



AR(t)CHITECTURE



Technion, Israel Institute of Technology
Faculty of Architecture and Town Planning



AR(t)CHITECTURE

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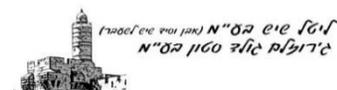
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AR(t)CHITECTURE

Good architecture brings forth a thick reality of experience. To create poetic local places (buildings, landscapes, and urban design projects), the architect has to embody the environment in which his architectural creation takes place. Meaningful architectural making always reflects and addresses the time, place, desires and needs of a shared context, but at the same time interprets, ponders, questions and manipulates it, while bringing forth the living subjectivity of the architect.

Artistic creation, in its different forms, allows the artist to embody the world poetically. Through drawing, painting, sculpture, film, music, dance, etc., the artist addresses collective cultural topics in a personal manner, questions, criticizes, and illuminates them, and thus actively participates in the shared reality.

It is not uncommon that architects immerse themselves in art making. Usually their artistic creation has been regarded as separated from their architectural work. The conference will investigate the intricate and fascinating ties between artistic and architectural making. It will aim to question, exemplify, and evaluate the connection between these two fields. Why do architects preoccupy themselves with art making? What are the relationships between their artistic works and their architectural design? Does their art making enrich their architectural designs?

Papers presented in this conference addressed four main topics:

Topic 1). Theoretical and philosophical aspects of art making as modes of poetic embodiment of the surroundings and interpretations of the relationship between artistic and architectural making.

Topic 2). Historiographies of relationships between art and architectural making, with emphasis on their conditions and significance in the contemporary era of enhanced technology and globalization

Topic 3). Case studies dealing with the artistic and architectural work of architects worldwide, and the ties between specific artistic and architectural projects, methodologies and products.

Topic 4). Case studies focusing on artistic and architectural work of Israeli, Palestinian and Mediterranean architects.



Key Lecturers and Special Events:

Prof. Architect David Leatherbarrow

Picturing Depth

Tuesday, April 19th, 2016, 14:00 (2:00PM)

Architect Zvi Hecker

"I draw because I have to think"

Tuesday, April 19th, 2016, 18:00 (6:00PM)

Architect Poet Tamir Greenberg

Wednesday, April 20th, 2016, 11:30 (11:30AM)

Prof. Michael Levin

The Impact of Art on the Architecture of Krakauer and Calatrava: Two Creative Alternatives

Wednesday, April 20th, 2016, 18:00 (6:00PM)

Prof. Architect Jörg H. Gleiter

Where there is more to think than to see – About Art, Building Art, and Critical Practice

Thursday, April 21st, 2016, 11:30 (11:30AM)

Conversation with Prof. Alberto Pérez-Gómez

Attunement: Architecture after the Crisis of Modern Science

Thursday, April 21st, 2016, 16:00 (4:00PM)

Architect Anna Shapiro

Observations, Discoveries, Propositions:

Non-Architectural Drawing and the Formation of Urban Strategy

Thursday, April 21st, 2016, 17:30 (5:30PM)

Ar(t)chitecture - Discussion Panel with Key lecturers and other experts: Prof. Architect Moshe Margalith, Architect Daniel Mintz, Associate Professor Alona Nitzan-Shiftan and more

Thursday, April 21st, 2016, 17:30 (5:30PM)



PARTICIPANTS



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Federica Andreoni
In the Expanded Atmospheric Field

Paola Ardizzola
The Art Process of the Expressionist Crystal Chain as Conceptual Premise for Future Architecture

Deborah Ascher Barnstone
The Color of Innovation: Bruno Taut's Fantasy Drawings and Painted Architecture Poetic Exploration: Alvar Aalto's Painting and Architecture

Juan Pablo Aschner
CABIN/CAVERN: Archetypal Phenomena and Their Unconscious Persistence Artistic Relations and Elements Present in the Architecture of Rogelio Salmona

Dan Costa Baciú
Sigfried Giedion - Historiography and History of Reception on Global Stage

David Baird
Iteration, Collaboration and Narrative

Jacob Sebastian Bang
Fragments of an Architecture (Work in Progress)

Amos Bar-Eli
Through the Filter of Walter Pichler: Life, Art, Architecture

Eduardo Benamor Duarte
User-Made Environments: Reflexivity & Digital Fabrication as Social Experience in Art & Architecture Pedagogy

Justyna Borucka, Anna Czech
THE ARCHITECTURE OF FASHION DESIGN

Ori Carmely, Rut Leonov
The Public Space - A Platform for Developing Interdisciplinary Tactics – Gym as a Study Case



Irit Carmon Popper

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Petra Čeferin

The Making of Ar(t)chitecture: Constructing Objects of a Special Type

Athina Charalampidou, Georgios-Petros Lazaridis

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João Borges da Cunha

Surfaces en Argos in Albis: The Artistry and Rhetoric of Whiteness in Modern Architecture

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Iskra Duric

Between art and architecture - Bogdan Bogdanovic and new formula of memorials in Socialist Federal Republic of Yugoslavia

Ronit Eisenbach

Moving in Place: Dance & Architecture
Sites-in-Flux: Architects, Artists & Placemaking

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Sharon Yavo Ayalon

Staging Urbanism: Space, Theater and Publicness in Acre



PAPERS & ABSTRACTS



Architecture, Art and Technology in the Sanctuary of Our Lady of Aranzazu

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Abstract

In Spain, the architectural development of the fifties, is included within the second stage of autarky in the country favoured by US aid, loans from European banks for the purchase of goods, and the beginning of tourism expansion and improvement of external relations. In this context, the Basilica of Arantzazu was completed in 1954, a real turning point in the Spanish architectural historiography of the 20th century.

Part of the archived documentation on this project has not been published yet, and will be showed for the first time in the paper of Congress, because it is interesting for the light it sheds on the construction process (real architecture, beyond considerations of architectural theory) of the Basilica of Arantzazu.

Introduction

The Sanctuary of Our Lady of Aranzazu is a building that brings together in an architectural project, the artistic concerns and technological development in an outstanding manner:

- On its architecture. The basilica of Arantzazu is original and essential. An empty facade compresses access to a mythical cave, discovered under a chorus that pushes the mystery of the appearance wrapped in wood and stained a light unapproachable.
- About its art. The history of Arantzazu is a true cultural field, from the point of the personalities of culture and arts related to this project. In particular the construction of the new sanctuary, in the international debate about the integration of arts in



architecture, attracts some of the biggest names on the national scene: Francisco Javier Saez de Oiza and Luis Laorga, Eduardo Chillida, Javier Eulate Nestor Basterretxea, Lucio Muñoz, and, of course, Jorge Oteiza. A team that connects squarely with the concerns of a Franciscan community committed to the Basque cultural identity in which blunted personalities such as Bitoriano Gandiaga and Luis Villasante

- Regarding technology, the memory of heating, ventilation and acoustics is two thirds of the total project documentation. What guarantees the interest and concern of the architects to integrate these issues in the project from the very beginning.

Despite being an extraordinary work, the result of the privileged mind of Oíza with the invaluable contribution of Laorga, they continued to pursue their intellectual process, it has been replicated as it is a closed path, being a special type (one temple) and by an incredible figure of architecture (and, therefore, difficult to repeat).

1. Architecture

After the sanctuary fire in the forties, an extraordinary adventure will start. Some of the most remarkable people of the artistic and intellectual fields of the fifties in the Basque Country, Spain and international countries can be found in this experience. People such as Francisco Javier Sáenz de Oiza, Jorge Oteiza, Lucio Muñoz and Eduardo Chillida among others, completely connect with the concerns of an opened, dynamic and engaged Franciscan community where personalities like Bitoriano Gandiaga and Luis Villasante were starting to grow up. The biggest sign of these successful relationships, its materialization, is the basilica. It is a unique work where culture, spirituality and nature are integrated once again. The rigour of labouring the stone or timber, the sincerity to face tradition and the possibilities that it can offer to artistic shapes, like the Latin cross floor plan, all them give as a result an outstanding work. Its modernity (never pursued as an objective by itself) transcends the particular case and, from the own values of Franciscan spirituality and the Basque culture, deepens into the unexplored possibilities of the relationship between the plastic arts and its integration with architecture. And making all these facts forestalling the spiritual renovation of the Second Vatican Council.

The linguistic universality of arts is conducted through the common materials that work as a humanized mirror of the natural environment where they are placed. That two-way path of arts and society that P. Francastel developed brilliantly and that here exhibits particularly that physical and emotive engagement with the land and traditions. An engagement that reviewed from postmodernism thinking or even better, from overmodernity, put Arantzazu in an enviable situation to reflect about its being and the main problems and discussions that are proposed nowadays and that, likely, will set the foreseeable cultural path.



2. Art

At the end of 1950, the General Assembly of the UN, repealed the resolution of 1946 by way of which that same institution had “recommended” to the member countries withdraw the ambassadors and accredited plenipotentiary ministers in Madrid. The next year, the first steps to the integration of Spain in that institution thanks to the United States took place. It meant some kind of external openness. It was, without doubt, controversial (as it was reflected in 1953 with the film *Bienvenido Mister Marshall* by L. García Berlanga), but it was translated into qualitative changes in social and cultural life anyway. In fact, although the mismatches of the Spanish reality were exposed more specifically, it was also possible to get involved, in some way, to the argumentative paths of the moment in Europe, like those that affected the new expectations that fine arts in general (and architecture specially) were facing after the Second World War.

To all these facts, it must be added an uncommon spotlight of some architects in the Spanish culture. Likely, because among their graphic sources, with their architecture magazines, new formal currents of design had arrived. Those renewed thoughts helped to restore the formal universe of artists of the most diverse disciplines. It must be remarked that after the Second World War, there was a concrete acknowledgment to ‘architecture’ as a leader at the expense of painting, sculpture or, the best known, applied arts. Documents like *The Athens Charte* justified that reality. Up to this moment in the 20th century, the dialectical speech where theorists and experts of architecture focused on, was the importance of the structure of the buildings, its symbolic function or the implementation of pure geometrical volumes. This speech had been enriched with the new aspirations created by a renewed humanism.

In this way, the cultural traditions of Italy, France and Spain joined in a speech with many common points. Lucio Costa’s or Alberto Sartoris’¹ thoughts are good examples of that agreement. Without doubt, because once again, history had booked a main role for arts and artists:

“The creator artists have now the possibility to impose their inventions with the tools that they have made by themselves. Provided that (and it is an essential point) they are shown with intelligence and regarding an appropriate style, an extremely important mission is assured for them”².

And here it is, that new commitment, rediscovering that “magic”, regarding plastic arts, had to start to solve the problem of the integration of fine arts in architecture so that its art wasn’t only a representative object of beauty and harmony, not only a visual art, but a livable art: “an art that is at the same time, more magic, more captivating, wiser, more specific and broader”³.

¹ A. Sartoris, “Perspectivas acerca de la integración de las artes en la Arquitectura”, in *Revista de Ideas Estéticas*, nº 64, 1958. Vid. para las relaciones entre A. Sartoris y España, M. Navarro, “Alberto Sartoris y el itinerario de la modernidad en España”, en *Los años 50: La arquitectura española y su compromiso con la historia*, Pamplona,, E.T.S.A., 2000, pp. 265-274.

² A. Sartoris, Op.cit. p. 265.

³ *Ibidem*.



Because, to close the circle, those same analysis sides, in 1915, are those that can be found behind a forum of great transcendence in the theoretical reflection field, the “Sesiones de Crítica de Arquitectura” (Meetings of Architecture Criticism), organized by Carlos de Miguel, head of the *Revista Nacional de Arquitectura* (National Architecture Magazine). In the issue of February, Francisco Asís Cabrero made a read conference about the Basilica of Arantzazu y la Merced¹. Among the opinions and thoughts shown there, we want to focus on the debate born due to the implementation of the Latin cross floor plan in both churches. According to Cabrero “inertia of baroque architecture (...) rejected at heart and respected on the shape”, while Sáenz de Oiza explained very well the overcoming of that dilemma between modernity and tradition when remarking that a project like Arantzazu could not be solved with a unique utilitarian criteria. Afterwards, he continued his speech, reaffirming his own conviction that Arantzazu would be “modern if it didn’t have a cross floor plan; but, I repeat, I believe that making true modern art is not stop making, just because, what the centuries have enshrined, and going for the change of fierce innovation”².

We must place the Grupo de Arantzazu (Group of Arantzazu) under those parameters. During some years, since 1950, the group met in Oñate a broader group of sculptor architects and avant-garde painters around the restoration works of reconstruction of the basilica of Arantzazu, a contest won by Francisco Javier Sáenz de Oriza and Rafael Laorga in architecture and Néstor Basterretxea and Pascual de Lara in painting. Afterwards, Agustín Ibarrola and Javier de Eulate, the main responsible for the stained glasses, were included. Finally, Jorge Oteiza³ was the responsible for sculpture. Indeed, in the issue number 120, December 1951, of the *Revista Nacional de Arquitectura*, the successes of the Milan Triennial were recognized with Jorge Oteiza’s article entitled “La investigación Abstracta” (The Abstract research). Although there were also more reactionary proposals, what is unquestionable is that the phase started in 1951 was going to be characterized by the debate figuration/abstraction or, if preferred, representational art/non-figurative art⁴ and by the debate of the integration of arts in architecture or, at least, by the reflection about the interrelationship of arts that is started with Arantzazu as the most paradigmatic case.

¹ F. Asís Cabrero, “Las basílicas de Arantzazu y de la Merced”, en *RNA*, nº 114, 1951, pp. 31- 43, where both the conference and the posterior debate were included. In the same issue a work of V. Eusa was analyzed, “San Antonio de Zaragoza”.

² *Ibidem*, p. 39

³ M. Cabañas Bravo, *Política artística del franquismo*, Madrid, CSIC., 1996, p. 76. The activity was stopped three years latter, not being finished until 1969.

⁴ *Ibidem*, p. 87.

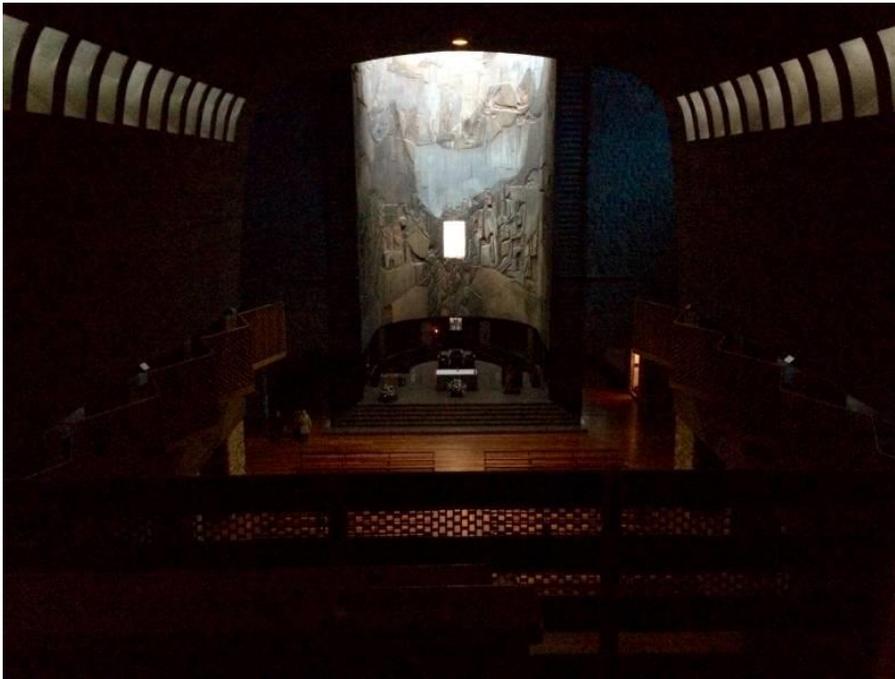


Fig. 3: Internal view of the Sanctuary.

2.1. The Group of Arantzazu?

Although the current criticism rejects the existence of the “Group of Arantzazu”, in some way, this mention shows very well the exceptional and, on the other hand, very natural character of what seems to be an inimitable meeting. It is also true that regarding the history of the project of the new basilica from the fifties to the eighties, it can be understood what is unavoidable and the logics of that meeting. Ultimately, it is the consequence of the short number of architects and plastic creators that were starting to know formal resources of modernity during those years. However, it is remarkable that among those few people, the number of Basque artists that were emerging in promising careers was high. Those brilliant careers would be confirmed years after. This is also the reason for the great relationship with the project of Arantzazu, created as a symbol of that cultural revolution based on a back to the roots, to find the own identity that bothered so much Oteiza or Chillida. “I became Basque in Arantzazu” Lucio Muñoz, the Madrid painter, said. And he did it mainly because he reached the project with Oiza and in a phase where the conceptual guidelines of the project were clear. But it is also true that Oiza, Oteiza and Chillida had gone to Madrid, Europe and America enriching their theoretical and cultural universe as an essential milestone to rethink the importance of their roots and give them a meaning that transcends from the particular to the universal.

We find a group of artists aware about their capacity to change the coming evolution of arts in the 20th century. But they also believed that they were able to influence directly in society and culture. Arantzazu offered to these creators a reflection made work, a modernity based on the



preterite and the essential of Basque culture that, in this case, was directly joined with Arantzazu history and the Franciscan spirit.

2.2. Eduardo Chillida

In 1954, the same year when he receives the Honour Diploma in the 10th Milan Triennial¹, and due to Oiza's lead, the timber doors designed by Laorga are rejected and the assignment is made to Chillida. Eduardo Chillida was not part of the "Group of Arantzazu", but his involvement in the project explained that, whether the assignment was made in autumn 1954, in spring 1955 the doors made with wastes of Zumaya's port and sheets of "Patricio Echeverría"² were installed. It is commonly accepted by the criticism the similarity of its design with the collages on paper made during those years by the sculptor. But, moreover, one of the constants that determines his work from that moment can be found: the relationship between space and matter so important in the architectural conception of the sanctuary.

2.3. Javier Álvarez de Eulate

The stained glasses mean an item of doubtless spotlight in the architecture of those years, given its capacity of metamorphosis a solid wall into a source of light. These plastic possibilities of the wall of light had already been explored since the gothic and becomes a key point within the context of the debate about the integration of arts in architecture because it means the absolute symbiosis of architecture and painting. Javier Álvarez de Eulate was taught in the Academia de San Fernando and, being a Franciscan, he knew at first hand the possibilities of that technique. However, he had entered the competition to paint the walls of the basilica. The jury did not consider it a good solution, choosing a more punctual solution (similar to what happened with Agustín Ibarrola). The jury for this competition was made up of Oiza and Laorga, Oteiza, Daniel Vázquez Díaz and Secundino Zuazo, although it was discontinued due to the Provincial Pablo Lete's³ death.

The Franciscan community assigned him the design and execution of the stained glassed of some spans which shape was not still defined. His work, in words of Eulate, could be defined like: "Expressionist Synthetism"⁴ among the plastic possibilities that the abstraction language offered.

¹ The chronicle of it was gathered and published in the *Revista Nacional de Arquitectura*.

² *Chillida en San Sebastián*, Donostia, 1992, pp. 490-491.

³ Pagola, op. Cit., pp.87-91.

⁴ Isabel Monforte, Arantzazu. *Arquitectura para una vanguardia*, Donostia San Sebastián, 1994 gathers Eulate's personal testimony about his stained glasses.



2.4. Nestor Basterretxea

His convoluted and complex involvement with the project of Arantzazu finishes with the sign of the final contract for the decoration of the crypt in 1983. Despite the explicit support of Jorge Oteiza, the painter had not received any assignment in three decades. During those years, the painter had tried thoroughly to decorate the apse. So many years since the first sketches implied a definitive change of concepts. A change that was translated into an expansion of the programme and a bigger ambition when talking about the exploration of expressive values of painting, shape, abstraction, a plot and colour hardly strident that find in the limits of the crypt an oppressive strength of the matter that seems to be in competition with. Indeed, the result is very close to soviet realism that so much repercussion had had in the two previous decades in Latin America. The creative energy of the painter finds its shape among the foundations of Arantzazu, announcing with released strength the history of the synthesized humanity in eighteen curved sheets.

2.5. Lucio Muñoz

In June 1961 the basis for the competition to finish the apse of Arantzazu are published. The period is more favourable for this commitment mainly due to the liturgical renovation backed by the Second Vatican Council and, in some way, by the definitive support of the Dominique José Manuel Aguilar (head of the movement of sacred art at that moment). The jury was made up of Muñoz Aguilar, the architects Luis Alustiza, Fco. Javier Sáenz de Oiza, Rafael Laorga, Ramón Vázquez Molezún and Modesto López Otero, the painters Francisco Cossío, Godofredo Ortega Muñoz and Daniel Vázquez Díaz, the sculptor Eduardo Chillida and the art critic Enrique Lafuente Ferrari. A prestigious jury that awarded with first prize to Lucio Muñoz and with other five awards to different creators. The group of materials created for the competition as well as the models of the awarded proposals make a compound of great historic-artistic interest.

But returning to Lucio Muñoz¹, we are talking about one of the most remarkable persons of what has been known as “Spanish informality” that immediately connects with the space and natural environment of Arantzazu. Once again, matter and space, nature and arts in a perfect symbiosis.

In this personal experience, the identification process with Arantzazu, with its nature, with its art and spirituality, is captured in that outstanding wall of 620 square meters, where the timber and colour, the texture and light, transfer the fusion to the spectator with this environment. As we will see later, this is one of the essential points about which the exhibition will work.

¹ Lucio Muñoz. *Madera de Fondo*. Madrid, Ministerio de Asuntos exteriores y cooperación, 2004.



2.6. Jorge Oteiza

When the relationship between Oiza and Oteiza¹ is analysed, it is surprising to find some symmetry, mainly because of the transcendence of the first and the latest Oiza's work where both of them collaborate. Those works enclose, like a symbolic parenthesis, a unique and difficult relationship. But above all, a relationship based on a mutual understanding of their creative processes.

In 1951, in the moment when the building is finished, contacts between the architects and Jorge Oteiza had already taken place so that Oteiza made the sculpture. That year, he gets the Honour Diploma in the Milan Triennial and he takes part in the first Hispano-American Arts Biennial held in Madrid. From the very first moment, he identifies the apostleship like "dynamic centre and goldenly proportional", making an explicit reference to the main theme of the congress held that year on the occasion of the Milan Triennial about the "golden section". Between 1951 and the precautionary suspension of the project, the sculptor starts a personal process of reflection that is partly gathered in his testimony to the magazine *Aranzazu* in 1952:

"I would like to make a good choice in this work and conciliate the formal requirements, of which I am part due to my experimental vocation as sculptor of this era, with the religious properties, of which the religious feeling is part of and I may say that the artistic feeling, of the people of my region".

3. Technology

The execution project of the new Basilica of Arantzazu, approved in June 1952, included an austere, simple, tight-budgeted air-conditioning installation, which not only fits in with the project, but clearly supports the architecture it serves. This installation was finally carried out in 1968, and is still working (with its virtue and defects) as it did when it began.

The archived documents of this project are fascinating thanks to the light they throw on the construction process (true architecture, beyond the realms of architectural theory) of the Basilica of Arantzazu².

The heating, ventilation and acoustic records of the Arantzazu project, which make up two thirds of the total documents for the project, show the full development of the project (thus confirming Sáenz de Oíza's knowledge of air conditioning installations).

¹ Pilar Muñoa, Oteiza. *La vida como experimento*, Zarautz, Alga Memoria, 2006.

² César Martín-Gómez et al. "Heating and Ventilation in the Basilica of Arantzazu". *Architecture Research*, 2015; 5(1): 1-9.

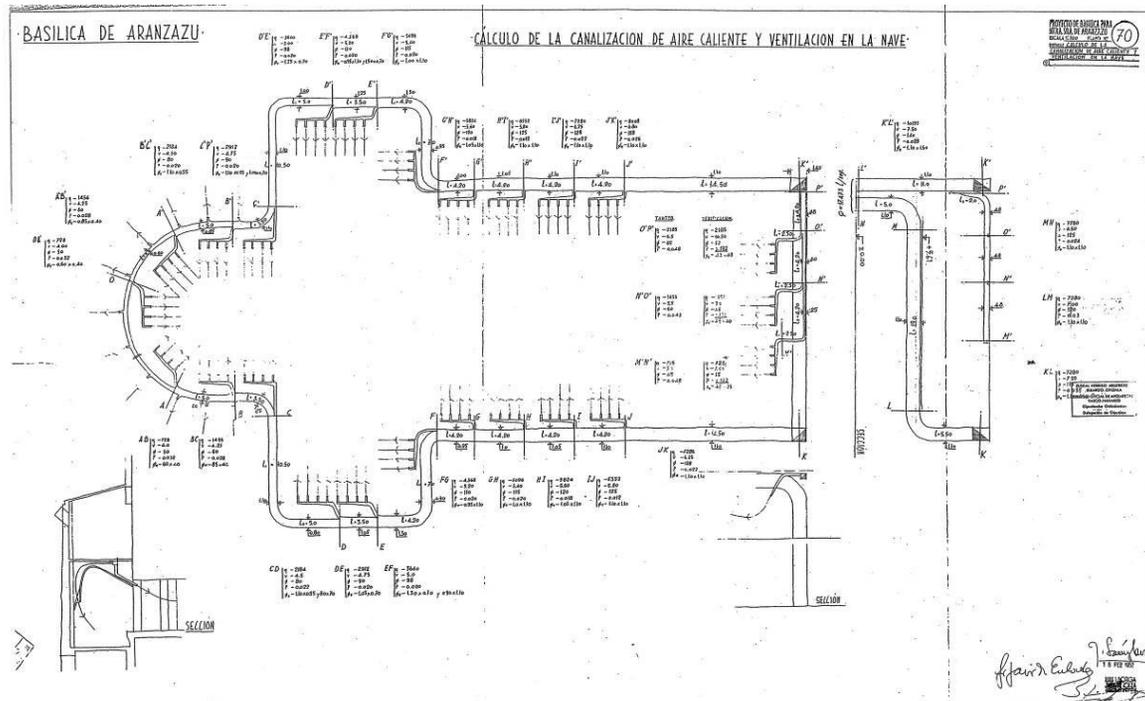


Fig. 4: Air conditioning ducts (recirculation) and ventilation of the crypt of the Basilica of Arantzazu

In fact, the translation from Spanish and the account of this documentation makes up most of this article, as the fact that what is described is so interesting and never before published in spite of being clearly explained, demands that it should be better known. For instance, apart from some specific terminology, the description given by the architects (not engineers) of this installation could well be that of a modern-day installation.

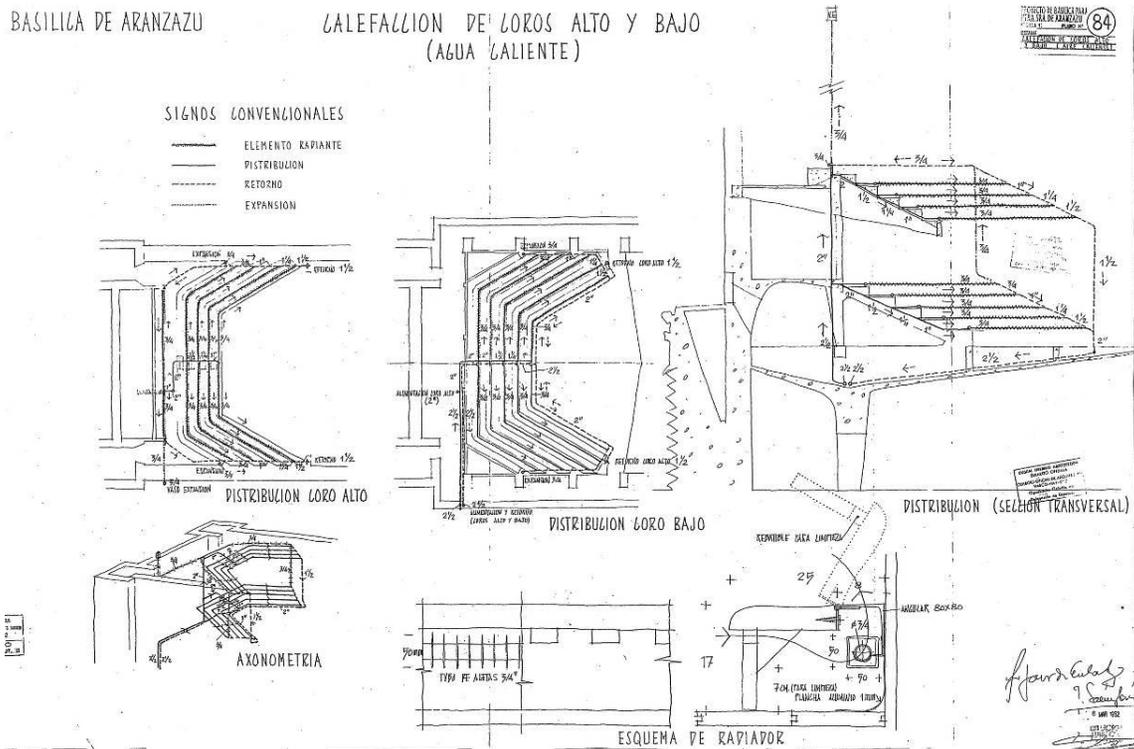


Fig. 5: Heating through finned tubes in choir and retro-choir (not executed) of the Basilica of Arantzazu

The records on the Basilica of Arantzazu make this project even more outstanding. Unfortunately, the project does not represent the spirit of global analysis of the questions on projects that architects, as professionals, should ask themselves.

The data presented on Arantzazu confirm the design possibilities of architecture with air conditioning, that is, with a concept that integrates the whole building process, without undervaluing any of the parts that make up the building.

The acoustic study of the nave (in which both the origins of the sound –organ and choir voices– and the characteristics of the different surfaces within the nave) are also included in the execution project, because, as can be seen throughout the many cases analysed in the authors’ research, those architects who take air conditioning into account in their projects are also interested in the acoustic performance of their buildings. This is a professional attitude that makes these architectural pieces even more valuable. Compare the study of this case with, for example, the main hall in the Capitol Building or the conference room of the Patronato Juan de la Cierva.

The Basilica of Arantzazu represents the turning point for air-conditioning installations in Spanish architecture. However, what we have described would be difficult to replicate; it is a kind of cul de sac, as it was a one-off commission (a church) erected by an incredibly brilliant tandem of Sáenz de Oiza and Laorga, and so practically unrepeatable.



4. Conclusions

The austerity of its execution and the fact that it continues to be used add even more value to their design, where the common sense and logic of the application of technology to modern architecture are outstanding.

The basilica is a triumph of multidisciplinary architecture, taken in the Renaissance sense, and of logics applied to technology. It is an example of holistic humanistic design, with a virtuosity that is essential in the tortuous world of contemporary architecture.

We believe that the history of Arantzazu is a unique cultural site. And we claim it not only from the view of culture and arts people involved in the project, but from the possibilities that the photographic, musical and documentary resources may offer. We could even go further on and claim that nature, technology, culture and spirituality are the central elements that define the history of Arantzazu. In fact, it is the balance between the integration of nature and artistic creation one of the nodal points, if not the main one, of the privileged and *natural* incorporation of Arantzazu to the fiery cultural context of contemporaneity. A juncture where simplicity and radical modernity of San Francisco de Asis' message, settled on the basis of the search for peace and harmony with nature and aimed, in the current cultural context, to stablish fruitful relationships among the different cultures and religions (Interreligious Meeting of Asis, 1986) and to obtain universal ethic values from the singularity of peoples (Nature Ethic, Earth Chart) offer a whole actuality and allow redesigning properly the importance of Arantzazu regarding texts like the new Pope Francis' Encyclical *Laudato si* (2015).

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In the Expanded Atmospheric Field

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Abstract

The ability to create architectural spaces just using *subtle substances* is a core topic in contemporary design culture. The thesis of this short essay is that architecture, the art of gardens and the artistic practices are nowadays sharing this common design research field: the creation of architectural space using immaterial materials. In this design attitude, the spatial configuration is assigned, largely or wholly, to the wise use of *subtle substances*. A survey of significant contemporary projects, where topology and phenomenology are overtly inseparable, can show by practice the flagrancy of the topic.

Key words: *Subtle Substances* of Architecture; Atmosphere; Landscape architecture; Ephemeral Architecture; Art of gardens; Urban design; Expanded field.

Subtle substances. The power of the immaterial.

The *subtle substances*¹ are intangible materials: the thickness of the air, the contest between shadow and light, wind, mist and dust, even smell. They are all ephemeral, evanescent, vague, impalpable, volatile: so weak in their material concreteness and physical weight, as strong in moulding space.

The ability to create architectural spaces just using *subtle substances* is a core topic in contemporary design culture.

Lawrence Halprin was among the pioneers². The workshops Experiments in Environment (1966-1968), also thanks to the collaboration with his wife Anna, stimulated students to the sensitive understanding of places, focusing on what is not visible, but equally crucial for the landscape quality (the air warmth or the background noise, for example) and on actual experience of the site as a tool of knowledge and imagination. Furthermore, his studies about the High Sierra - set in the countless notebooks where Halprin noted down the different temperaments of the water, its

¹ The expression *subtle substances* is picked up from Lina Bo Bardi. The Brazilian-Italian architect Lina Bo Bardi, has been using the term *substances* (instead of the term *materials*) to explain what essentially composes her architecture. Thus, for *subtle substances* Lina Bo Bardi indicates especially vegetal, mineral, air or aqueous elements. In this text, we consider this expression in a larger way, meaning all the ephemeral elements of which architecture can be made. To deepen the Lina Bo Bardi work, we suggest to especially refer to: Olivia De Oliveira, Lina Bo Bardi: sutis substancias da arquitetura (São Paulo: Romano Guerra, 2006)

² For a deepening on the subject, please refer in particular to: Annalisa Metta, Benedetta Di Donato, Anna e Lawrence Halprin. Paesaggi e coreografie del quotidiano (Melfi: Libria, 2015).



fickle materiality, its sound atmosphere -, are the indispensable background for several projects, as the public spaces in Portland (1963-1970), masterpieces of the XX century.

More recently, Peter Zumthor defined this design attitude as the search for the magic of things, the magic of the real world. He identified several design principles to achieve an architecture made of atmosphere, closely dealing with the *subtle substances*: “the light of things”, “the temperature of the space”, “the sound of a space”¹.

The atmosphere is increasingly getting the crux for urban space design, as Mirko Zardini asserts with the exhibition *Sense of the City*, at the Montreal CCA, in 2005: “Challenging the dominance of vision, *Sense of the City* (...) proposes a new approach, a «sensorial urbanism» whose aim is to analyse urban phenomena in terms of luminosity and darkness, seasons and climate, the smell of the air, the material surfaces of the city, and sounds”².

The thesis of this short essay is that architecture, the art of gardens and the artistic practices are nowadays sharing this common design research field: the creation of architectural space using immaterial materials. In this design attitude, both in garden design and art installation, the spatial configuration is assigned, largely or wholly, to the wise use of these materials.

A survey of significant contemporary projects can show by practice the flagrancy of the topic.

Gardens. Light, air, water.

The perception of materials, light and time have always been fundamental themes of the art of gardens. Some contemporary gardens translate these topics in a very interesting way.

A poetic perception of atmosphere, especially through the light reflections, is the core issue of *The Rotunda garden* (Citylaboratory, Quebec, 2014). Rotunda is an elemental garden, conceived as a device capturing the beauty of nature; it transforms the surrounding landscape into the garden itself by grasping what is outside its boundaries. The garden has to be filled with water at the beginning of its life and has to be left to evolve over time, becoming also a climate register device. So, it is explicitly sensible to the changing light conditions, the fluctuations in temperature and humidity, rainfall and evaporation.

A specific character of the air is, instead, the protagonist of the *Nordic Dreams* garden (1:1 Landskab, Chaumont-sur-Loire, France, 2008). The ambition of *Nordic Dreams*, in fact, is to reflect that kind of uncomplicated aesthetics typical of the Nordic air. The Nordic sky has a subtle intensity that creates the special light: the often-changing colours of greys and blues have a simple understated powerfulness. So, the garden is basically a rectangular room, created in a “forest” of

¹ Peter Zumthor, *Atmospheres* (Zürich: Birkhäuser, 2006), pp. 21-61

² Mirko Zardini, ed., *Sense of the city an alternative approach to urbanism*, (Baden: Lars Müller Publisher, 2005)



Spruce trees and ground covers of Wild Strawberries. The room is furnished with a grid of Willow trees in various sizes and surfaced with gravel. As a backdrop, at the end of the room, a glass screen is set up featuring an image of a Nordic sky. The sky on the glass screen is visible under the tree canopies, eliminating the horizon.

Furthermore, making visible that the atmosphere is not empty, but is full of substances, especially the aqueous ones, with their own thickness, density and temperature, seems to be the aim of the two *Weather Garden* of Hyatt Hotel (Vogt, Zurich, 2004). In fact, moss entirely covers one of them, changing colour depending on the air damp, from the bright green of the steamier season, to the earthy brown of dry periods. Stone slabs, variously concave, pave the other garden. According with rainfall and evaporation, they retain more or less water, dry more or less quickly.

Fig. 1: *The Rotunda garden*, Citylaboratory, Quebec, 2014





Fig. 2: *Nordic Dreams garden*, 1:1 Landskab, Chaumont-sur-Loire, France, 2008



Fig. 3: *Weather Garden of Hyatt Hotel*, Gunther Vogt, Zurich, 2004



Art installations. Light, air, water.

Many contemporary art installations also lie in the same conceptual horizon.

Among them, working specifically with the potential of the light, there is the series of the English artist Anthony McCall called *Solid Light Films*. The series is designed studying the mechanical projection of a film: the beam of light is a three-dimensional volume, before being transformed in two dimensions on the screen. Consequently, *The Solid Light Films* are simple projections that highlight the sculptural volume and quality of the light beam. *Line Describing a Cone* (1973) is the first of the series, which continues to evolve until the latest *Breathe Vertical works* (McCall, Milan, 2009). In a darkened space, filled with mist, the light projections create the illusion of three dimensions through abstract figures, ellipses, waves and flat surfaces which gradually expand, contract or caress the space - as ephemeral architectural walls. In these installations, the light membranes, and thus also the spaces created by that light, are visible thanks to the movements of the mist and the spirals that sometimes are formed and which guide the eye to the point in which they vanish in the lens of the projector.

A construction made of air is the concept design of *On space time foam* (Saraceno, Milano, 2010). Conceived as a large transparent membrane that visitors can get into, folded in three layers, it is suspended at 25 metres above the ground, providing a radical bodily experience. The installation can be easily defined as a sculpture made of 7000 cubic metres of air. The artist creates spheres that seethe and break like membranes, full of air. He conceives space, he says¹, as a tympanum, a membrane that allows you to listen because it vibrates, through the air's material.

We can also mention *The Mediated Motion* (Eliasson and Vogt, Bregenz, Austria, 2001), such an emblem of the configurative capability of *subtle substances*. *The Mediated motion* is a large-scale installation spanning all four floors of Peter Zumthor's Kunsthaus Bregenz². Exploring water in its various and changing aspects of matter - humidity, fog, liquid state, vapour... -, the installation is a sequence of 'interior landscapes'. On the ground floor was a collection of logs sprouting shiitake mushrooms; continuing to level one, visitors encountered a pond with duckweed floating on its surface, which they could cross via a series of pontoons. On level two, a floor of gently sloping compressed soil could be traversed, and on level three, a suspension bridge spanned a foggy room and terminated abruptly at a blank wall, forcing visitors to return along their original route. A staircase of roughly hewn wood was built on top of the existing concrete stairs, creating an unbroken transition from one landscape situation to the next. The water, its odours, as well as the fog and its humidity, on all four levels, turn the Kunsthaus into a path of experience.

¹ Filipa Ramos, Interview (Milano: Domus Web, 2012)

² The catalogue of this work has been published; it contains various authors' considerations. Eckhard Schneider, ed., Olafur Eliasson *The mediated motion* (Bregenz: Kunsthaus Edition, 2001)



Fig. 4: *Breathe Vertical works, Solid Light Films series, Anthony McCall, Milan, 2009*



Fig. 5: *On space time foam*, Tomás Saraceno, Milan, 2010



Fig. 6: *The Mediated Motion*, Eliasson Olafur with Gunther Vogt, Bregenz, Austria, 2001



Switching to the urban scene.

As Franco Zagari reminded us already several years ago, architecture, particularly the one concerning the open urban space, owes a strong debt to the garden culture and to the artistic sphere¹. From landscape designers like Dan Kiley, Russell Page, Geoffrey Jellicoe, architecture undoubtedly draws a morphological range and a botanical richness. In a broader sense, we can consider it a sort of special awareness and sensitivity to the *subtle substances*, typical of the atmosphere of gardens.

From artists such as Christo, Michael Heizer, Walter De Maria and Richard Serra, architecture is instead inspired to conceptual dimensions. These are the exploration of spatial and temporal themes, the richness of symbols and meanings, and above all the leadership of the crowd in movement, as protagonist of the urban scene.

The garden and the art installation, among which we have taken some samples considered significant, are categories whose boundaries sometimes become really blurred. Certainly, though, it can be viewed as both categories sharing an appearance of pure superstructure, almost of superfluity. As such, Zagari noted², the projects of these spaces, always traditionally identify a particular projection of the collective imagination. The garden -and a special kind of artistic installation, we would like to add- is a project dimension that experiments, with strong anticipation in every historical moment, techniques, knowledge and social representations.

In every civilization gardens are places that often become a laboratory of thought, even preventing and accelerating the contemporary concept of settlement itself.

Not unlike we can consider the so-called ephemeral architecture. Both the gardens and the artistic installations, they can, albeit in different ways, be considered ephemeral architecture. As Annalisa Metta noted³, their occasional, thus almost harmless, nature allows these projects to act as a breeding ground where to test innovating possibilities. It is clear that the ephemeral architecture has always played this task of anticipation, by not opposing to the permanent one, but feeding it. It is not a contemporary process, but rather a handed down practice.

So, we intend to support the idea that the design attitude we analysed - to produce architectural spaces using *subtle substances* - both in gardens and in art installations, can be seen as a kind of testing ground for urban projects.

In fact, the contemporary design culture of public space is also showing a strong interest in this attitude.

A public space like *Water Mirror* (Corajoud, Bordeaux, 2006) is proving it. Thanks to the dynamism

¹ Franco Zagari, *L'architettura del giardino contemporaneo* (Roma: Arnoldo Mondadori Editore, 1988)

² Ibid.

³ Annalisa Metta, *Breve scadenza. Lunga Conservazione in Reale Luca*, Federica Fava, Juan Lopez Cano, eds, *Spazi d'artificio. Dialoghi sulla città temporanea*, (Macerata: Quodlibet, 2016).



of the device regulating the water effects, the place acquires different shapes. Sometimes space is doubled by the reflection of the water, sometimes is occupied by the physical embodiment of the fog room.

Also *Poble Nou Park* (Nouvel, Barcelona, 2006) particularly explores the power of one of the *subtle substances*: the light. The park is a thick blanket of leaves in the heart of the city and deploys a varied “vocabulary of the shadows”¹: solar sparks, or moving, deep, opaque shadows. Largely disregarded by the implementation, it would make visible the sharp and absolute sunlight, everywhere prevailing in the city and where we enter in, just crossed outward the park’s exit gate.

Even in a big project like the urban development of the old, industrial valley close to *Ettlingen*² (Marcel Meili and Markus Peter, 1990) the atmosphere becomes a core theme. The project takes into consideration the wind currents. With the wooded slopes of the Black Forest and their currents of cold air, a wind channel would arise integrating the fields of plants into a cycle. The valley wind would be continually cooled and moistened in the artificially watered flower fields. So, changes in phenology of the herbs fields translate the rhythmic passage of the Albtäler wind.

Thus, finally we can note that in the “expanded field”³ of contemporary culture, landscape architecture, arts and architecture increasingly share common issues and seem to interpret this specific design attitude: generating projects where topology and phenomenology are overtly inseparable, because they are made of spaces intimately defined by *subtle substances*.

¹ Poble Park, Area 89 (Milano, 2006)

² Studio per l'Albtal presso Ettlingen, Casabella 597|598, (Milano, 1993).

³ Rosalind E. Krauss, *Sculpture in the expanded field* in Rosalind E. Krauss, *The originality of the avant-garde and other modernist myths*, (Cambridge: The MIT Press, 1986).



Fig. 7: *Water Mirror*, Michel Corajoud, Bordeaux, 2006



Fig. 8: *Poble Nou Park*, Jean Nouvel, Barcelona, 2006



Fig. 9: *Study for the Albtal Ettlingen*, Marcel Meili and Markus Peter, Ettlingen, 1990



The Art Process of the Expressionist Crystal Chain as Conceptual Premise for Future Architecture

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Abstract

The Crystal Chain (Gläserne Kette) experience arose in Berlin within the context of Expressionism, seeking new concepts for a renewed architecture in a time when it was almost impossible to build, due to the First World War and the heavy economic crisis. “In our profession today we cannot be creators, we can be only men of research, of roll call” states Bruno Taut, inviting architects of the time in working on drafting processes of new projects, new design ideas on a very utopian and fantasy scale .

The expressionistic culture defines itself as preparatory to something that necessarily has to come: a strongly utopian experience, because of no alternative possibilities, but also the opportunity to elaborate an art language which would be useful when time to build will come. This uncommon ‘utopian art experience’ seems a bridging step with no formal traces within the architectural reality; it is almost easy to trust in the apparent contradiction where the concreteness of architecture annihilates the artistic issues, the rationality dominates fantasy and the Rationalism is the answer to the ideal city. But deepening the artistic contribution of the expressionist Gläserne Kette, a serious continuity in the architectural field emerges. An immense faith in the chance of reforming the reality by an artistic concept, which refers to utopia, was animating architects who designed projects in form of art works. From this artistic speculation, which refers to moral strength and spiritual values, the new architecture is supposed to arise. It does not exist just per se, but rather it will have the power to generate a new culture, as emphasized by the poet Paul Scheerbart, spiritual guide of the Gläserne Kette: “Our culture is, in a sort of way, the outcome of our architecture. If we want to bring this culture to a higher level, we will have to change the architecture. This will be possible just when we will have removed the closed from our milieu... Thus the new milieu created by us, will bring a new culture.”

The Alpine Architektur by Bruno Taut, the organic zoomorphic public buildings by Herman Finsterlin, the vertical crystal buildings by Wenzel Hablik, the public spaces with physiological life by Paul Gösch, the cosmic compositions by Carl Krayl, the early thoughts by Walter Gropius, the continuous becoming cathedrals by Max Taut, the edge projects by Luckhardt brothers, the vertical houses of culture by Hans Scharoun, what do they represent in the forthcoming process of the Neues Bauen? These architects use a technical way of drawing which reifies the strong art language: the projects are drawn in a very pictorial way using watercolours, tempera, pastels,



pencil, charcoal, or even mix media; the artistic drawings are often perspectives, not only plan and elevation, in order to be understandable as much as possible to a large audience .

The expressionist architecture, articulated in form of art works, can be called human architecture; it has a component which is permanent in the developing of modern architecture as Bruno Zevi emphasizes: "It constantly vanishes and resurfaces in the historical event and in life of every architect. It arose much earlier than Erich Mendelsohn's drawings and his Einstein's tower (...). There is an early Expressionism, as that one of Gropius and Mies; a senile Expressionism as that one of Le Corbusier; a steady Expressionism, as that one of Mendelsohn and Scharoun ."

This paper aims to formulate a possible answer to the question of Adolf Behne, theoretic supporter of the Gläserne Kette: "Of these drawings, none of us will see their realization, neither just one. Well then are they castles on air, utopia, fantasies, superfluous trifles?"

Despite the will of not formulating theories or making of their practice a dogma, the architects of the Gläserne Kette have still something to say to the Contemporary Architecture developing process.



The Color of Innovation: Bruno Taut's Fantasy Drawings and Painted Architecture

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Abstract

The eminent German architect Bruno Taut was an innovator in the realm of color in architecture. Initially trained as a painter who then turned to architectural design, he experimented lifelong with applications of color in every aspect of architectural design. Although he is widely known for the vibrantly colored fantasy drawings he produced soon after the First World War, he is less well known for the brightly colored architecture he produced in Magdeburg or his manifesto on colored building.

The Color of Innovation: Bruno Taut's Fantasy Drawings and Painted Architecture

For the German architect Bruno Taut, art practice was the way to probe futuristic and fantastic visions, a polemical tool of the first order, and a means through which he could express architectural ideas that were not circumscribed by the constraints of reality, constructional, functional, or otherwise. Art practice was also a way to explore ideas for the use of color that he would later use on the surface of a façade and also in the three-dimensional space of architecture. Through painterly explorations, Taut discovered ways to use color to transform architecture from familiar to unfamiliar, from conventional to innovative. The methods that Taut developed were the result of a deeply felt design philosophy; they were more than mere surface decoration, they altered the outer and inner qualities of buildings, to achieve what he called, "optische Sinnfreude" (meaningful optical pleasure). And on the interiors, his use of color created an emotional response in the viewer that Taut believed he could predict and control. (Figure 1)

Taut was first trained as a painter and vacillated at times about which career path he should follow, painting or architecture. In 1904 he wrote he brother Max, "I feel more and more like a painter."¹ He wondered, "How extensive is my talent? I can probably best live according to my nature in the field of art, probably better than in architecture."² Taut is likely referring to his quasi-mystical and religious tendencies, which he could better express in the relatively unrestricted realm of art over the functionally, practically, and politically circumscribed profession of

¹ Bruno Taut Diary, AdK Berlin, re-printed in *Bruno Taut 1880-1938*, 33.

² Ibid.



architecture. From the start, Taut had a sophisticated color sense and the ability to work with a complex color palette, a rare gift.

Taut developed his talent for the application of color through a careful study of color theory; beginning with Goethe's *Farbenlehre* of 1810 to more contemporary ideas, in particular those of the Russian painter Wassily Kandinsky and the French painter Robert Delaunay as well as Dutch theorist Theo van Doesburg. (Figure 2) There were several strains to the color debates important to underline here – the tension between form and color, the search for color harmony, and the question whether color was an inherent material property or a perceptual response to material. Kandinsky proposed that form, color and meaning were inextricable from one another – an idea that Taut embraced. Kandinsky and Delaunay both were interested in the emotional associations and sensations color elicited in viewers and probed this aspect of color in their work. (Figure 3) Delaunay rejected the notion that color was a secondary property of form; he saw color as a formal and spatial element in its own right, ideas that were deeply attractive to Taut. Van Doesburg was the first theorist to associate the primary colors, red, yellow and blue plus black, white, and grey with two-, three-, and four-dimensional space.¹ Taut would also adopt this understanding of the primary schema for exteriors and interiors of his buildings.

In his essay "Eine Notwendigkeit," Taut uses Kandinsky's paintings as an example of the direction in which architects must go. Kandinsky's work in 1912-1913 had moved into abstraction; the canvases are full of vibrant color, animated lines and forms, and composed without recognizable objects or conventional spatial relationships. In 1912, Kandinsky had published his famous book *On the Spiritual in Art*, which was a passionate embrace of color as the driving force in art. Kandinsky began by articulating the properties of color like warm and cold, light and dark, and complementarity and assigned emotional value to color, although perhaps most importantly for Taut, Kandinsky organized his color world in oppositional values, an approach that Taut would adopt and adapt to his architectural projects.

Taut asserts that like Kandinsky and other contemporary artists, architects must achieve "freedom from perspective and single vantage points...the buildings of great architectural eras were invented without perspective...."² Taut blames the over concern with perspective for trapping architects in a mode of thinking that paradoxically produces flat, "backdrop" buildings rather than spatial experience. "Architecture," he writes, "should have rooms whose characteristic phenomena come from the new art...light compositions of Delaunay...Cubic rhythms of the paintings by Franz Marc or the art of Kandinsky. The pillars outside and inside should reflect the constructive sculptures of Archipenko, Campendonk will make the ornament."³ In other words,

¹ John Gage, *Colour and Meaning: Art, Science and Symbolism* (London: Thames and Hudson, 1999), 242. See also Theo van Doesburg, "Painting and Sculpture: Elementarism" (1927).

² Bruno Taut, "Eine Notwendigkeit," *Der Sturm*, No. 196, 174.

³ *IBID*, 175.



Taut is searching for a way to develop new space and form using color as a constitutive part. Delaunay's complex canvases were influenced by Cubist composition along with the color theories of Paul Signac and Eugene Chevreul, and the perceptual ideas of Charles Henry, but moved to pure abstraction and used abstract formal structures and color to create emotional sensation. From Chevreul, Delaunay learned the importance of optical mixing of colors and how to juxtapose complementary colors to great visual effect. Taut combined Kandinsky's and Delaunay's approaches with the primary palette of Theo van Doesburg.

Among the other color controversies was disagreement about how many primaries existed and what the primaries actually were; Taut plays with both the additive and subtractive notions of primary colors: red, blue, green, and red, yellow, blue, with black, white and grey.¹ At the Berlin Weissensee development (1926), for example, he painted the facades in alternating bands of primary color from bottom to top: blue, yellow, red, yellow, capped with white.

Taut recognizes that painting has made advances that suggest some paths forward for architectural application of color. And yet, Taut is not yet really sure what this new architecture might look like or how to achieve it. He begins to consolidate his ideas about color in 1919 in "Call to a Colored Architecture."² In the 19th century there were vibrantly colored buildings, he asserts, but they were either farm buildings or historic structures in the Hanseatic and harbor cities; otherwise, the modern industrial city was largely dull grey. Taut declares, "The last years have, through pure technical and scientific emphasis killed meaningful optical pleasure. Grey in grey stone boxes in place of colored and painted houses."³ He continues, "Everything that is in the world must have some color. All of nature is colored, and even the grey of the dust, soot, even the gloomy melancholy areas always have a certain type of color."⁴ And to justify the use of bright color in architecture he asserts, "In place of the dirty grey houses I place again a blue, red, green, yellow, black, white house in undisturbed light coloring."⁵

In 1902 Taut had written his brother Max, "The idea which I have already carried around with me for two years still occupies me – the combination of my talents with regard to color with my architectural ability. Spatial composition with color, colored architecture – these are areas in which I shall perhaps say something special."⁶ In fact, it is using these two related but different approaches to art and architecture that Taut finds his path forward. From 1917 Taut uses color

¹ See Charles A. Riley II, *Color Codes: Modern Theories of Color in Philosophy, Painting and Architecture, Literature, Music, and Psychology* (Hanover: Univ. Press of New England, 1995) for an extensive discussion on the search for primary colors. Subtractive primaries are ones based on paints which, when added together make grey; additive primaries are those based on light, which, when added together make white.

² Bruno Taut, "Aufruf zum farbigen Bau," *Die Bauwelt*, 10 JG, Heft 38, 18 Sept. 1919

³ Bruno Taut, "Aufruf zum farbigen Bau" "Die vergangenen Jahrzehnte haben durch die rein technische und wissenschaftliche Betonung die optischen Sinnesfreuden getötet. Grau in graue Steinkästen traten an die Stelle farbiger und bemalter Häuser."

⁴ Ibid, "Alles, was auf der Welt ist, muss irgendeine Farbe haben. Die ganze Natur ist farbig, und selbst das Grau des Staubes, des Rußes, selbst die düsteren melancholischen Gegenden haben immer eine bestimmte Art von Farbe."

⁵ Bruno Taut, "Aufruf zum farbigen Bau," -- "An Stelle des schmutzig-grauen Hauses trete endlich wieder das blaue, rote, grüne, gelbe, schwar- ze, weiße Haus in ungebrochen leuchtender Tönung."

⁶ Bruno Taut Diary, AdK. Cited in Whyte, 20.



in his visionary drawings as an evocative way to explore new architecture and new urban design propositions and to provoke emotional responses in his audience. He then transposes the lessons he learns from color exploration in his visionary drawings and paintings to his façade designs, where he experiments with applying color in abstract patterns as a form of contemporary ornament, and to interiors where he probes the possibilities of color as a way of enhancing space, spatial perception, and the emotional response to space.

Taut's fascination with bold and contrasting color is evident in the visionary books from the late teens and early 1920s like *Der Weltmeister* shown here. Taut generally restricts his palette to primary and complementary colors, utilized in a broad range of values. In this page from *Alpine Architecture*, for instance, he juxtaposes bright red and yellow, adds a smattering of blue and green as accents, against a stark white background. Chevreul and others had demonstrated that the intentional placement of complementary colors next to one another caused a perceptual sense that each was more intense than when viewed alone. Similarly, the concentric circles in this plate work either with complementary color contrast or tonal contrast. But the contrasts are more than optical phenomena, they are also spatial ones that follow Kandinsky's spatial color theory; blue recedes and yellow and red advance. The receding blue suggests the infinity of outer space in contrast to the forward pushing red of the central sphere.

Taut developed a two-pronged approach to his use of color in architecture. For facades, he strove to create "meaningful optical pleasure" as at the Falkenburg Housing Estate, Magdeburg downtown, and Onkel Tom's Hutte while on the interiors he chose colors that went beyond optical pleasure to stimulate emotional sensations. Kandinsky articulated the emotional value of specific colors.¹ He associated green with bourgeois comfort, for instance, blue with spirituality and peace, and red with energy, warmth and passion. Although Taut never articulated the specific emotional corollaries to his interior palettes, a comparison between Kandinsky's color characteristics in *Concerning the Spiritual in Art*, which Taut knew well, and Taut's designs makes it apparent that Taut worked with many of Kandinsky's ideas for his interior color schemes.

One unit at Taut's famous Hufeisensiedlung has recently been lovingly and accurately restored to the original color scheme of saturated primary colors. Taut explains, "The house form is a crystallization of the atmospheric conditions. It is supported through color."² The house is totally organized around the primary color scheme; each room has a color theme that addresses all six surfaces, walls, floor, and ceiling as well as furnishings to create an emotionally-charged atmosphere by juxtaposing complementary colors in the same space.

(Figure 4)

The choice of green for the living room follows Kandinsky's association of green with comfort and

¹ Gage, 242.

² "Aufruf zum farbigen Bau," "Die Hausform ist eine Kristallisation der atmosphärischen Bedingungen. Sie wird unterstützt durch die Farbe."



bourgeois luxury. The red floor adds warmth and the white ceiling suggests “endless possibility.” Blue as the bedroom color is meditative and peaceful, which makes for a good space to rest in. Yellow for the spare room is “cheeky and exciting” so it is appropriate for its function. And white makes good sense in a kitchen as a symbol of health and hygiene but also to emphasize this room as the space “pregnant with possibilities” of the culinary variety.¹

(Figure 5)

In all of the rooms, Taut carefully selected furnishings that would both fit well into the space and whose color would optically balance the room colors. He places black and white objects in the kitchen to heighten the sense of hygiene. He accents the blue walls in the bedroom with white and black built-in furniture and a red stove. In the spare room, he places red curtains, a red couch, and a blue chair, then colors the ceiling white and the radiator black completing the use of primary colors.

Taut had invented an innovative way to combine contemporary color theories in the service of architectural form and space that was different from any other approach. While his use of color to enliven facades was unique and embodied Taut’s notion of “meaningful optical pleasure” by creating visually attractive patterns on building facades, it was his interior treatments that suggested a truly original way to use color in space as an agent of psychological and emotional charge. His colleague Adolf Rading used color to transform the interior into an abstract space, akin to a theatrical set or a folded painting, in which the traditional markers for spatial boundaries are replaced with colored surfaces and colored abstract shapes. Van Doesburg and the De Stijl group used color to articulate individual planar elements of the space in a way that was unfamiliar and designed to dissolve spatial boundaries. In contrast, Taut does not treat every plane differently but tends to choose a single color for the walls, another for the ceiling, and another for the floor to form an immersive environment. This creates a totally different spatial effect that emphasizes the emotional quality of the space. Rather than giving the sense of stepping into a canvas, or an abstract space, in which color articulates the planes of the enclosure, Taut’s rooms give the sense of entering an emotion-charged zone delineated by the room’s all-encompassing color – the blue room, green room, red room. Once across the threshold, color envelops you giving a strong sensation and optical pleasure.

¹ Wassily Kandinsky, *Concerning the Spiritual in Art* (1912).

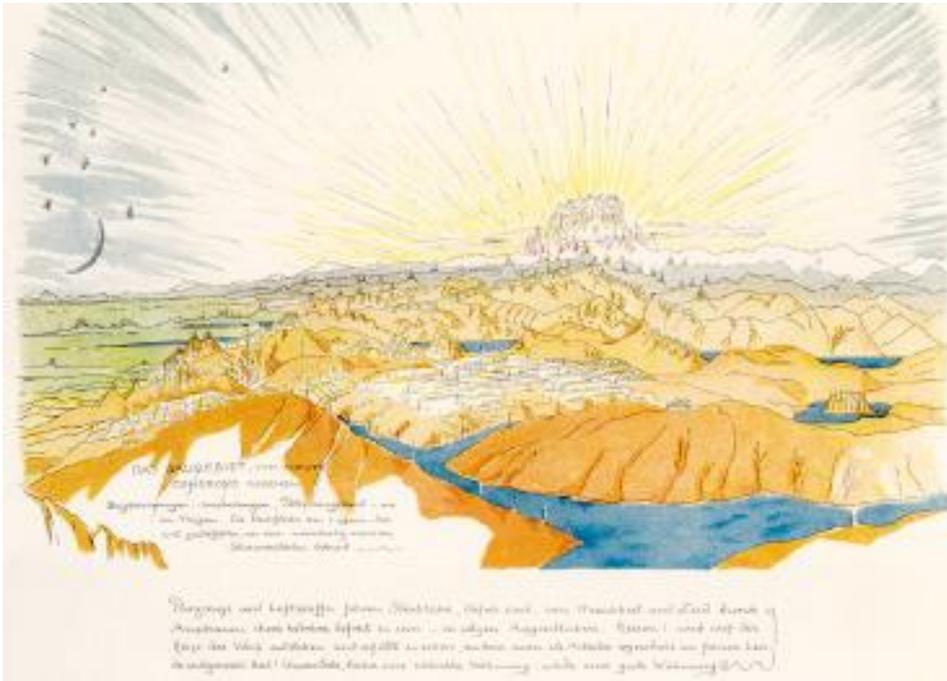


Figure 1: Page from *Alpine Architecture* that shows how Taut worked with color, in particular primary color, in his artwork.

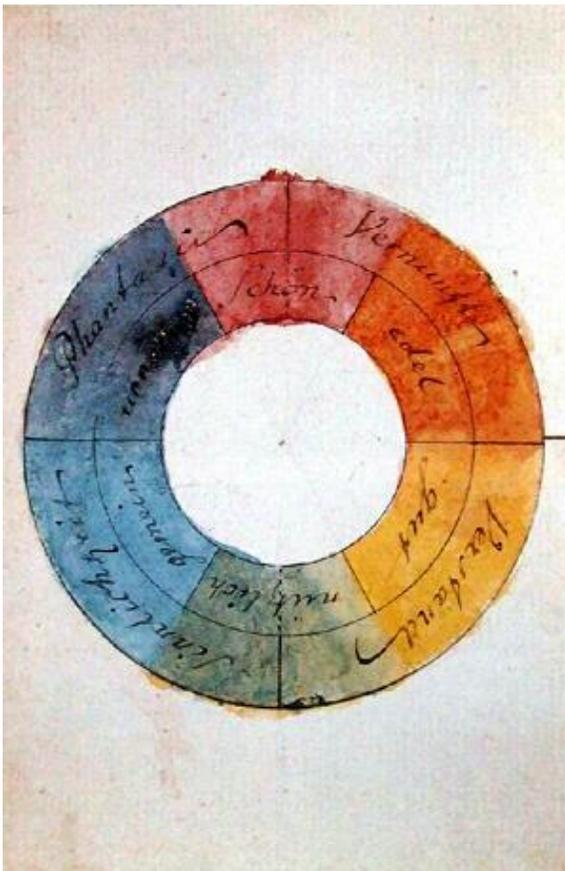


Figure 2: Goethe's color wheel from the *Farbenlehre* of 1810.



Figure 3: Wassily Kandinsky, *Improvisation 27*, 1912, from the same year he authored his *On the Spiritual in Art*. The painting shows his ideas about color and the bold palette he was working with.



Figure 4: Bruno Taut's Hufeisensiedlung (Horseshoe Development) from above.

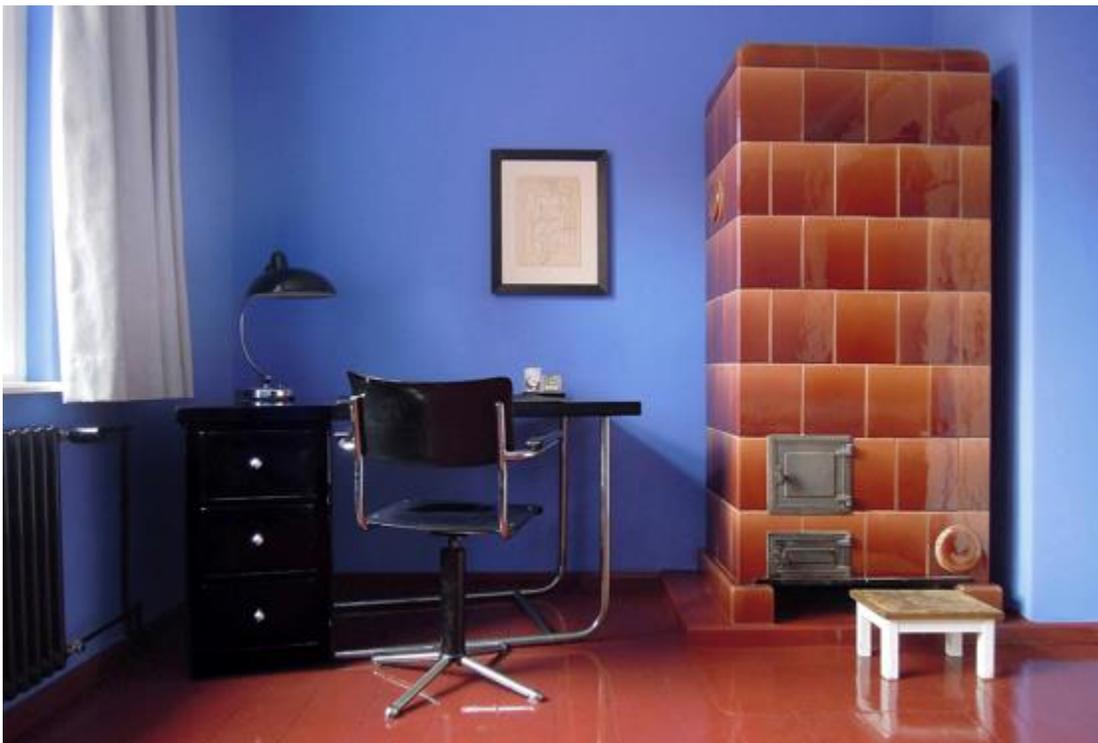


Figure 5: Bruno Taut interior at the Hufeisensiedlung. The room shows how Taut worked with primary colors along with black and white on the interiors.



Poetic Exploration: Alvar Aalto's Painting and Architecture

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Abstract

Throughout his career Alvar Aalto used painting as a means with which to explore multiple dimensions of architectural design, which played out primarily in the reconciliation of compositional opposites -- spatial depth and perception against foreground, line and contour opposed to field color, natural versus manmade form, functional planning and intuitive design. As he said in 1955, "In every case [of creative work] one must achieve a simultaneous solution of opposites...Nearly every design task involves tens, often hundreds, sometimes thousands of different contradictory elements, which are forced into a functional harmony only by man's will. This harmony cannot be achieved by any other means than those of art." Although largely ignored in the historiography of classical modernism until recently, Aalto's approach was common throughout the European avant-gardes. An early photograph of Aalto as a 14-year old shows him holding a painter's palette and brush, standing in front several landscape paintings that are hanging on the wall. The image is both a testament to the importance painting held for Aalto and to the autobiographical double meaning in his statement, "But it all began in painting." Aalto apparently had difficulty choosing whether to pursue painting or architecture, decided on the latter but never gave up the former. In 1947 Aalto wrote, "abstract art forms have brought impulses to the architecture of our time, although indirectly, but this fact cannot be denied." This paper will examine a series of paintings Aalto executed over the years and compare the compositional strategies and explorations with several of his built projects in order to trace the relationships between his painting and architecture. Aalto's many paintings attest to his lasting devotion to other media beyond architecture; their content demonstrates what Aalto explored and its efficacy for his architectural works.



CABIN/CAVERN: Archetypal Phenomena and Their Unconscious Persistence

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Abstract

The following paper explores phenomena underlying the meaning of primordial space. It aims to cast some light on certain fundamental aspects of the origins of architecture and rock art that lie concealed or that remain at an unconscious level within contemporary disciplinary practices and experiences of built environments. The narration focuses on two notions that are apparently antithetical: the cabin and the cavern, and that are respectively associated with tectonic and stereotomic systems. The text examines their respective meanings, the phenomena that characterize their spatial properties and their possible durability and readability in recent architectural manifestations.

By means of an interdisciplinary approach, the text falls between the analytic and the literary, in the hope to reenact, through reverie, a current and argued interpretation of the meaning of primordial space.

Key words: Cabin, cavern, primordial space, tectonics, stereotomics, rock art



Fig. 1: Bison composed of red dots. Grotte Chauvet (Ardèche), France. Aurignacian or Early Gravettian. Taken from: (White 2003, 60).¹

Part 1

*The creature gazes into openness with all
its eyes. But our eyes are
as if they were reversed, and surround it,
everywhere, like barriers against its free passage.
We know what is outside us from the animal's
face alone: since we already turn
the young child round and make it look
backwards at what is settled, not that openness
that is so deep in the animal's vision. Free from death.
We alone see that: the free creature
has its progress always behind it,
and God before it, and when it moves, it moves
in eternity, as streams do.
We never have pure space in front of us,
not for a single day, such as flowers open
endlessly into.*

Rilke, "The eighth Duino elegy"²

¹ White, Randall. Prehistoric art: the symbolic journey of humankind. (New York: Harry N. Abrams, 2003).

² Rilke, Rainer Maria. Duino Elegies and The Sonnets to Orpheus. (Boston: Houghton Mifflin, 1975).



When I think about the cabin from inside the cave my imagination fills with images of brightly lit spaces within an enclosed interior. I realize that the cave resembles the world at night, or a bladder insufflated by an unfamiliar substance. In this gloomy medium, the atmosphere is densely packed; its irregular walls exhibit evocations of the living, and the floor exposes remains of the dead—together they form a microcosmic cavern.

I head outside to where I can unveil the images of those beings that once provided us sustenance by observing those that have endured. The remembrance of the bison that once grazed these fields manifests in the domestic bull; despite the domesticity of this new image, it is preferable to the precedent, that savage and obscure vision of the past, which is as uncertain and turbid as a vision of the future. Since the primitive bison is gone and has left its remnant halo in its domesticated offspring, the animal I now see is not the same as it was but is rather a manifestation of an ever changing or transitive animal. Now that I have seen the bull I may go beyond its image to arrive to that of the bison that is found in the essence of the bull. The bull that I have seen grazing is midway between the primitive bison and the promissory bison that is about to leave my cranial interior through the act of painting.

I lead the vision of the bison towards the interior of the cave—using my head as a receptacle—and once inside, I expel this vision through the synchronized movement of my hand and the ebb and flow of my breathing. The spectra of those beings that have given us sustenance enter the cave just as a cup leads water to our mouths, quenching our thirst. The bison abandons the envelope of my brain and adheres to the walls of the cave, withdrawing from me as a bull would do while grazing in the field. The resulting painting is not that of the ruminant dweller of my mind, or of the bull in the fields, and even less of the vision of the bison crouching within the essence of the bull. For it is true that from the periphery of this mouth that is the cave the painting of a new bison emerges, and it reveals itself in all its splendor in a drawing in a cave, as a new word lies hidden in a mouth about to open. Painting and speech, cave and mouth come together to engender myths and to enhance the blind narratives of the night. The painted cavern resembles a socket where an eye that had seen great things previously dwelled, or it resembles a skull that once sheltered somber ideas. And so the bison emerges only to fade away untouched by sunlight into the cave that is as round and hollow as an echo. But the reverberation of the image of the bison, once thought to mediate between two simultaneous worlds, now bonds the dreams of human beings from the distant past and from the immediate present, and our ephemeral and dancing shadows converge with the long lasting and static spectra in the cave.

Somewhere between my mind and the bison a sieve is found through which thought transits as it becomes dots and lines. A common and universal grid emerges when dreaming and imagining—while awake or watching—and mediates between the animal found outside and the one in my mind. In the midst of this becoming of art, a blurry, transient spectrum made out of dots and lines emerges. The animal in movement, once gone, also leaves behind dots and lines.

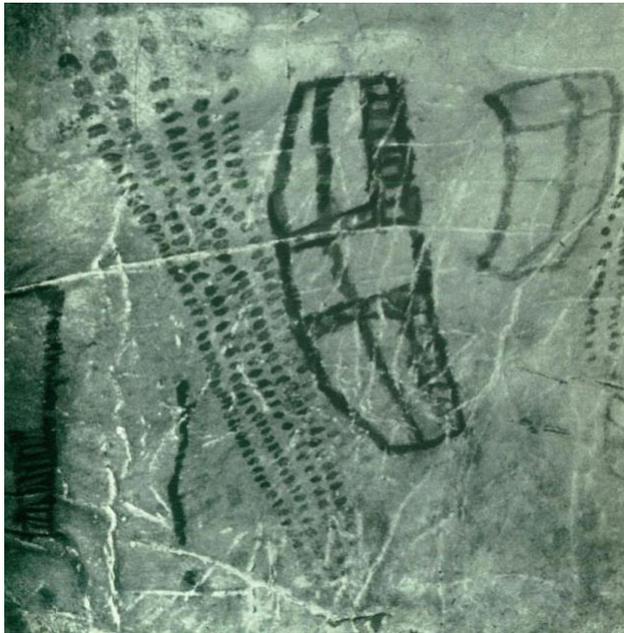


Fig. 2: —tectiform designs, El Castillo cavern, Spain. Final Perigordian. Taken from: (Varagnac 1959, 131)¹

In this “sketch” of the world for the free subject, the cosmetic is the anticipation of the cosmic. The beautiful is not here a quality, intrinsic or extrinsic, subjective or objective, it is more than a quality. Indeed, it constitutes the status and very being of the subject which forms itself and which presents itself in order to (re)present for itself a world of phenomena. Nancy, “The sublime offering”, p. 31²

The bison approaches, is seen, and then parts. To take possession of this image, I transport it to my head and then into the cave, favoring my mind and abandoning my body just as I abandoned the outside. After periods of abstraction, in which I feverishly enjoy the surrounding penumbra, I once again come out to be bewildered by the glaring exterior light; dazzled, I see dots and lines. Eclipsing the animal, the glare deposes the penumbra and forges, in that encounter of my warm hand with the cold stone, an impression of the animal that I remembered. I fear, though, that the true bison withdraws. The animal moves at great speed towards a world that is unknown to me, and I am eager to follow it, to go after it, to become it in dreams. Painting involves following something that flees. That which I paint has as much of myself as of that which I chase, and it also invokes that which I wish my imagination to overcome. Art is hunting, and from hunting emerges the feeling that reveals the reality of the insatiable hunger of art.

¹ Varagnac, André. *L'homme avant l'écriture*. (Paris: Armand Colin, 1959).

² Jean-Luc Nancy, “The sublime offering” in Rodolphe Gasche and Mark C. Taylor, ed., *Of the Sublime: Presence in Question* (Albany: SUNY Press, 1993) 25-53

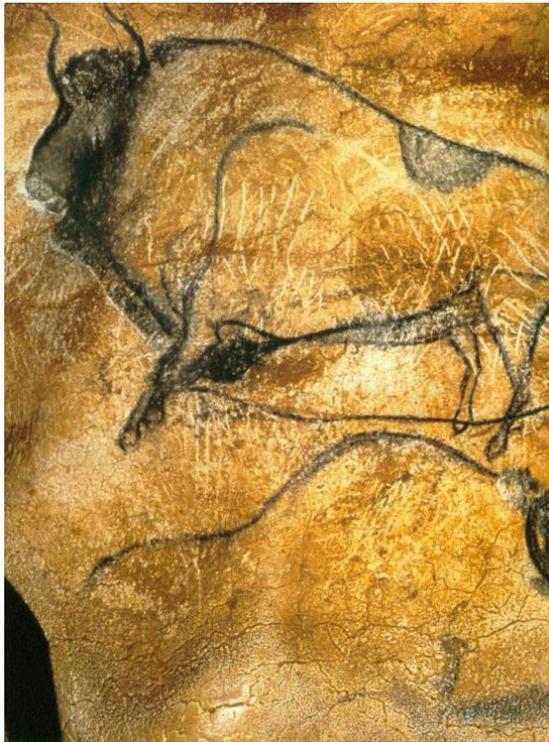


Fig. 3: Large bison in the Grotte Chauvet, France, dated to $30,360 \pm 570$ B.P. Photo by J. Clottes. Taken from: (Clottes 2002, 36)¹

I must grasp at that which moves in haste. The cavern is a closed hand firmly seizing us like a fist. We lay in its wrinkled palm that is completely furrowed by the plow of time. In order to retain the animal, as the cave holds me, I mentally move to where the bison would be while the bison in my mind transmutes. When I do find the bison, it is different from the one I visualized while searching. It gives me the impression of something reduced by its flight to an array of lines and dots. Half way between reality and its imagined becoming, this precarious ensemble of graphic indications of the bison establishes a consensus between that which I desired and its realization. Once painted, I can infer from it the plausible existence of another bison or bull that was unable to manifest itself.

Reality, when strained through a sieve or when it traverses a threshold, generally becomes a mesh of lines and dots. In its transit towards imagination the thick parts are separated from the subtle parts of reality as though it passed through a sifter. This rigorous selection also happens when imaginary phenomena desire to touch or lightly touch the surface of reality. When entering or leaving the cavern, or when opening our eyes in complete darkness, we sift the world and weave an image with what remains from the sifting. In the cavern reality is ultimately abstracted and abstraction is performed ritually.

¹ Clottes, Jean. World rock art. (Los Angeles: Getty Conservation Institute, 2002).

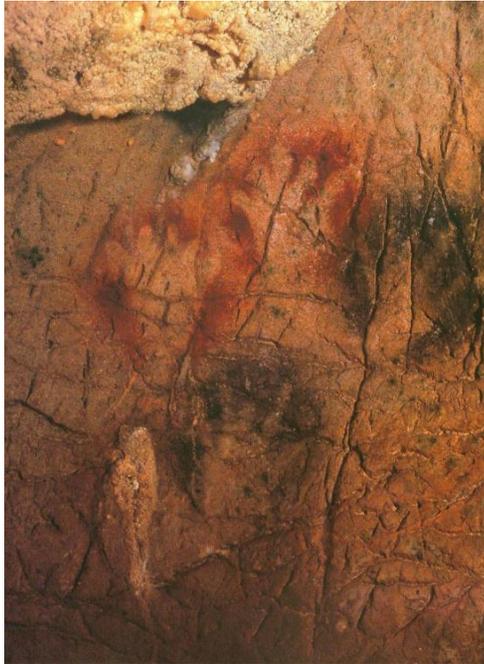


Fig. 4: Red and black silhouettes of human hands, some with missing fingers, painted on cave wall, either by direct spitting or by blowing paint through a tube. Grotte de Gargas (Haute-Garonne), France. Photo: A. Roussot Taken from: (White 2003, 14).¹

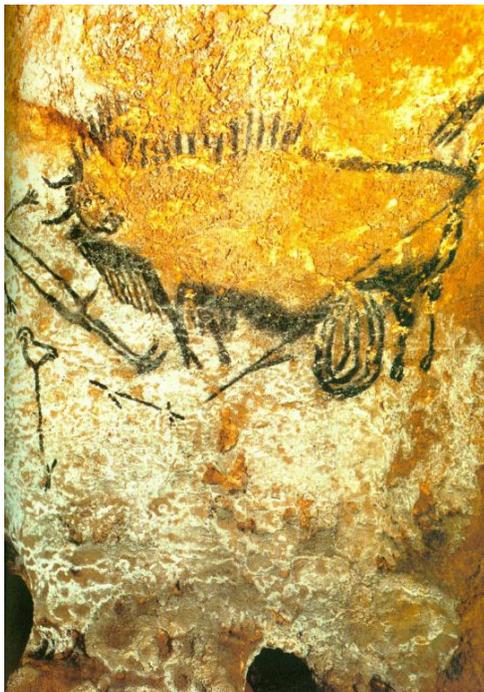


Fig. 5: hunting scene at Lascaux (Dordogne), France. Magdalenian. Photo by Hans Hinz Taken from: (White 2003, 101).²

¹ White, Randall. Prehistoric art: the symbolic journey of humankind. (New York: Harry N. Abrams, 2003).

² White, Randall. Prehistoric art: the symbolic journey of humankind. (New York: Harry N. Abrams, 2003).



Part 2

(...)this old skull cracks so, like a glass in which the contents turned to ice, and shiver it. And still this hair is growing now; this moment growing, and heat must breed it; but no, it's like that sort of common grass that will grow anywhere, between the earthy clefts of Greenland ice or in Vesuvius lava. How the wild winds blow it; they whip it about me as the torn shreds of split sails lash the tossed ship they cling to. A vile wind that has no doubt blown ere this through prison corridors and cells, and wards of hospitals, and ventilated them, and now comes blowing hither as innocent as fleeces. Out upon it!—it's tainted. Were I the wind, I'd blow no more on such a wicked, miserable world. I'd crawl somewhere to a cave, and slink there. And yet, 'tis a noble and heroic thing, the wind! who ever conquered it? Melville, Moby Dick, p. 554.¹

One of the plausible yet antithetical things that may be visualized from within the cavern is the cabin; much in the same way that it may be possible to think “Adam” after the previous thought of “Eve”. Architecture results from the fertile and fruitful encounter of these two archetypal and primordial spaces. However, architecture has fallen from the paradise projected by this encounter because primordial ideas have remained deeply concealed in materialization. Yet we can still imagine the essence of the cabin in the cavern; we visualize more lines than dots in its constitution. We have, on the one hand, a given cavity of stone and water, and on the other hand, a proposed idea of a skeleton of wood and fire. The thought of the cabin is akin to seeing our own bodies lacking all its flesh and skin. The cavern is skin for our flesh; the thought of flesh for our skin, and being able to mentally deprive this enclosed space of its cover, may bring us to conceive a hut or skeleton. We can foresee what we will all become with death. It may be that with time the cabin will supplant the cave just as the mesh has supplanted the variable spectra of shadows, or just as our skeleton outlasts our flesh.

A tree is uprooted, dismembered, and led into the cave so that it may be consumed by fire. From being a vital, organic and humid entity it turns into an arrangement of inert, straight and dry logs. It is difficult for the organic to be kept alive when entering the stony milieu of the cave. Losing life or trading it for another sort of existence is common, when crossing the path that leads art from its preexistence in nature to its unnatural abstraction. Through this path, art unveils the peremptory secrets of nature. A tree trunk, for example, will become a column, or a rib, which is a part of Adam—the symbolic equivalent of the cabin— will become Eve —the symbolic equivalent of the cave—. In the presence of a skeleton we may conceive, through imagination, the thought of flesh and skin. And upon the entrance of the tree trunk to the cave we may perceive a penetration of the linear that may influence a thought or dream: from within we may imagine an outside where trunks superimpose. The possibility of a cabin is concealed within a pile of logs waiting for the fire. In the cabin sunlight filters through the slits left between the superimposed

¹ Melville, Herman. Moby Dick. (New York: Norton, 2002).



logs. The cabin, unlike the cave, belongs more to reality than to the realm of dreams because the environment is filtered with greater ease through this human creation. In the cavern the phenomena that inform the surroundings are unable to enter unless they are transmuted. There is a tendency of silence in the cave, and as we abandon silence and perceive greater light and sound we are figuratively replacing the closeness of the cavern for the openness of the cabin. And so we do not experience imagination as a thumb exerting pressure on our thought, but instead as a fingernail scratching it.

How old is the cave? Penumbra provides evidences of its petrified and mineral time drilled and set apart from the vital cycles of organic matter. In the cabin space is witness to the fleeting transit of time; wood ages, molds, dries, rots or catches fire. The cabin is of another time than that of the cavern, a time where a halo of torches, caught in the reiteration of rites, has left an indelible print on the stone. In the cave, bison move with the flames. They come to life heated by the domesticated fire. Before art existed torches had been rubbed against the walls of caverns. In the shadows, neglected by the flames and because of distorted light, humans saw, in the irregularities of stone, the surging of beings resembling those outside. But in the cabin fire must tread carefully. A longing arson pursues the creation and destruction of the cabin. We have passed from digging the world in the cave to the weaving of the cabin in the world.

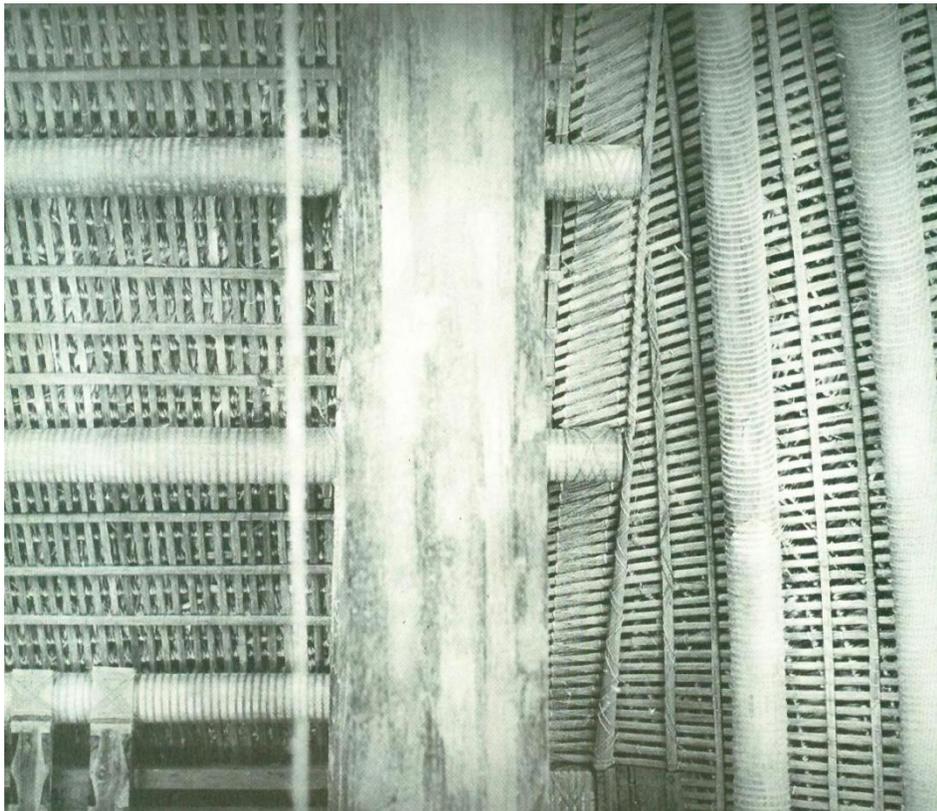


Fig. 6: Interior of cabin in Samoa Islands, Polynesia. Taken from: (Guidoni 1977, 206).¹

¹ Guidoni, Enrico. *Arquitectura primitiva*. (Madrid: Aguilar, 1977).



In the cabin there is clarity of sound and accuracy of features and gestures, and therefore this primordial space celebrates the singularity of each phenomenon and being in the world under the vivifying sky. In contrast, in the cavern there is a vagueness of hearing and a penumbra that amalgamates, which stimulate the cohesion of phenomena and beings in a magma that consolidates itself through isolation. The cavern tends to blur the crisp distinctness that the cabin stimulates. This underworld is a supernatural world. While large herds of bison roam the steppes accustomed to the harsh cold, the cave presents itself as a possibility of physical stillness, mental movement, and warmth. Sheltered in the cave and as a result of the domestication of fire human beings have been able to give birth to art, yet art has been unearthed. If the cavern invokes the outside, the cabin convokes the outside. A mind that is a receptacle and dwelling place of abstraction behaves like a cave. Abstraction in art demands estrangement from the exterior and involvement with the interior. The experience of the cavern may be reenacted by closing our eyes, entering into the night or imagining the night; but even into this exercise the outside is able to penetrate, just as the cool wind, the sound of insects, or the wetness of rain penetrates space. In the cave there is fear for the distant and uncertain and in the cabin there is fear for that which is close and certain; we evoke the cave from the cabin, sometimes with yearning and other times with disdain. In our minds lies an immemorial cavern that is the work of telluric forces that overcome us. The cavern that certainly was not created by us, that preceded us, can once again welcome us within its womb. In the cabin, vulnerable to fire, we recreate a cave for fire in the chimney. In the chimney the cabins of our imagination are burned.

I will arise and go now, and go to Innisfree,
And a small cabin build there, of clay and wattles made:
Nine bean-rows will I have there, a hive for the honey-bee,
And live alone in the bee-loud glade.

And I shall have some peace there, for peace comes dropping slow,
Dropping from the veils of the morning to where the cricket sings;
There midnight's all a glimmer, and noon a purple glow,
And evening full of the linnet's wings.

I will arise and go now, for always night and day
I hear lake water lapping with low sounds by the shore;
While I stand on the roadway, or on the pavements grey,
I hear it in the deep heart's core.

W.B. Yeats. The Lake Isle of Innisfree. P. 39¹

Through the cabin we return to nature in order to distance ourselves from it through its

¹ Yeats, William Butler. The collected poems of W.B. Yeats. (New York: Macmillan, 1956).



contemplation. Glaciers melt and human beings are able to abandon the caves and move toward the woods. They no longer require stone dens in a possibly more benevolent world. Art will also return to the world from which it came. Embodied in culture, art can now be made of clay, bones, stones and wood. Straight and stiff elements are needed to serve as prostheses for our organic flaws. The tectonic shelter emerges from the cave as the possibility of a cabin. If in the cavern our dreams and memories were found immersed in a hazy magma, in the cabin they occupy vessels that float on torrents charged with all that we hear and feel as we sleep. The awakenings dissipate dreams, sunlight burns them like lumber set afire and the wind disperses them as seeds over barren fields. The cabin is the architecture of reality, materially ephemeral, while the cavern is the architecture of dream, conceptually permanent. Human longing is distilled in an effective and logical concretion such as the cabin—a natural result of the effort required in formalizing an idea—while the cavern is given to us as a natural space to engender an idea.

The tree that grows twisted is later cut into straight fragments, much as ideas crystallize through strokes that fix movement on paintings. A tree becomes a trunk just as a dream becomes a cabin. In both cases there is uprooting or detachment of roots. Let us remember how the bison leaves a halo and how this halo becomes a stroke while the vanished animal dissolves with passing time. Whenever we imagine, the mesh of lines and dots is extended like a mental net. We weave images with the resulting creative sediments. The black pigments that outline spectral beasts in caves are made with carbon from burnt lumber mixed with saliva. And every time our mind remembers colors, the tones are degraded until they resemble the primordial—those with which we are obsessed. But at the bottom of all those soon to fade colors there lies, in recess, the black and white that are the tones of all things at night when reflections cease and light dissolves.

Behind the different architectures that humanity has produced there lies, as black and white, the primordial spatial conditions of the cabin and the cavern. Sheltering our bodies, recipients of our shadows, the lineage of both cabin and cave is present. Architectures are their children. The cabin is witness to sunlight and the winds. But the same cabin may become cavern with nightfall and the closing of eyes. We can imagine our cabin as a cave. To our human beginning we return in dreams. It is awake before dawn, and with the horizon in sight that we project the cabin. Caves are left behind in the night of time and in the interruption of the awakening; but we do return to the darkness of the cave with death. Inside a coffin, or dispersed within the embers of fire, we return to the cabin in the cave, either by the closing of an urn for our ashes or because the earth slips in between the boards of the cabin-coffin. And then, the coffin becomes rotten, like the cabin exposed to the natural elements. We gradually turn into bones losing all flesh and skin—singular identities that are supplanted by names, memories or myths. Only then do we allow our concealed cave to detach from its skeleton. With death we become an ephemeral cabin buried in the earth, yielding its place for some other to occupy it. In the surface of this enormous cave that is the world only our shadows endure when projected upon art and architecture.

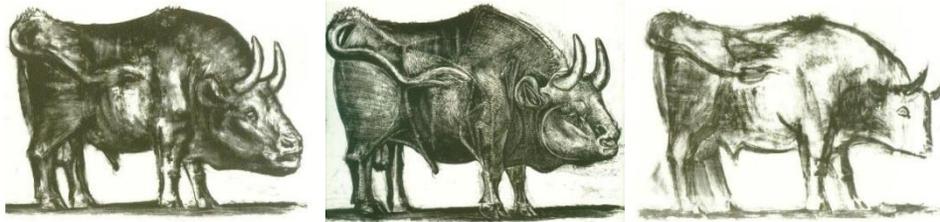


Fig. 7: Le Taureau – 1er, 2ème et 3ème état. December 5, 12 and 18, 1945
(Picasso 2007, 34, 35)¹

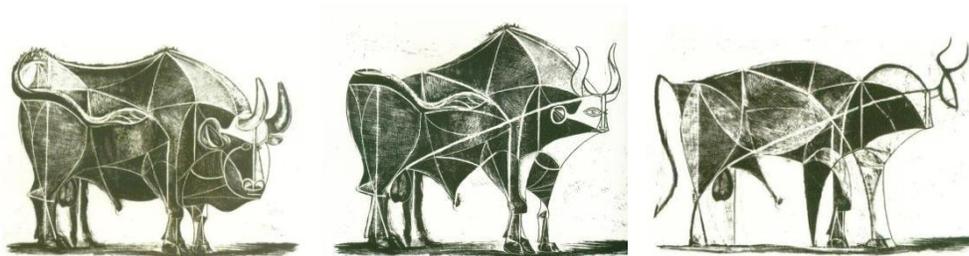


Fig. 8: Le Taureau – 4ème, 5ème et 6ème état, December 22, 24, 26 1945
(Picasso 2007, 35, 36, 37)²

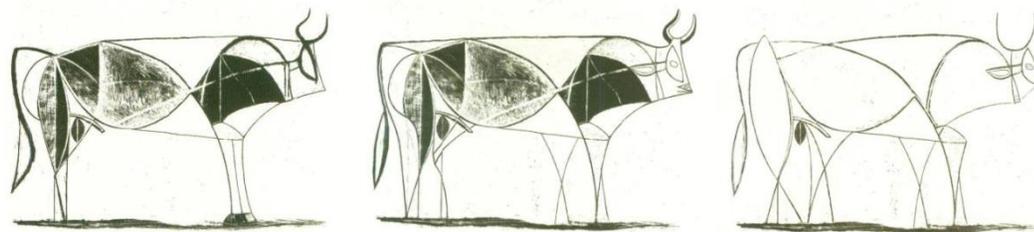


Fig. 9: Le Taureau – 7ème, 8ème, 9ème état, December 28, 1945, January 2 and 5, 1946,
(Picasso 2007, 37, 38)³

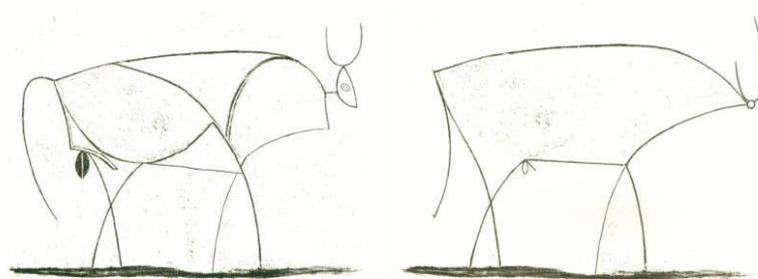


Fig. 10: Le Taureau 10ème, 11ème état, January 10, 17 1946 (Picasso 2007, 39)⁴

¹ Picasso, Pablo. Picasso, la joie de vivre, 1945-1948. (Venezia: Palazzo Grassi - Skira, 2007).

² Picasso, Pablo. Picasso, la joie de vivre, 1945-1948. (Venezia: Palazzo Grassi - Skira, 2007).

³ Picasso, Pablo. Picasso, la joie de vivre, 1945-1948. (Venezia: Palazzo Grassi - Skira, 2007).

⁴ Picasso, Pablo. Picasso, la joie de vivre, 1945-1948. (Venezia: Palazzo Grassi - Skira, 2007).



Part 3

*CREON: I'll take her down a path untrod by man
I'll hide her living in rock-hewn vault,
With ritual food enough to clear the taint
Of murder from the City's name.
I'll leave her pleading to her favorite god Hades.
He may charm her out a way to life.
Or perhaps she'll learn though late the cost
Of homage to the dead is: labor lost.
Antigone, Sophocles. P. 190¹*

All architectures conceived result from visions in which cabins and caverns appear, some inside others, woven or linked through thresholds. From darkness to brightness, the cavern transits in its becoming cabin. But at night we all dwell in a shared cavern. Under this vault covered with stars, humanity comes together to link white dots with strokes of imagination. The bison can now be seen as constellations. With daylight, illumination and a new birth comes the abandonment of the dream and of the cavern. That seems to be what we want for architecture today: abandonment of the cave, the limitation of its performance solely to dusk or the reduction of its presence to lar, to the chimney that warms, to a congregational fire or to an alternative vision to that of the sun. For fire is a sun that can be admired and that, in contrast with the star, can incite dreaming instead of acting. But fire extinguishes easily—as all of our visions do—and the sun replaces it when the cabin appears to dissipate imagination.

To think about the cavern nowadays is to dig for what is real as a worm digs through an apple. In contrast, the cabin is a tree that has become a trunk or the transformation of the natural into something artificial. The cabin embodies the processed and exemplifies our veneration for the process. It is through performance that thoughts move away from the outfall of our dreams. They head for concretion and become the entities we later dream about. We think of the possibilities of the cabin as those that will lead to the future, because we may envision towers through them, but unleashed tectonic progress is a domination through straightness that subjugates the contours of imagination. Caverns nowadays are understood as past and underground, as swollen stomachs of memory.

The city of our daily life is an unfinished cabin. In it we have the sensation of always being outside, enveloped in noises that never cease, where diminished odors come tightly close and visions crowd with transmitted, overlapping messages. There seems to be no place for the cavern to take place in the city. Over the entire periphery of the cavern that is the night merciless light is shed,

¹ Sophocles. The Oedipus plays of Sophocles: Oedipus the king, Oedipus at Colonus, Antigone. (New York: New American Library, 1986).



and the city behaves like an electric, insect-killing lamp. In its uniformity and consistency the luminous mass which is supported by what has been built, no longer edifying, dissolves the precise presence of stars.

It is a strange picture, he said, and a strange sort of prisoners. Like ourselves, I replied; for in the first place prisoners so confined would have seen nothing of themselves or of one another, except the shadows thrown by the fire-light on the wall of the Cave facing them, would they? Plato, The Allegory of the Cave, Book VII of The Republic, P. 228¹

Exerted pressure has been replaced with repetitive scratches upon our imagination. And thus the cabin replaces the cavern. Archi-sculptures, either skyscrapers or contemporary formalist buildings, are hollow molds of spiritless caves. And so we merely skim, in contemporary architecture, the potential symbolic periphery of caves. Fetid odors emanate from sewers and sadness crouches in misunderstood penumbra. We demand light upon us at all costs and our eyes no longer seem to turn into our sockets; nostrils, mouths and stomachs, are the only remains of caverns within us, and they ooze, through nocturnal snorts, our hidden animal breath.

¹ Plato. The Republic (London: Oxford University Press, 1945).



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*Illustrations are only valid for oral paper presentation, not for publication; since I do not have legal permission to reproduce them on print.

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Artistic Relations and Elements Present in the Architecture of Rogelio Salmona

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Abstract

With this paper I intend an approach to the composition of Rogelio Salmona's architecture and its influence in the later experience of the built work. Apparently accidental phenomena that we experience in his work, can be explained in the light of the previous processes of composition; and compositional processes, in turn, are informed and supported in phenomena that are revealed in the experience of his buildings. By stringing processes of composition and experience it is possible to find continuities and ruptures in the architect's career.

Key words: Rogelio Salmona, Architectural composition, artistic relations

Decomposition of the composition

I start by saying that the formal structure of an architectural work is a set of components that are not independent between them; and are bounded by internal laws. An analysis of the composition of the form involves an understanding of the laws that govern it as well as a decomposition of this form.

In architecture it is common to use the words design or project when referring to undergoing procedures. Salmona opposes both notions and prefers, when speaking about what he does, the word composition which in its simplest expression means giving good order to things.

“Order is, at one and the same time, that which is given in things as their inner law, the hidden network that determines the way they confront one another, and also that which has no existence except in the grid created by a glance, an examination, a language”¹

Composition as a disciplinary notion is rarely used today but its implementation has a long tradition that begins with Vitruvius, revives in Alberti and consolidates in Durand. It is in the arts, areas where composition prevails, that we can find a confluence between the subjective and the objective in stating this notion, thus reestablishing the link between experience and composition. Julian Guadet said that architecture like music is composed of elements². A change in the order of a same set of elements can give you a new condition to space and with a different interaction, the same elements endow each space very different qualities. To this end the architect's

¹ Foucault, Michel. The Order of things. An Archaeology of the Human Sciences (New York: Vintage Books, 1995).

² Guadet, Julian. Éléments et théorie de l'Architecture Vol. 1. (Paris: Librairie de la Construction Moderne, 1910)



composition requires a systematic knowledge of the elements of architecture. A brief tour of the components of the composition in an increasing degree of complexity and an analysis of the artistic relations between elements and phenomena in the work of Rogelio Salmona are the basis for this presentation.

A central hypothesis of the paper proposes the existence of four instances for the delimitation of the compositional units: materials and techniques applied to them; elements; parts; and wholes. Each of these contains the preceding instances.

Materials and techniques applied to them

Let us begin with the materials. The starting point when understanding the composition of form is the smallest unit in which the form can be decomposed. These minimal units are the materials that compose it, and their governing laws are the techniques by which they are manipulated.



Fig. 1: Picture of Salmona's Torres del Parque from the architect's office. Brickwork in first plane designed by the architect. Picture: Juan Pablo Aschner.

Salmona works with five predominant materials chosen according to their formal malleability, durability, nobility and historical use: the brick and concrete complemented by the use of wood, metal and glass.



Salmona uses and experiments with a limited number of materials in a large number of combinations which entails a high degree of innovation. Innovation in the handling of materials means advancing techniques that over time have acquired cultural and social acceptance in a place, by introducing new strategies that help strengthen and improve their employment without affecting the already acquired habits. On a personal level for both the architect and the user it is easier to establish a bond with those materials that are locally well known and that involve an artisan work rather than those that are unknown and come from the industry.

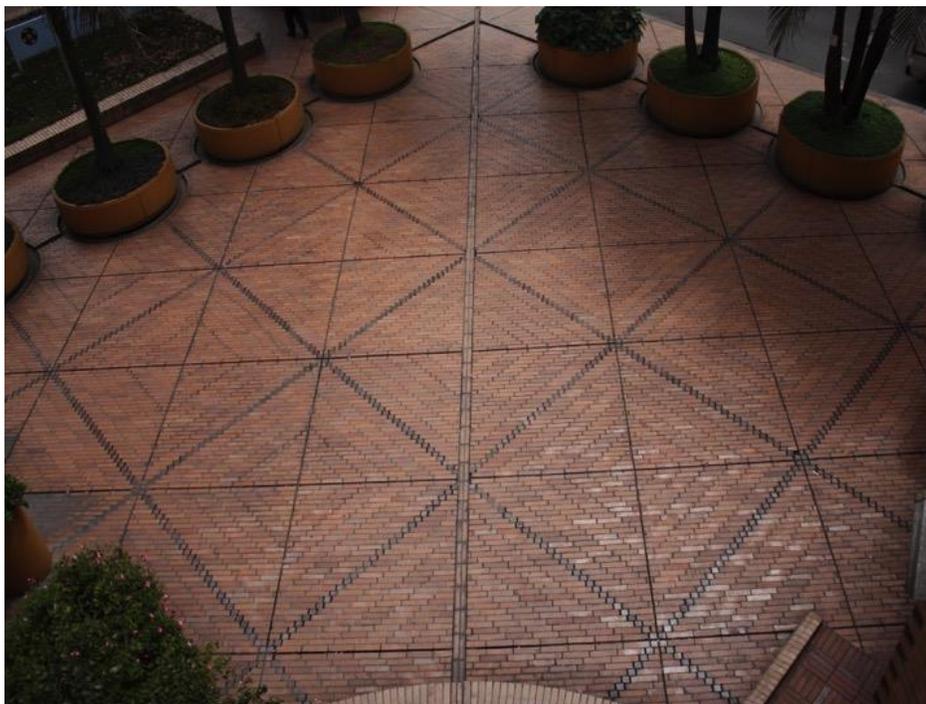


Fig. 2: Example of material exploration in Salmona's National Archive. Picture: Juanita Barriga.

The physical properties corresponding to each of the five materials used are highlighted in the experience when the materials interact or are subject to contrast with each other. Masonry and pavements such as the one seen here are subject to composition and as his work was moving forward in time, these compositions were becoming increasingly rich and complex.

The elements

We turn now to a next instance in the analysis of the components. I shall briefly present those architectural elements that are not divisible in themselves and are able to articulate each part through repetitions and interactions.

The elements used in the work of Rogelio Salmona experience their material genesis in the



manipulation of already mentioned materials and take shape and meaning according to the role they entail within the building. The architect's interest in composing all scales of his projects resorting to previous experiences allows the same elements used in previous works to reappear with variations, and to this extent the elements are enriched from one work to another.

The criteria for the classification of elements in order to analyze them can not be material or formal as these conditions are not constant. What does not change is the usual role the elements carry out in the composition and the actions they perform within the system of the building. Consequently we can identify in the work of Rogelio Salmona four families of elements.

The families are composed of: the elements that support the building and that close space, the elements that serve as filter between the outside and inside; elements that allow transition between spaces, and finally the elements of natural interaction.



Fig. 3: Closure and support elements in the Garcia Marquez Cultural Center. Picture: Carolina Cantor.

The earliest architectural actions that elements undertake consist of support and delimitation. These functions are observed both in the origins of architecture as well as in the beginning of any construction process. The elements that support and close are the first to make presence in construction and the last to remain in the transit of a building to ruin. This family is made out of walls, parapets, floors, vaulted, flat or sloping roofs, columns, beams and trusses.

If the elements of support and closure delimit and provide stability to spaces that shelter human beings, the filter elements are responsible for mediating sensory and perceptually between exterior and interior. The filter elements, in association with the closure elements determine



degrees of intimacy and extroversion. By establishing formal and material actions that allow the passage of light and wind without allowing entrance to water or humans, the basic premises for the definition of the elements grouped under the action of filter are set. The filter elements are therefore the latticework, framing windows, sliding windows, pergolas and skylights in various forms and dimensions.



Fig. 4: Contrast between brickwork and concrete, between closure and support elements.
Picture: Carolina Cantor.

We now turn to the transition elements that facilitate movement between the parts of the building. The architecture of Salmona proposes different routes and spatial concatenation of parts and these elements encourage and diversify transitions and shifts between them. Bridges, stairs, ramps and thresholds constitute the family of the transition elements.

The fourth and last family of elements that I will present allows for interactions with nature. Natural interaction elements are those that empower relationships with water, earth, fire, air, vegetation or landscape. Natural interaction elements are then water mirrors, water stairs, water threads, earth slopes, flower beds, fireplaces, balconies and planters.



Fig. 5: Water stair at Virgilio Barco Public Library. Picture: Carolina Cantor.

Parts of a whole

For the purpose of such rearrangement, the constituent elements are treated essentially as coordinated equals. Cardboard cutouts are moved about on a board. Inevitably, however, the search for the proper configuration is also an attempt to establish a suitable hierarchy. The various components carry different weights, although these weights may be readjusted in the process¹. Arnheim, Notes on creative invention, p. 262.

As elements are already presented we move towards a more complex scale. It is said of a part that it is a portion of a whole and that it is a major division of it. It is therefore a portion elaborate enough to constitute an autonomous unit but equally dependent as to interact with other parts in order to form a whole. We can try here an analogy with language or music: the materials are to be formalized by techniques that can turn them into the equivalent of letters or musical notes.

¹ Arnheim, Rudolph. "Notes on creative invention" in W. Curtis. Le Corbusier at Work. The Genesis of the Carpenter Center for the Visual Arts (pág. 262). (Cambridge: Harvard University Press, 1978)



Not by the mere existence of notes can we speak of music because we are missing the relations between the notes by means of composition. The same applies to architecture. Clay, for example, is a materiality that in music is equivalent to a sound.

Following the grammatical and musical simile, elements are equivalent to syllables or bars, while composite units and parts are equivalent to words or verses. If we further extend the metaphor we can say that an architectural work either a building or public space is equivalent to a sentence. A sentence is the maximum scale of study of grammar. The city acts as literature: a multiplicity of variations and connections between sentences. It can be said that verbs are words that refer to concrete actions. Not every part, as not every word, has this nominal experiential aspect. Hence the finite number of parts that are addressed here and the explanation of the scope of the parties in the experience of the built work.

An intelligent way of dividing up a book on philosophy would be into parts of speech, kinds of words. Where in fact you would have to distinguish far more parts of speech than an ordinary grammar does. You would talk for hours and hours on the verbs 'seeing', 'feeling', etc., verbs describing personal experience¹ Wittgenstein: Lectures & Conversations on Aesthetics, Psychology and Religious Belief. p. 63

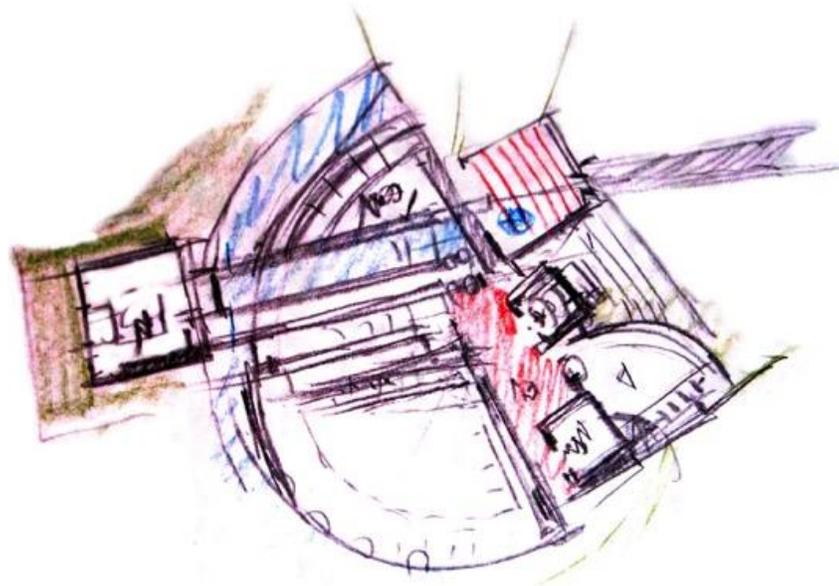


Fig. 6: Parts distributed on a sketch of the Postgraduate Building. Source: Rogelio Salmons Foundation

The parts that Salmons uses are: vaulted pavilions, patios, four column halls, semicircular spaces, amphitheaters, etc.; these parts appear in floor plans as outlines or signs, quality that allows them to move freely through the choreography. Though it can't be observed in projects schemes, all parts are composed of architectural elements.

¹ Wittgenstein, Ludwig: Lectures & Conversations on Aesthetics, Psychology and Religious Belief (Indianapolis: Basil Blackwell, 1966)



Throughout the history of architecture, the definition and classification of parts of a building has changed. Since the diversification of living spaces and up to the twentieth century parts were classified according to their destination. Thus the building wholes consisted of parts such as living rooms, bedrooms, kitchens, lobbies, atriums, etc. and they were spatially characterized by the activities carried out inside. But as the number of activities increased, or became more complex, it became more difficult for architecture to work upon preconceived and interlinked parts characterized by sheltered activities.

Another way of conceiving parts independent of its use, is in a formal or typological sense. Therefore typology can also help understand the constitution of parts. A part understood from the perspective of typology is not dependant upon the activity within but rather understood based upon the formal structure associated. The problem with typology when used for the analysis and the composition of parts is, however, its inflexibility. The more consolidated the part is, understood as type, the more difficult it might be to alter it for design purposes.

Architects such as Louis I. Kahn, prefer to use geometric solids as integral parts of the whole¹. Thus the constituent parts are modeled and fit better within the whole, a consideration that does not happen with parts that behave like types. Through the use of cylinders, pyramids, rectangles or cubes the architect composes his buildings. Salmons, on the other hand, works with parts that can be understood as hybrids between typologies and geometric solids; that are either open or covered and that have an archaic experiential origin.

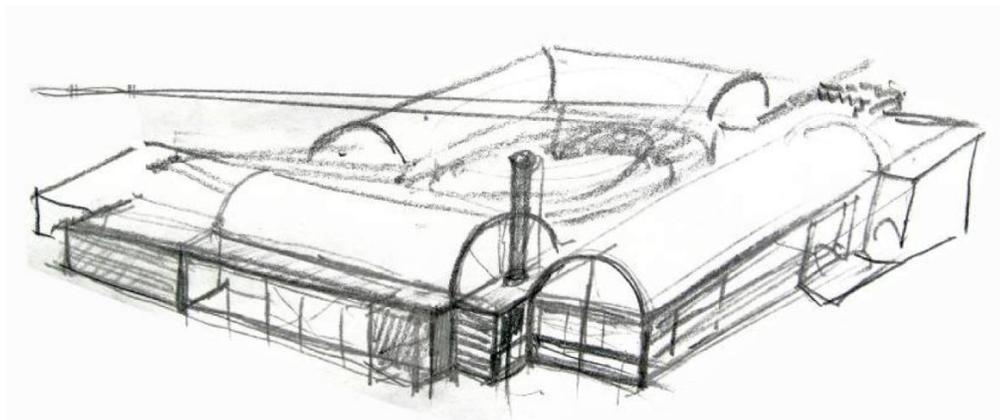


Fig. 7: Interaction between patios and pavilions in Subchoque house. Source: Rogelio Salmons Foundation

When the parts act jointly or in associations, they acquire a different behavior that attend to the whole. Hence, once set up, the ensemble makes the parts indivisible. It is possible to establish an analogy with drama where a director seeks a group of actors to give organic form to a complete work.

It can be said that the director, in this case Salmons, knows the work of the actors involved in his

¹ Kahn, Louis. *Forma y diseño*. (Buenos Aires: Nueva edición, 1984).



compositions, because of their role in previous works; has seen them act and therefore knows what they can bring to a new project incorporating variations. It is from this analogy that we can speak about choreography when talking about relations and interactions between the parts and the interstitial space.



Fig. 8: Interstitial space in Virgilio Barco Public Library. Picture: Juan Pablo Aschner.

The parts, understood as "functionally necessary volumes" evoke, in words of Louis Kahn, the function to be contained. In stating the existence of "functionally necessary volumes" and a "lyrical basis: the different spaces between the volumes"¹ Salmons completes the set of components required for the composition without losing sight of place (to which the lyrical basis attends), or specific activities (which each volume attends). How else could we justify the existence of autonomous parts if not for the need to sustain discernable uses? The program has a real inference on the composition insofar as it requires a certain number of actors, each with specific conditions of scale and spatiality. Each part-player is assigned a role and the role in turn gives form to the part.

The parts arrive to the composition of each project to meet a certain performance that has been tested in previous compositions and interstitial space is new to each composition; in each case the interstitial space gives cohesion to the parts; it is responsible for detaching or bringing parts together, it facilitates a direct or mediated dialogue between elements and is also responsible for establishing links with place and landscape. Finally, the interstitial space establishes a narrative that marks the beginning and end in the succession and experience of the parts and provides a space for indeterminate background activities to happen. The whole then consists of highlights (parts), against the background of a connective tissue of intermediate or mediating areas that are both moments of change from one part to another, spatial intervals that are like silences between words of each sentence.

¹ Salmons, Rogelio. Comentarios sobre el concurso del Colegio Emilio Cifuentes. (Bogotá: *Semana*, 1960) .



Relations of artistic nature

Composition demands from the architect knowledge both of components as well as of relations established between the components. As leitmotif of this process the following hypothesis arises: the formal composition of architectural objects in Salmona is determined by relations of musical nature such as harmony and rhythm, relations of pictorial nature such as collage, geometric assumptions and, finally, relations of dual nature.

Both architecture and music are experience over time; the experience is equivalent to listening, construction to interpretation and composition is common to both. In the two disciplines measurements and proportions are involved. A common denominator in both disciplines is rhythm defined by Matila Ghyka as *perceived periodicity*, speaking of recurrence of elements, of identical or similar clusters in a spatial artistic composition¹.



Fig. 9 Rhythm in Santafe Housing. Picture: Juanita Barriga

You can exchange terms relating to succession in space and time. In fact, spatial succession is perceived in time. In a succession of components a law is discovered; that law is rhythm. The art of rhythm that triggers pleasure in who experiences architecture, is present as perceived periodicity. In the process of composition that Salmona undertakes, components appear, disappear, are repeated, reinforced, and are perceived in an ever changing juxtaposition. The musicality of the composition establishes an emotional link that allows emotional and memorable experiences of the built work. Rhythm determines the sequence and alternation of support elements and filter elements. Rhythm enables tile patterns in walls and pavements or the successive imprint of the formwork on concrete.

Harmony, that attracts us by its stability in order is probably the aesthetic opposite of chaos. Through harmony we find unity in diversity, a fundamental principle in Salmona's compositions concerning various components. If we further understand harmony in correspondence with

¹ Ghyka, Matila El número de oro. Los ritmos, 1978, p. 170.



euritmia, understood as the correspondence between the parts and the whole, we come to an even more intense understanding of the coherence between the microcosm and the macrocosm of Salmona's architecture; considerations on which I will insist in this presentation.

If the principles of harmony governing classical art and traditions survive in Salmona's attitude, modernity sets alternate principles to reinterpret tradition. A compositional premise that seems essential to all modern art either pictorial, sculptural, architectural, literary or musical is the technique of collage. Rogelio Salmona deliberately debates between the harmonic interplay of the parts mentioned above and the tight assembly between them. The pieces that make the different wholes seem perfect and harmonically linked by homogeneity in materials but tense and abruptly found by the diversity and uniqueness of the parties.

It can be said without fear of error, that it is cubism which has given its final guidance to the living art of the twentieth century¹. Francastel, *Arte y técnica en los siglos XIX y XX*, 1961, p. 209).

Collage technique is a dominant mechanism in Rogelio Salmona's composition of complex projects; but even the most basic scales of the composition make collage explicit.



Fig. 10 Collage pavement in Torres del Parque. Picture: Rogelio Salmona
The hierarchy with which the various components are arranged is a compositional premise. In

¹ Francastel, Pierre. *Arte y técnica en los siglos XIX y XX*. (Valencia: Fomento de Cultura, 1961)



Institutional buildings, for example, we see clear geometries within the constituent parts. In residential projects It is not so easy to single out the parts because they are tightly fit but it is evident that there is an ordering geometry of the ensemble.

Other geometric consideration that is evident in the composition is related to the hierarchical or dual use of point and line. Point and line are the smallest units of which any subsequent consideration emerges and are therefore condensed synthesis of values and characteristics that will then shift towards experience. The point is the most abstract and representational expression of experiences associated with stillness, statism, convergence, contour; and concentric circular or organizational systems. The line in turn is the most concise and condensed expression of experiences associated with displacement, movement and rectilinear or orthogonal systems.

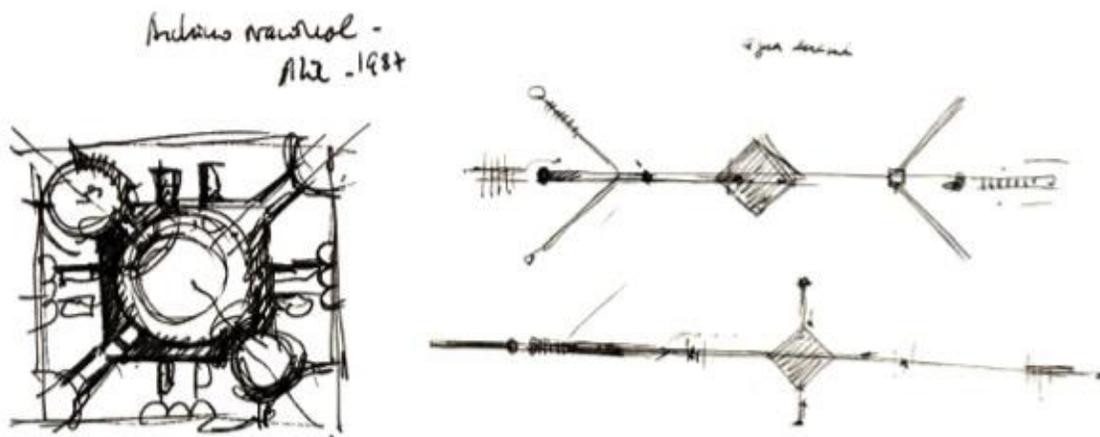


Fig. 11 Sketches using linear and concentric systems. Source: Rogelio Salmona Foundation

The line is also used to represent axes, abstract guides that lead organization. The arrangement of the line as axis can be radiated or can be diagonal to the plane. The directional line, accompanied by other parallel or perpendicular lines will generate a progressive and unlimited harmonic system on which parts are arranged. The appearance of diagonals in the composition challenges this orthogonal grid and complicates the subsequent relations.

Additionally and from another geometric perspective, the work of Salmona seeks to establish a confluence between concentric and linear systems. Sometimes a system will prevail over the other and sometimes both systems find a complementary compositional balance.



Fig. 12 Linearity in Gimnasio Fontana. Picture: Carolina Cantor

Seen to this point the musical, pictorial and geometric considerations we note that there is a common denominator to all of them: managing relations of dual nature. There is tension present in all scales; counterpoints between open and covered spaces, between processes of contraction and expansion, between exercises of addition and subtraction, dialogue between brick and concrete, between stereotomy and tectonics, between column and wall, between point and line, between parts and interstitial space; between directional space and central space, among others. The latent tension between opposites is present and pursued.

In counterpoint to the study of the composition, the paper refers ultimately to the experience of space, from which a dialogue is established with the built work, which allows deep sensory integration not at all apparent in the planimetric origin of composition. All this leads to a conclusion: that there are two procedural stances in occasion successive and in others simultaneous: one compositional and another experiential, and from their mutual interaction not entirely integrated, the tension and richness of architecture arises.

Endnotes

¹ Foucault, Michel. *The Order of things. An Arthaology of the Human Sciences* (New York: Vintage Books, 1995).

² Guadet, Julian. *Éléments et théorie de l'Architecture Vol. 1.* (Paris: Librairie de la Construction Moderne, 1910)

³ Arnheim, Rudolph. "Notes on creative invention" in W. Curtis. *Le Corbusier at Work. The Genesis of the Carpenter Center for the Visual Arts* (pág. 262). (Cambridge: Harvard University Press, 1978)

⁴ Wittgenstein, Ludwig: *Lectures & Conversations on Aesthetics, Psychology and Religious Belief* (Indianapolis: Basil Blackwell, 1966)

⁵ Kahn, Louis. *Forma y diseño.* (Buenos Aires: Nueva edición, 1984).

⁶ Salmona, Rogelio. *Comentarios sobre el concurso del Colegio Emilio Cifuentes.* (Bogota: *Semana*, 1960) .

⁷ Ghyka, Matila *El número de oro. Los ritmos*, 1978, p. 170.

⁸ Francastel, Pierre. *Arte y técnica en los siglos XIX y XX.* (Valencia: Fomento de Cultura, 1961)



Sigfried Giedion - Historiography and History of Reception on a Global Stage

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Abstract

Among the historians of the modern movement, Sigfried Giedion (1888-1968) was the most internationally active. His textbook, *Space, Time and Architecture* (1941), shaped the Avantgarde like no other. Giedion stood out from his contemporaries by framing the story of the early Chicago high-rise under the headline *The Chicago School*. He suggested that this modern development first reconciled art and engineering.

As a consequence of reconsidering Giedion's work on *the Chicago School*, the main contribution of my present paper is to expand on scholarly bibliographies by identifying hitherto neglected mentions of *the Chicago school*. In particular, Giedion followed an internationally oriented textbook that was published in New York between 1900 and 1907. Furthermore, Giedion's belief that Chicago thinking was a *via media* between two extremes, finds continuing confirmation in another source that attracted his attention, the philosopher William James who wrote an essay, *The Chicago School*, in 1904.

1 Introduction

In architectural history, *the Chicago school* is a recurrent term that attracted abundant attention from many authors. The Hathi Trust (the digital library of the major North American universities) counts over hundred thousand books that contain the phrase «Chicago school».¹ The biggest part of these essays, articles, monographs and city-guides focus on architecture, and the texts date from the second part of the 20th century. A general fascination with early Chicago high-rise can be observed, and this interest can be traced back to Sigfried Giedion. The Swiss historian lectured at Harvard in 1939. He published first results right away in a newly founded magazine named *Focus*. The same year, he also presented his findings at a symposium held at New York University. Finally, in 1941, Giedion his results in his opus magnum *Space, Time and Architecture*.

¹ The Hathi Trust digital collection has been gathered from a widespread network of North American university libraries. 1% of the records contains the phrase "Chicago School". The precise numbers as of May 5. 2015 are 12.7 Mio. books, 103,606 for Chicago School, and 61,747 for Chicago School and Sullivan. Source: www.hathitrust.org



Years before Sigfried Giedion entered the scene, European architects and historians already wrote on the early Chicago high-rise. Bruno Taut and Nikolaus Pevsner published their work in the U.K., however, they did not discuss the phrase *the Chicago school*. Then again, in the U.S., there was a recognized group of architects who called themselves *the Chicago School*. They were skilled, but built little high-rise. In 1893, the earliest date the grout might have come into existence, the construction-boom in Chicago was over.

Very soon, in July 1939, the National Council of Registration Boards officially mailed Sigfried Giedion to reprimand him. The letter listed the names of the living members of *the Chicago School*. Giedion's diverging definition of the term was called a "monumental error."¹ Nevertheless, the Swiss historian felt enough self-confident to go his path, and despite the critique, the references offered by his book are sparse and obscure.

Many historians observed the lack of proper sources, but all the scholarly work is based on bibliographies which shared the early view of the National Council of Registration Boards. The authors assumed that Thomas E. Tallmadge (1876-1940) first coined the term in 1908.² Tallmadge had many followers, including the historians Fiske Kimball, Henry-Russell Hitchcock, Hugh Morrison, Mark Peisch and H. Allen Brooks. The latter three were professor and students. However, none of their texts can be seen as the proper context for Giedion's account of *the Chicago school*, because his definition of the term is in diametral opposition to Tallmadge.

Some scholarly work credited Lewis Mumford to have included early high-rise in the discussion of *the Chicago school*. In *The Brown Decades* (1931), Mumford used the term *the Chicago school* two times. As a reference, he quoted a great journalist and critic, Montgomery Schulyer, but that author used the phrase *Chicago idea* rather than school. My continuing research deals with Mumford, however, he will not be part of this current research paper. Detailed results of the research on Mumford will be described elsewhere.

2 Methods — Expanding the Bibliography, Validating the Results

Given that Giedion broke with his peers and re-defined the term *the Chicago school*, there is a need to equally stand out from the canon of scholarly bibliographies in order to find sources that better match with Giedion's work. The international importance of *Space, Time and Architecture*

¹ GTA Archive, 43-K-1939.07-06. Letter from the National Council of Registration Boards to Sigfried Giedion.

² David Van Zanten, "The Ambition and Reach of Chicago Progressive Architecture," in: David Van Zanten, Ashley Elizabeth Dunn, Leslie Coburn, *Chicago Architecture on the International Stage 1900-1925*. Evanston: Northwestern University Press, 2013.

Robert Bruegmann, "The Myth of the Chicago School," in: *Chicago Architecture Histories, Revisions, Alternatives*, edited by Charles Waldheim and Katerina Ruedi Ray. Chicago: The University of Chicago Press, 2005, 15-29.



as well as the assumption that a great historian could potentially have based his work on interesting material, motivated my belief that it might be insightful to find those sources.

Expanding the existent scholarly bibliography has to start with generating a big picture and effectively identifying relevant publications. A number of distinct entities are named *the Chicago school*. Even in the 19th century, the phrase has been printed countless times in American publications.¹ However, much of the material is out of context. There are texts on public schools, articles on the Chicago School of Art (1876), on the Chicago School of Elocution (1887), as well as other similar records.

In my research, I used methods from the Digital Humanities to get an overview over the vast material. As a first step, I resorted to an approach that was implemented by Harvard researchers in 2010.² I plotted *n-grams* to see how the frequencies of occurrence for the phrase «the Chicago school», «the Chicago School of Architecture», «the Chicago School of Sociology» etc. changed over time.

Second, based on a series of well known algorithms, I developed a tool to simulate a reader's associative memory.³ The implementation can be described as follows: For each record 1) recognize and extract the Named Entities, 2) build a directed graph in reading direction, with weighted edges to reflect occurrences of succession, 3) set node weights by running Power Iteration with Restart to the beginnings of the paragraphs, 4) remove nodes that fall under a preset threshold. This tool was run on a corpus of 300 manually de-duplicated records that contained the phrase «the Chicago school». The collection was gathered from the four most relevant digital libraries: the Hathi Trust, the Gutenberg project, JStor and the Avery Index. The works are non copyrighted, and they mostly date before 1920. I first focused on the pair of terms «the Chicago school» — «Sullivan». I also included Sullivan's most prominent buildings: the Auditorium Theater, the Schiller / Garrick Theater, the Gage Building, the Fisher Building etc.

My idea was to simulate a reader that was assiduous enough to read everything, but he would dismiss the majority of the names judging them unimportant. The output of the algorithm was only a few items. In fact, there was only one book that I didn't know: A.D.F. Hamlin's *Text-book of the History of Architecture*. The book was neither a first, nor a last edition. It dated before 1908, and it identified the Chicago school with early commercial high-rise. At this point, the output was small enough for me to further process the results manually.

¹ Source for the data: google books

² Jean-Baptiste Michel, Yuan Kui Shen, Aviva Presser Aiden, Adrian Veres, Matthew K. Gray, The Google Books Team, Joseph P. Pickett, Dale Hoiberg, Dan Clancy, Peter Norvig, Jon Orwant, Steven Pinker, Martin A. Nowak, and Erez Lieberman Aiden. "Quantitative Analysis of Culture Using Millions of Digitized Books. *Science* 331 (2011) [online 12/16/2010].

³ Based on my pseudocode, the computer code was written by Petter Castro, Swagatam Guhathakurta, Arnab Mukhopadhyay as part of the data mining course of Irina Matveeva at.



The following step was a systematic critic research at several archives including the Archives of the Art Institute of Chicago (Tallmadge papers), the Avery Archives (Hamlin papers) and the GTA Archives (Giedion papers). This research was targeted at understanding the context around A. D. F. Hamlin's text-book and Giedion's works, as well as their relationship. At the archive, I also searched for other sources, and this revealed William James' essay *The Chicago School* (1904).

3 Results — New Insights on the Chicago School of Architecture

The technical objective of this current paper is to revise and expand scholarly bibliographies in order to better understand the Chicago school and Giedion's contribution. I make the results readable as a revised history, mostly preserving a chronologic order. Giedion's reading of the term *the Chicago school* owes very much to older ideas about the evolution of modern American architecture out of the French Fine Arts education. The reconciliation of art and engineering is therefore a frequent topic. This is of particular interest because, Giedion was an author surrounded by Avantgarde artists. I therefore emphasize the relationship between art and engineering throughout the presentation of my results.

3.1 Henry Van Brunt: the New School

Henry Van Brunt (1832-1903) was an American architect active on the East Coast as well as in the Mid West. He also was an architectural critic and translated Eugène Viollet Le Duc's *Discourses on Architecture*. In the context of this current article it is relevant that Van Brunt observed the emergence of *a new school*; the term was essentially congruent to *the Chicago school* as later defined by Hamlin and Giedion.

Architecture in the West (1889),¹ is the first major essay that presents Van Brunt's position. The commercial buildings in the city of Chicago are the central point of attention.² Van Brunt criticized both, the vernacular structures of the West, as well as the conservatism of the east. However, he suggested that the Chicago architects unconsciously blended Western construction methods with the Eastern style that stood in the tradition of the French Fine Arts school.³ The architect called the result bold, ingenuous, successful and felicitous.⁴

¹ Henry Van Brunt, "Architecture in the West," *The Atlantic Monthly. A Magazine of Literature, Science, Art, and Polititcs*. LXIV, (1889).

² Henry Van Brunt, "Architecture in the West," *The Atlantic Monthly*, LXIV, 778.

³ Henry Van Brunt, "Architecture in the West," *The Atlantic Monthly. A Magazine of Literature, Science, Art, and Polititcs*. LXIV, (1889), 776-777.

⁴Henry Van Brunt, "Architecture in the West," *The Atlantic Monthly*, LXIV, 782.



Van Brunt was aware that he was writing about a trend, and therefore, no single architect represented this mass phenomenon perfectly. The architects and buildings worth mentioning were too numerous, and the critic wrote that he feared serious omissions.¹ He nevertheless went on giving some examples. In first line, he named several tall buildings by Burnham and Root. Next, Van Brunt lauded the theaters built by Adler and Sullivan. A special mention went to the Auditorium building, which was a great piece of engineering and acoustics. Theaters were very popular in Chicago, and the shapes of the halls differ greatly from models that were perpetuated in Europe. There are other examples too, most of them being high-rise of their days, executed in a freely interpreted romanesque style. Van Brunt claimed that the “school [...] may be recognized in history as the proper exponent of this marvelous [American] civilization.”² 50 years later, Giedion suggested the same about the Chicago school.

In 1892, Henry Van Brunt wrote on the World’s Columbian Exposition. As a contributing architect, he also received the task to review the major buildings of the fair. The articles are useful as an update for Van Brunt’s older essay. He expressed his belief that the *new school*, as he called it, was emerging within the cities, and not as part of the world’s fair.³ This point of view also became part of Giedion’s argument.

3.2 A.D.F. Hamlin: the Chicago School

Henry Van Brunt’s partner, William Robert Ware(1832-1915), left the practice to establish the architecture school at the Massachusetts Institute of Technology (MIT, it was the first architectural education in the United States). A. D. F. Hamlin (1855-1926) was one of his students.⁴ Later, when Ware established the architecture school at Columbia College in New York, he employed Hamlin as a design instructor and subsequently as a professor.⁵ Hamlin admired Ware, and he was also the person to write his obituary, from which it also emerges that he knew Van Brunt: “Most of Professor Ware’s work as a designer, in partnership with the late Henry Van Brunt, was done between 1865 and 1880, before the modern movement in American architecture was fully under way.”

Born in Turkey to an influential American family, Hamlin became one of the the most recognized American historians. His architectural style was a new romanesque similar to the one employed by Ware and Van Brunt, but Hamlin’s most prominent work at Columbia was

¹ Henry Van Brunt, “Architecture in the West,” *The Atlantic Monthly*, LXIV, 783-784.

² Henry Van Brunt, “Architecture in the West,” *The Atlantic Monthly*, LXIV, 776-777.

³ Henry Van Brunt, “Architecture at the World’s Columbian Exposition — III.” *The Century. Illustrated Monthly Magazine* XLIV (May-October 1892), 86-88.

⁴ Hamlin studied at MIT the year of 1876-1877

⁵ 1883, special assistant position. 1889, professor position.



the first comprehensive architectural history written in the United States. *A Text-book of the History of Architecture* filled more than 400 pages. The book was printed countless times, but between 1900 and 1907, five of the textbook's prints include a paragraph that deals with *the Chicago school*. The text anticipates Giedion's view.

In 1896, when A.D.F. Hamlin first published his textbook, he devoted one chapter to American architecture, which in turn contained a section *Commercial Buildings*. In concise sentences, the critic mentioned the most important elements of this type of construction: fireproofing, the need of light, the use of elevators, the rising property prizes and consequently, the quest of height, as well as the frames out of steel or iron. To illustrate his idea, Hamlin used a picture of the contemporary Times building, a merely 13 stories Romanesque design. However, in the accompanying text, he mentioned buildings of 20 stories, and he gave three examples from Chicago, namely the Auditorium, the Schiller and the Transportation Building, all of which were designed by Adler and Sullivan.¹ The historian did not want to mention living architects by their names. Even in the case of Adler and Sullivan, to stick to his rule, he wrote "a Chicago firm of architects," and he added a footnote explaining that the names of living architects had purposely been omitted. The solution was obviously unappealing. In March 1900 Dankmar Adler died untimely, and in October the same year, when the text-book was reprinted in a revised form, Hamlin wrote out Adler's name. As for Louis Sullivan, he found another solution; he wrote "the Chicago school."²

The Chicago school of commercial high-rise was marked by a design that Hamlin called utilitarian, unconventional, extremely bold and effective. "The metallic framework [was] suggested by slender piers rising uninterrupted from the basement to the top of the building," the historian wrote to describe the designs. The Fisher building by Adler and Sullivan is a roughly 20 story high-rise that displayed these characteristics. Five further buildings by Adler and Sullivan served as additional examples. The strong presence of Sullivan's hand led Hamlin not to advertise for the Chicago school as a style that organically evolved over historic time. The word choice *school* offered room for artistic individualism.³

In 1908 Hamlin prepared a new edition, in which he started referring to living architects by their actual names. He abandoned both Adler and the Chicago school and candidly used "L. H. Sullivan" instead. Whether the detail of dropping the Chicago school also was a reaction to

¹ Hamlin, Alfred Dwight Foster, *A Text-book of the History of Architecture*, 1986.

² Hamlin, Alfred Dwight Foster, *A Text-book of the History of Architecture*, editions of 1900 -1907, 397-398.

³ Giedion too mourned that contemporary styles did not evolve the same way they had done in the past: "There have been periods in the past like the Renaissance, when owing to their own vitality they were able to assimilate the forms of the past, and from them evolve a new creative architecture." (Sigfried Giedion, "The danger and Advantages of Luxury" *Focus* 3, 1939, 36.)



Tallmadge's article earlier that year must still be identified. However, a clear trend after 1908, Chicago lost importance for Hamlin. The text grew dense with high-rise from New York. The New Times Building, and later the Woolworth Building served as images, while Chicago high-rise became less prominent.

The similarity between Hamlin's and Giedion's texts is symptomatic. Both authors wrote major textbooks that printed every second year. They spelled "the Chicago school" the same way, with Capital C and lowercase s. The focus lied on engineering, daylight, elevator, as well as high property prizes. The interest in tall structures was predominant, as much as the view that the Chicago school marked by utilitarian forms, while still allowing for a certain amount of individualism when it came to the artistic side of the buildings. Moreover, both authors believed that Chicago was leading in the early days. Besides these more obvious features, both authors wrote about anonymous architecture, an interest that was already present in Van Brunt's essays. Another common point of view, Hamlin associated the Chicago school with flat surface ornament, and similarly, Giedion had a strong interest in plane surfaces. In terms of format and content, the two stories of the Chicago school could not be more similar.

3.3 Jenney, Burnham, Tallmadge, Sullivan: the Chicago School of Architecture

Even before Hamlin used the term the Chicago school referring to contemporary architecture in the Mid West, technically *the Chicago School of Architecture* was the first program in Architecture offered in Chicago. It was an alliance spanning over two universities, the Art Institute of Chicago and the Armour Institute of Technology. The latter had been included to strengthen the faculty in mathematics and engineering. Consequently the Chicago School of Architecture had two locations: downtown on Michigan Avenue, and in the Romanesque building erected by Armour in Bronzeville.

Between 1893 and 1939, the major Chicago architects went in and out at the Chicago School of Architecture. William Le Baron Jenney (1832-1907) taught the first year for free. Daniel Burnham (1846-1912) was in the committee of architects among others. Thomas Tallmadge taught there too. And in 1915, Sullivan himself found his name in the committee of architects. Moreover, a student design of a temple was explained in the yearbook by using the architect's dictum "Form Follows Function."

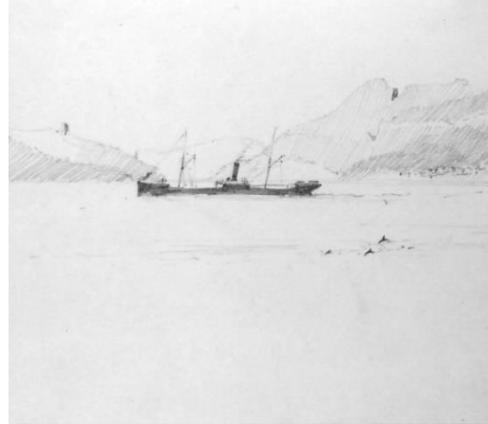
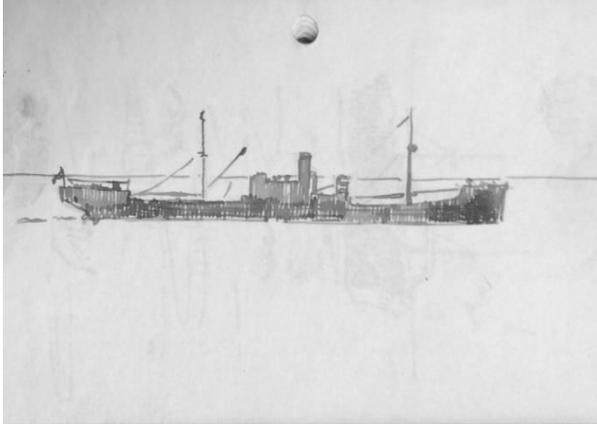


Illustration: Thomas E. Tallmadge and A. D. F. Hamlin, sketches from the notebooks on their trips to Europe. Image sources: Burnham Library, Art Institute of Chicago, Avery Library.

3.4 Thomas E. Tallmadge's contribution

Compared to the MIT, the architecture school at Columbia University initially had a more pragmatic approach, with more focus on construction materials and less French influence. This educational line was installed by Ware and Hamlin. A similar teaching style was present at *the Chicago School of Architecture*. Tallmadge's design classes for example indicate a strong focus on materials. A close look at book *the Story of Architecture in America*, written by Tallmadge in 1927, reveals even deeper connections. The first and foremost person credited in this publication is A. D. F. Hamlin, "a teacher and torch bearer to thousands of students throughout the land."¹ Hamlin's *History of Architecture* is the only textbook mentioned to contain information about American architecture, and Hamlin is also the first author named for his contributions in architectural journals in the United States. This strong credit indicates a great admiration. Tallmadge seems to have followed on Hamlin's footsteps: he first worked as an architect, he was then employed as design instructor, then he went on a trip to Europe, guided by Hamlin's textbook. The print most likely included the paragraph on the Chicago school of commercial buildings. When he returned to Chicago, he wrote his seminal article *the Chicago School*, and he became a lecturer in architectural history.

Both, Hamlin and Tallmadge admired Louis Sullivan. But by 1908, Sullivan had increasingly separated himself from his peers. Hamlin observed that Sullivan became a figure too isolated

¹ Thomas E. Tallmadge, *Architecture in America*, New York: W.W. Norton & Company, 1927, reprinted 1936 p. 2.



to give rise of an architectural style. Tallmadge's contribution was then to reform the Chicago School by setting Sullivan in the center of a group of young followers. Initially, some of the young architects identified themselves with the group, they published their work, and they taught at the *Chicago School of Architecture*. However, as early as 1916, Tallmadge showed resignation that the architectural style of Sullivan's young followers never became American mainstream. The reform was nevertheless persistent: it is this group of architects that was known to National Council of Registration Boards in 1939 when it mailed Giedion.

3.5 Moholy-Nagy and Mies van der Rohe

By 1938, the *Chicago School of Architecture* gradually lost the original pragmatic approach. Mies van der Rohe (1886-1969) was called to Chicago and his first task was to revise the curriculum. After one year, he discontinued using the name *The Chicago school of Architecture*, possible reasons involve his lack of a proper function at the Art Institute, hopes to build a campus at Armour, or simply the decay of a long-lasting co-operation.

A Bauhaus colleague of Mies, László Moholy-Nagy (1895-1946) took a different route. He tried to revive the Bauhaus in Chicago, but failed at the funding. He subsequently renamed the institution *the School of Design in Chicago*, and it was also known as the *Chicago School of Design*. The n-gram indicates that the *Chicago School of Design* was the first of the Chicago Schools to be frequently mentioned in American publications. The School literally went viral immediately after its establishment, but the activity lasted for less than one decade due to frequent name changes, the untimely death of Moholy-Nagy, and finally the institute was merged with the school of Mies van der Rohe to become the current day Illinois Institute of Technology (IIT).

Through exponents such as Moholy-Nagy and Mies van der Rohe, Giedion's story of the Chicago school became a source of inspiration for the Avantgarde.¹ The n-gram further substantiates this thesis: the phrase «the Chicago school» displays the same trend as the word “the Avantgarde” after 1938. A frequent co-occurrence of the two terms can be detected as well.² A detailed reading points into the same direction: in *Space, Time and Architecture* the word Avantgarde appears only once. It is used to write on Mies van der Rohe, who was also seen as the heir of the Chicago school.

3.6 Sigfried Giedion and the Chicago School: the Archival Findings

¹ By the term the Avantgarde I refer to a vanguard movement of European, mostly German and French origin, whose exponents came to the U.S.A. mostly between 1937 and 1941.

² The same phenomenon cannot be observed for the word “vanguard.”



The call to lecture at Harvard University reached Giedion in winter 1937. Soon thereafter, a personal note indicates that Giedion read Thomas Tallmadge's *The Story of Architecture in America*.¹ One might only assume that he read the chapter on Louis Sullivan. The frequent and negative mentions of Le Corbusier might have irritated his Swiss fellow. Nevertheless, in January 1939 Giedion met Tallmadge in Chicago, and the two historians had a lengthy discussion and also started nicknaming each other.² There is no record indicating that the discussion also dealt with the meaning of the phrase *the Chicago school*. However, a lecture held in 1947 makes it clear that Giedion knew Tallmadge's and Morrison's definition of the school. He found that it differed from his own, and he wrote down: "There exists a second Chicago School, a group of a dozen appealing talents that could have done an extraordinary job [...], but they failed due to financial reasons."³ This quote makes it clear, that Giedion could not have relied on Tallmadge or Morrison as a source for his definition of the term *the Chicago school*.

The same personal note from 1938 also indicated: "check Hitchcock."⁴ However Hitchcock learned the definition of *the Chicago School* from Morrison.⁵ He used that definition for instance in a publication of 1939.⁶ Hitchcock's book in a series edited by Nikolaus Pevsner *Architecture: Nineteenth and Twentieth Centuries*, published in 1958 seems to agree with Giedion, however, in a later symposium, Hitchcock made it very clear that he strongly disagreed.⁷ On the other side, archival findings show that Giedion removed initial mentions of Hitchcock's work.⁸ Besides the fact that the definitions of the Chicago school do not match, the records make Hitchcock an unlikely source.

A. D. F. Hamlin is a very probable source from the point of view of the content. This impression is further strengthened by the archival material. It is evident that Giedion knew A. D. F. Hamlin, because he quoted one of his works. Furthermore, Tallmadge's *Story of Architecture in America* might have already made Giedion familiar with the *Text-book of the History of Architecture*. The Harvard University library where Giedion worked, owned two copies of Hamlin's textbook that contained the paragraph on the Chicago school. The archival material lets no doubt that Giedion

¹ GTA Archives, Giedion Papers, Notebook "first half of 1938."

² The calendar indicates a lengthy talk. The notebook remembers the sentence a talking about Romanesque before the World's fair, and Classicism thereafter. The address book contains Tallmadge two times, once as Thomas, and on the subsequent page as "TOM."

³ GTA Archive, 43-T-13-16-1. [Third lecture. May 1947.]

⁴ "Nachsehen wegen Hitchcock."

⁵ Terence Riley, "Portrait of the curator as a young man," in: *Philip Johnson and the Museum of Modern Art*, edited by John Elderfield. New York: MoMA, 1998.

⁶ Henry-Russell Hitchcock, "Rhode Island Architecture," Providence: Rhode Island Museum Press, 1939.

⁷ J. Carson Webster, editor. "The Discussion: Sir John Summerson [moderator], Henry-Russell Hitchcock, H. Allen Brooks [panelists]," *Prairie School Review* 9, 2 (Second Quarter 1972), 23-35.

⁸ GTA Archive, 43-T-13-1-5 [American architecture viewed from Europe. The Chicago School p. 2. Hitchcock removed in the edited version.]



made a conscious decision to write *the Chicago school* with lowercase s, the version used by Hamlin and Mumford, but not chosen by Tallmadge, Morrison, Hitchcock, or the National Council of Registration Boards. A. D. F. Hamlin died in the 1920's, but Charles E. Peterson, a young, and very influential preservationist in the United States put Giedion in contact with Hamlin's son, who similarly taught architectural history at Columbia. The entry in Giedion's address book is written in bold capital letters, with detailed indications how to reach Columbia University by subway. The two men and their wives met soon after Giedion lectured at New York University in spring 1939. They developed an enduring friendship and heartedly commenting on each other's works.¹

In the Giedion papers, the only records that contains explicit information on possible sources for the Chicago school is the correspondence with the Holabird & Root, one of the firms that built early Chicago high-rise. The firm was also one of the exponents of the school of architects mentioned in Van Brunt's essay *Architecture in the West*.² Giedion visited the Holabird & Root on his first trip to Chicago. Soon thereafter, Giedion sent a letter to one of the companies chief architects Frank B. Long.³ This letter, as well as the lecture material make it evident that Long told Giedion about his experience building for the World's Columbian Exposition. In that context, no doubt Long came in contact with Van Brunt. One might only suppose that Long also told Giedion about Van Brunt's *new school*. Giedion finally wrote Long: "I very much enjoyed your personal touch in telling me the history of the Chicago school."

The letter from Giedion to Long, Giedion's notebook, as well as the lecture notes also make clear that, in the context of the Chicago school, the two men lengthily discussed about the great Harvard Professor and philosopher William James (1842-1910). Ideas about William James and John Dewey might have also reached Giedion through Moholy-Nagy his best friend at that time who accompanied him at many places in Chicago.⁴ This interest links Giedion's interpretation of the Chicago school to early psychology at the University of Chicago.

3.7 The Chicago School of Thought: the Via Media

There are many *Chicago Schools* related to a number of departments at the University of Chicago, namely Sociology, Economy, Law and others. One of the important Professors associated with

¹ GTA Archives. Correspondence between Giedion and Hamlin.

² At that time the company was named "Holabird & Roche."

³ GTA Archives, 43-K-1939-1-30(6)1/3. Letter from Sigfried Giedion to Frank B. Long.

⁴ This has very well been addressed by Reto Geiser and by Gregor Harbusch.

Gregor Harbusch, "Work in Text and Images: Sigfried Giedion's Space, Time and Architecture, 1941-1967," *The Journal of Architecture* 4, 20 (November 2015), 596-620. [DOI: 10.1080/13602365.2015.1069371]

Reto Geiser, "Eine Reise durch den Mittleren Westen der USA, 1939," In *Sigfried Giedion und die Fotografie. Bildinszenierungen der Moderne*, edited by Harbusch, Gregor and Werner Oechslin. Zurich: GTA-Verlag, 2010
Another book in Giedion's library *Industrial Education and Industrial Museums* 1935 might have additionally showcased Dewey's importance in industrialization in Chicago.



this type of *Chicago school* is John Dewey (1859-1952). Maybe the earliest mention of a Chicago School in this context, the great psychologist and philosopher William James wrote an essay entitled *the Chicago School* in 1904, in which he proposed that Dewey was the central figure of a school of thought in psychology.

According to James, the merit of the Chicago School was to go a *via media* between transcendentalism and pragmatism. James' essay of 1904 might have been known to Giedion, and it is remarkable that his publication of early 1939 shows an interest in psychology: "This reaction against the functional, this leaning towards the emotional, is quite in accordance with the state of the architecture today. The problem is how to satisfy the feeling."¹ Giedion suggested that specialization was at fault for the loss of a more holistic approach. "In these days of specialization it is exceptional to find a painter who has a grasp of architectural problems, or an architect with a talent for painting."² The role of imagination and expression of emotions is further stressed: "Nothing has been so despised and persecuted by the public during the last hundred years as artistic imagination which tries to find emotional expression for an age which was incomprehensible even to itself. Yet imagination is the most valuable ingredient of architecture."³

Sigfried Giedion often searched for thesis, antithesis and synthesis. If art and engineering were two opposite poles, the Chicago school was the unison between them. William James' suggestion that Chicago thinking was a *via media*, might have been in tune with the historian's observations.

4. Conclusion:

This present paper reconsiders the historiography of *the Chicago school*. Authors such as Henry Van Brunt witnessed the emergence of a *new school* around 1890. Architectural motives from the French Fine Arts school were unconsciously adapted to new needs. A new style was evolving. Between 1900 and 1907, A.D.F. Hamlin, a professor at Columbia University wrote on *the Chicago school* in his comprehensive textbook. By that time Louis Sullivan's hand clearly led the development. In comparison to Van Brunt, Hamlin's Chicago school had to offer slightly more room for individualism. My research suggests that Sigfried Giedion's definition of the phrase *the Chicago school* stays in Van Brunt's and Hamlin's tradition. Moreover, Giedion found interest in the philosopher William James who wrote an essay on the Chicago school 1904. In this context, Giedion's ideas about the reconciliation of art and engineering might have been enriched by an attempt to understand the human mind.

¹ Sigfried Giedion, "The danger and Advantages of Luxury" *Focus* 3 (1939), 36.

² Sigfried Giedion, "The danger and Advantages of Luxury" *Focus* 3 (1939), 37.

³ Sigfried Giedion, "The danger and Advantages of Luxury" *Focus* 3 (1939), 37.



Illustration: Sigfried Giedion, "Chicago Reliance Building," lecture-slide. GTA Archives, Zurich, lecture slides box IV.



Iteration, Collaboration and Narrative

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Abstract

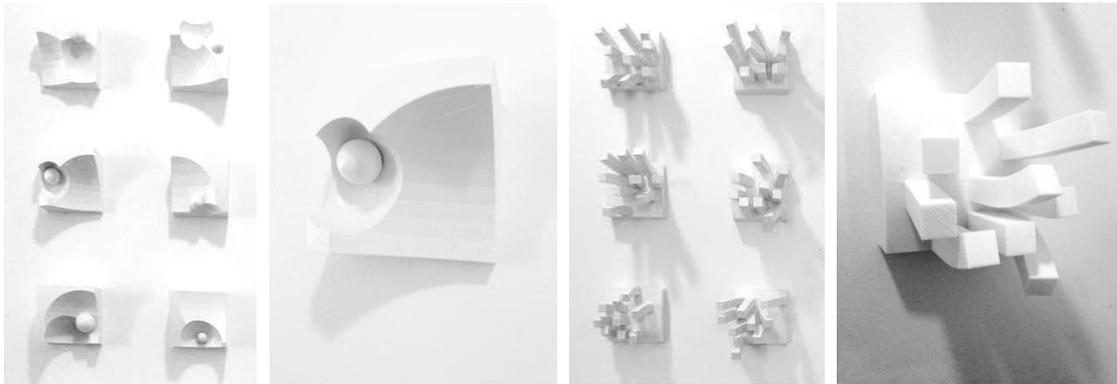
This paper examines three bodies of artwork or case studies: the *Visual Journal*, *Your Turn* and the *Paper Trial*. Each case study explores a different aspect of the creative process that is shared by both art and architecture: Iteration, User Participation and Narrative.

Visual Journal: Iteration

“Artists reproduce themselves or each other with wearisome iteration. But Criticism is always moving on, the critic is always developing.” Oscar Wilde (1891)

Iteration is most commonly associated with a design process of continual refinement that moves toward a specific goal or objective. I use iteration as an investigative tool to explore basic compositional issues as they relate to a limited set number of variables. My reliance on iteration is a response to the difficulty we have in this modern age critiquing composition or discussing beauty. This lack of structure, confidence and authority surrounding the evaluation of composition is due to an increasing reliance on relativism and subjectivity. When knowledge, truth, and readings of history are not absolute, evaluating compositions or searching for beauty becomes difficult, if not impossible. The notion of beauty and the attempt to define or quantify it has been replaced by discussions of appropriateness, performance and personal preferences. Iteration offers an alternative by creating a field of reference that facilitates critical observations. The *Visual Journal* is a quest to re-establish some compositional authority in this modern age.

The *Visual Journal* is a project I started more than 20 years ago that currently contains more than 15,000 works. The majority of the journal entries are non-objective abstract works, which offer an *experience* to the viewer. This is their intended meaning and purpose. The *Visual Journal* can be understood as a rigorous, ongoing exploration grounded in the notion that beauty is not created but, rather, discovered.



This artistic journal is conceived of as a singular work of art that will never be viewed or perhaps understood in its entirety. Many of the individual entries have been sold to institutions and private collectors, which has fragmented and geographically dispersed the journal. In addition, my family members and I hold many pieces that will never be displayed publicly.

Every visual experience was explored in series—most involving well over 20 iterations. At first glance, the entries may look the same. However, they are variations on a theme, using the same colors, forms and technique, with subtle alterations. When displayed in groupings, these prints reveal the significant impact of these small changes and variations. Each series provides the viewer a context in which to critically evaluate his or her experience to exercise their visual muscles—to truly examine, experience and evaluate our visual world. Displaying the work this way can unburden the viewer by allowing them to make meaningful observations without in-depth knowledge of art and/or composition.

Many of the journal entries are two-dimensional mixed media paintings. However, the entries shown above are the latest three-dimensional investigations using Form Z software and a Makerbot 3-D printer. These particular entries, stripped of color, isolate the form, allowing one to observe both the impact of the relationships between the compositional elements and how those subtle variations impact the overall experience of a work. The pieces are always displayed in groupings of 6–24. This gives the observer a field within which to make critical observations.

Your Turn: User Participation

“When a place is lifeless or unreal, there is almost always a mastermind behind it. It is so filled with the will of its maker that there is no room for its own nature.” Christopher Alexander (1979)

Designing buildings and urban spaces have always been collaborative endeavors. Most understand the need for the lead designer or architect to work closely with the owner/client, a variety of engineers, local building code/planning officials, other specialized designers as well as the contractor to produce a building. Few consider the role the inhabitants play in the design of a building. Habraken (1972), in his seminal book *Supports: An Alternative to Mass Housing*, suggests

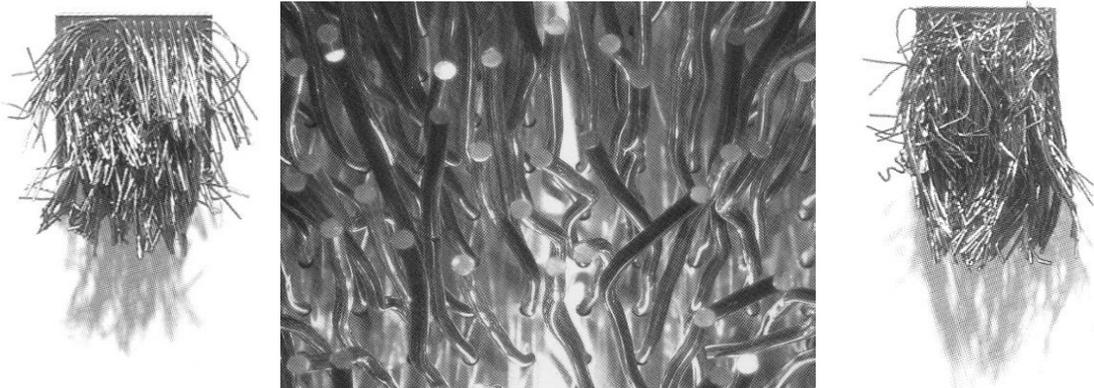


that the control given to the users of a particular space is largely defined by the architect—more specifically when the architect stops designing and provides meaningful opportunities for the inhabitants to control the space. He elaborates on these spheres of control in his book *The Structure of the Ordinary*. These humble ideas have proven powerful and are linked to the Structuralist and Open Building movements.

Less rigor has been applied to this participation dynamic in the art world, where the authorship of a work is most commonly considered the sole responsibility of the artist. Participatory art is largely an affront to the “professional artist,” and the work that results from this process is rarely considered significant or noteworthy. *Your Turn* is an exploration in participation.

Your Turn is not solely concerned with form, composition or external appearances. Nor is this work simply willful self-expression or the result of a desire to create a definitive masterpiece. *Your Turn* examines the process of making art and more specifically the distribution of control within that process: Who decides what and when? These works are purposefully open-ended to provide the viewer/collaborator a frame within which to maneuver and explore. The intent is for the art to become a device for exploration and enrichment—a tool for engagement.

These works are constantly moving, but you will never perceive the movement. The wires begin by projecting straight out of their stainless steel frames. It takes approximately 4–16 hours for the wires to droop down due to gravity. The role of the viewer/collaborator is to manage the piece by occasionally turning the work. The length of the wires, their proximity to one another and how the piece is managed will determine how the composition changes over time.



The collaboration requires a direct ongoing dialogue between a work and a willing participant and relies on a clear division of responsibilities. My role is to define the “deep structure” or “rules of play” and to surrender the status of independent artist. The viewer’s role, first and foremost, is to bring an earnestness to their engagement. In return they are granted substantial authority in the development of the work and its ever-changing composition.



Paper Trail: Narrative

"The universe is made of stories, not atoms." Muriel Rukeyser (1992)

Bruner (1986) identified two ways people order their experiences. The first is *paradigmatic*, which refers to a scientific framework based on reason. The second is *narrative*, which structures information or experience through expressions using various media. Narrative is a compelling way to organize experiences and communicate understanding to others. Art and architecture have made ample use of both these approaches. However, narrative has been used in perhaps more varied ways.

Contemporary uses of narrative include Bachelard (1969), who revealed how our thoughts, memories and dreams are embedded in the spaces we inhabit; Frascari (2012), who explored the powerful narrative techniques that help introduce new designs, and strategies for conceiving buildings; and Mitchell (2000), who showed us that architecture can embrace digital information to generate interactive stories unique to each user group. In contrast, the sculptural works entitled *Paper Trail* maintain the centrality and importance of the text while scrutinizing its reading.

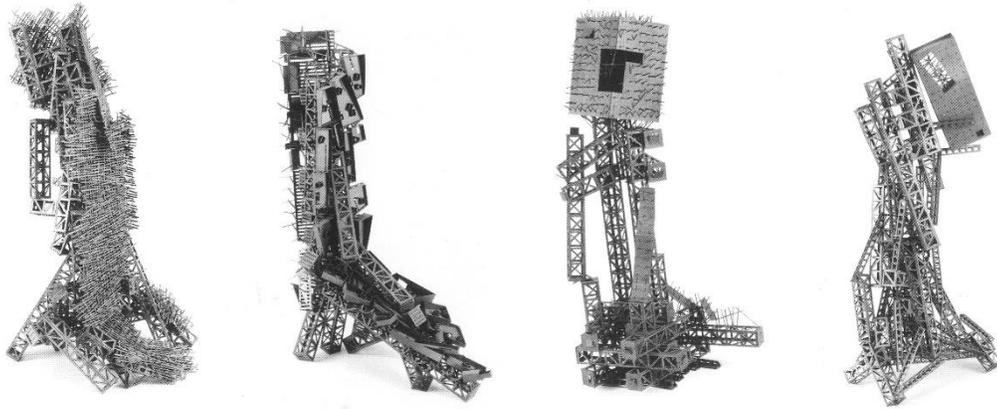
Paper Trail reflects my ongoing exploration of three-dimensional structural variations based on scriptural themes. The Tower of Babel, from Genesis 11:4, is one of the selected themes in this series. The scriptural text depicts the "vain imaginations" of people, attempting to create a one-world global order with a common temple and language:

Now the whole world had one language and a common speech. As people moved eastward, they found a plain in Shinar[b] and settled there. They said to each other, "Come, let's make bricks and bake them thoroughly." They used brick instead of stone, and tar for mortar. Then they said, "Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves; otherwise we will be scattered over the face of the whole earth." But the Lord came down to see the city and the tower the people were building. The Lord said, "If as one people speaking the same language they have begun to do this, then nothing they plan to do will be impossible for them. Come, let us go down and confuse their language so they will not understand each other." So the Lord scattered them from there over all the earth, and they stopped building the city. That is why it was called Babel—because there the Lord confused the language of the whole world. From there the Lord scattered them over the face of the whole earth (Genesis 11: 1-9, NIV).

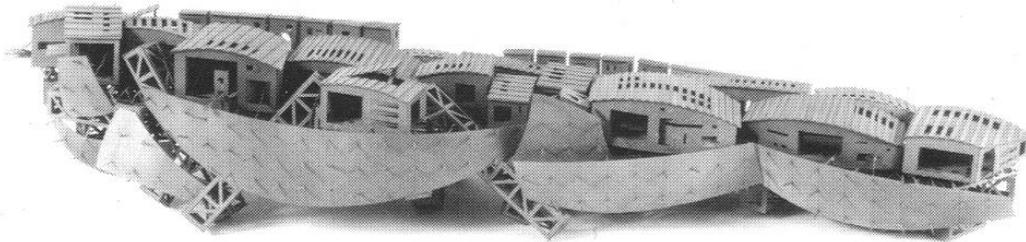
The passage is brief and leaves much to the imagination, but these gaps in the narrative leave fertile ground for artistic exploration. The Biblical text clearly challenges a society focused on itself. Similarly, *Paper Trail* captures the paradox between human accomplishment and unbridled human ambition. The structures appear to be simultaneously constructed and deconstructed or



“falling apart.” It is reminiscent of Robert Delauney’s work, especially his cubist-like painting of the Eiffel Tower. The pieces appear to have a set structure that is exploding. The strength and complexity of these works are juxtaposed against the disquieting, less than reassuring feeling they exude.



This can be compared to the Noah’s Ark piece entitled *Sanctification*. Noah’s blind faith obedience to God in building a boat according to God’s explicit “blueprint” is a timeless testimony to the great artist and architect of the universe. This piece forcefully depicts the struggles and difficulties that must have occurred but were left to the reader’s imagination. This redemptive story parallels and has an implicit connection to the contemporary narrative developed around global warming - the earths looming destruction if human behavior does not change.



The *Paper Trail* series combines realistic and abstract qualities, challenging any sanitized interpretations of these accounts. As a viewer you need to perceive these forms, to look “through” instead of “at” the physical surfaces. After reading and studying the text, one can use this work as a starting point for a reflective journey.



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* All images have been provided by the author/artist.



Fragments of Architecture" (Work in Progress)

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Abstract

I'm interested in making models or fragments I haven't seen before, in an attempt to create and construct a new "world" in which I'm the expert, a collection of possibilities, of suggestions, something to study in order to develop knowledge and my special view on things – something to reflect on. They are fragments that did not exist before. They are pure form to excite my curiosity, amuse me and stimulate my lust for creating huge collections, fragments that can be held in my hand, considered, scrutinized and reflected on. There's always something apparently recognizable in a fragment, always traces of life and a possible forewarning of an inherent story that can and must be exposed - a promise of architectural potentials.

Keywords: Artistic Research, representation, graphic works, drawing and model.

Creation

I'm like a chemist who mixes two liquids to see what happens. My fragments (fig.1) aren't representations of anything, but my drawings are representations of these fragments and must thereby be something. The process is about creation, about how the project should move forward. My artistic way of working is between the planned and the random, but it is important that I'm well prepared to get the most out of it. I trust my intuition because I know that material of architectural value will show up during the artistic process. To begin with, I prefer puzzles and questions rather than answers. I'm not trying to solve a problem. I do not have any hypothesis, but only the actual work of creating drawings and models (fragments), the missing link: what is between me and architecture. The drawings are smart, accurate and reflective. They create something even though some of them could and perhaps ought to be called errors, as a redeeming concept of failure. They are analytic, they think and they argue with me. They speculate, they are operational and they are manageable. To draw and to make models is obviously a way to think, but the drawings and models are also works of art in their own right - and fundamental to me as research objects. I can't let go of them since "*they demand their right in the world*" as my brother once said¹. They are real. I've given up trying to master digital technologies, not because I don't

¹ The author Hans Kristian Bang



respect them, but because I cannot bring myself to acquire the digital world, and what is most important, I find that a large analogue output with body, mind, hand and intuition (as well as a little sense) is enough for me – combined, of course, with subsequent reflection on what I did. I can walk around the drawing and the model, turn them around, consider them from a distance and work my way into them.

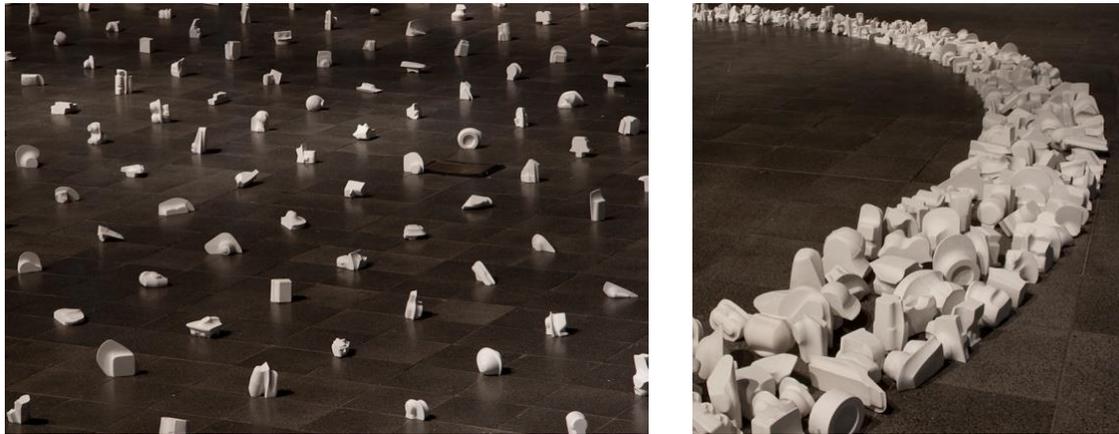


Fig.1-2 Various models (fragments). From the exhibition "1.001 Models", Cph. 2012

The fragment.

Without solicitation or reason, I'm interested in making models or fragments I haven't seen before, in an attempt to create and construct a new "world" in which I'm the (only) expert, a collection of possibilities, of suggestions, something to study in order to develop knowledge and my special view on things – something to reflect on. They are fragments that did not exist before. They are pure form to excite my curiosity, amuse me and stimulate my lust for creating huge collections, fragments that can be held in my hand, considered, scrutinized and reflected on. The good thing about a fragment is that it opens up possible interpretations and transformations, where a unity (a whole) may seem closed. There's always something apparently recognizable in a fragment, always traces of life and a possible forewarning of an inherent story that can and must be exposed - a promise of architectural potentials.



Fig.3-4 Various models (fragments). From the exhibition "1.001 Models", Cph. 2012



To work in a series

I always work in a series in order to compare and combine the different results in my process, as inspired by, for instance, Hiroshige's 36 views of Mount Fuji¹, where the famous holy mountain (and volcano) is seen from 36 different positions, around the mountain: from the river, the sea, the forest, the open land or from different villages, among others. In the same manner or somewhat similar, there is Claude Monet's² painting of haystacks over and over again in different lightings, seasons, angles and so on. It is about explaining the motive, opening it up, in search of information, to break down the distance between observer and object and thus create insight. Something slips through the filter and something gets stuck. Certain shapes, structures and relations between characters catch my eye. It is a key point for me to work with several depictions at once. Working in a series is liberating; it provides routines (without too much thought), creative energy, chance and rituals, to keep the work of art open to "whims" or incidents, providing an awareness of techniques, as well as workflows, processes, process optimization and logistics – all important when producing 1.001 different models. It's important to me to have a large production that I can dig into, duplicate, transform or sometimes even destroy. Not everything should not necessarily progress to a higher level but something does.

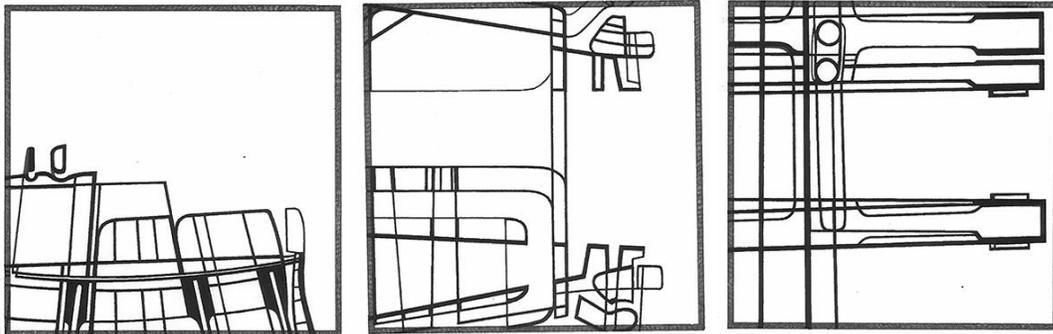


Fig.5-7 Drawings from the same series, fragments inscribed in geometric frames that secure combinatorial possibilities

¹ Hiroshige: Japanese Ukiyo-e artist, 1797-1858

² Monet: French impressionistic artist, 1840-1926

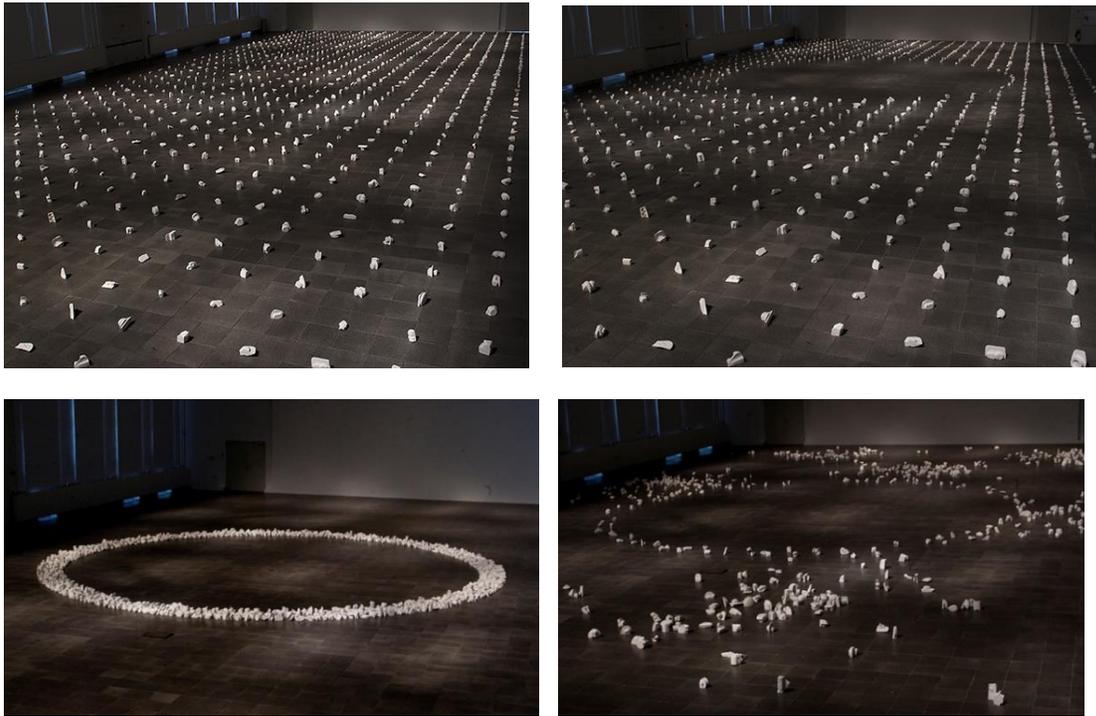


Fig.8-11 4 different compositions or distributions: the grid, the negative circle in a grid, the circle and a dissolved version. From the exhibition "1.001 Models", Cph. 2012

The making of ideas

The fragments are architectural forms and potentials - what lies before an actual idea so to speak. They are nothing yet at this time, created in an attempt to locate or conclude architectural ideas and characters. This is therefore not a true progressive chronology in the traditional sense of creation: from idea to sketch to model. It's not even linear, but more like from model to drawing to idea, and then from idea to sketch to model. Sometimes, it may be drawings that I did years ago that solve a problem. In order to become an architectural idea, the material must go through a process of interpretation or "liberation", in other kinds of representations, for instance in drawings, in dissolving into geometries, in signs, "alphabets" and rules, in the unfolding of a fragment's inherent ideas.

Representation

In order to unfold my fragments, I have to invent different ways of representing them in other depictions, such as drawings, paintings or new models, so as to find their potential as architecture or what may be called new ways of being architecture. The drawings are at once analyses, obstructions, limitations and a way to choose and determine which way to go. They form a kind of creative pressure, a way of disturbing or deconstructing my creativity and production. I make many mistakes, but hopefully, I at least gain new knowledge from them, the drawings, and hence



am able to pass this experience onto coming drawings. It is important for me to be in a *space* created by the drawing, an almost religious, raving flow, where I compose, reduce and repeat lines, figures or themes, and scale figures and themes, in my search for more precise architectural characters and potentials. The drawings are classic measurements and more imaginative sketches reduced to or concluded as architectural characters. These two ways of drawing go hand in hand in reading fragments and their history. It is about the balance between black and white, about space, shaping, cropping, colours, composition and proportions. I am a romantic and confess myself openly to aesthetics.

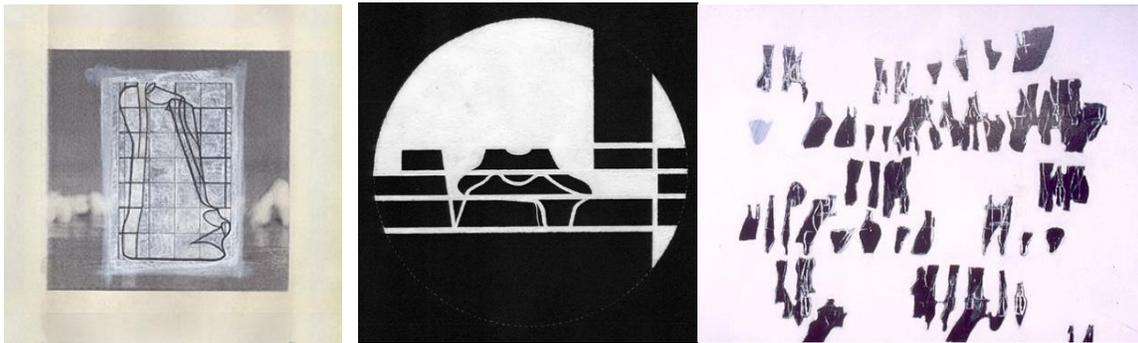


Fig.12-14 Various types of drawings: fragment inscribed in a geometric frame / in a circular frame / and a sequence of figures (detail of oil-painting)

The process of naming

I see the different representations of the fragments not only as a documentation of processes, but also as independent works of art in their own right. I create drawings of my plaster fragments in order to achieve an increased awareness of their inherent possibilities. An abstract thought is enhanced when it is backed up by something tangible, by drawings that want to be architecture, measurable plans and sections, as architecture and sculpture in one, architecture that wants to be named and recognized as column, stair, yard, entrance, hall, fence, plateau, furniture, tongue and groove and so on. I try to separate the different depictions into different categories, like a zoologist. After the naming and the categorization, I have architecture looking for a context, a place to rest.

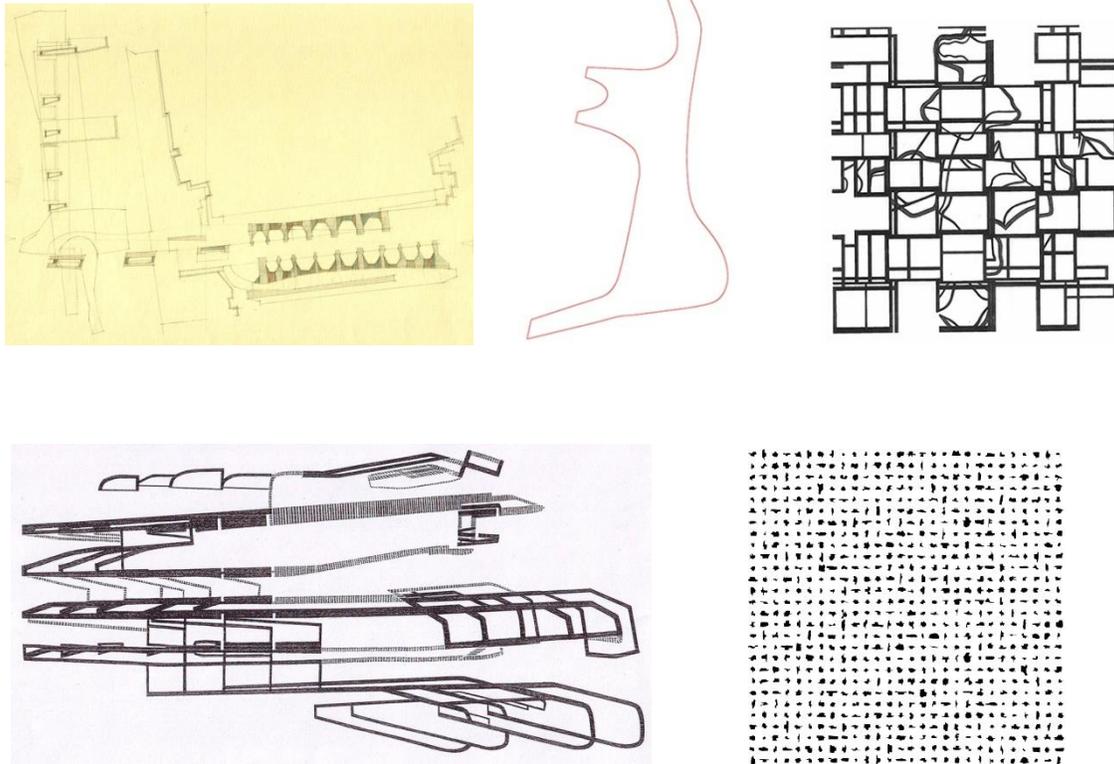


Fig.15-19 Various types of drawings: Plan of a Monastery / plan of column / combinatorial plan / 841 templates (category/collection) / Plan repetition

Artistic context and family

It's important for me, after a while, to get out of my self-indulgent and imploded cave to look for "like-minded" sisters and brothers with the same "interest", both from the past and the present. I have always been very interested in negative spaces. As a child, my father told me the tragic story about the Roman city of Pompeii, destroyed by the volcano Vesuvius in 79 AD, and I saw images of what resembled human mouldings of people and animals. Especially, the Pompeii Dog made a huge impression on me. Another very interesting image is Luigi Moretti's¹ plastermodel, the Model of the inner spaces of the Saint Maria of the Divine Providence, in which context I see my own models; they could be the inner spaces of buildings as well. Last year, in 2015, I saw the marvellous exhibition "Man Ray² – Human Equations" at the Glyptotek³ in Copenhagen, organized by the Philips Collection in Washington D.C and the Israel Museum in Jerusalem (in 2013). In 1934, Man Ray photographed some mathematical models in plaster at the Henri Poincaré Institute

¹ Luigi Moretti: Italian architect, 1907-1973

² Man Ray: American artist, 1890-1976

³ Catalogue: "Man Ray – Human Equations" published by Hatje Cantz Verlag, Germany, 2015



(André Breton and other surrealists were also fascinated and wrote about them¹) and later, after the war, Man Ray used the photographs as a starting point for a series of paintings he called "Shakespearean Equations". This way of creating representations of something that already exists is for me to see a way forward in the "decoding" of my own models into other depictions. The whole idea of casting inner spaces is also seen in Bruce Nauman's² "Cast of the Space Beneath My Chair" (1965), a concrete casting of a simple chair with the negative space in solid. Rachel Whiteread's³ castings of negative spaces, of entire buildings and everyday objects are filled with mystery and intense atmosphere, and are inspiring as the familiar in the unfamiliar, Das Unheimliche⁴.

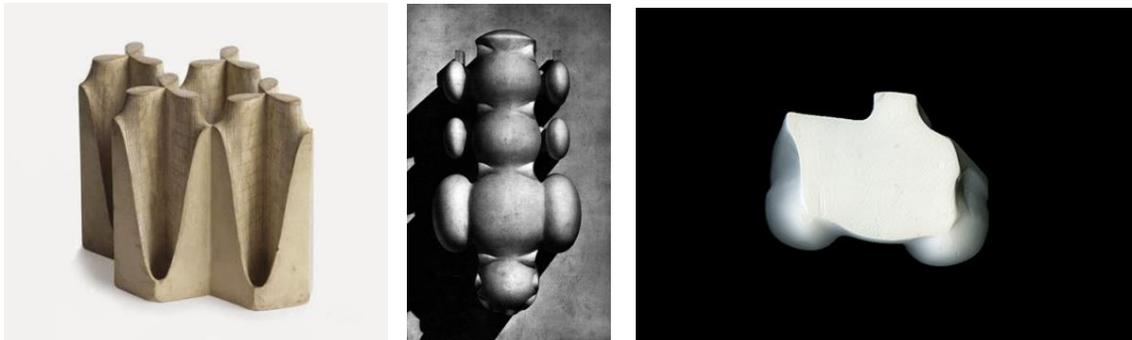


Fig.20-22 Mathematical model in plaster from the Henri Poincaré Institute / Luigi Moretti, model of inner space / one of my own models from my collection of 1.001 models

Work in progress

And here, finally a work in progress: a survey of selected plaster models with special interest in the spaces they create among themselves or contain individually. I experiment with the hollowing of a series of models, in order to make them spatial and "liveable", or cut them up in rectangular-shaped units for the subsequent composition of city-like structures. I'm working on my own order of columns and other building parts, relief models in brass and various other products, all different stages of a work in progress, which can be translated further in order to meet and approach the demands of a concrete or more definite architecture. The process is empiric with a strong dynamic flow and a high level of abstraction in the creation of a collection of possibilities to be examined and developed, a collection of artistic work to be reflected upon. Individually, they can be used in

¹ André Breton (1896-1966): "Crise de l'objet", Cahiers d'Art, 1936

² Bruce Nauman: American artist, 1941-

³ Rachel Whiteread: British artist, 1963-

⁴ Sigmund Freud (1856-1939): the essay "Das Unheimliche" (The Uncanny), 1919



creating creative workshops in my teaching at the Royal Academy of Fine Art, the School of Architecture in Copenhagen.



Fig.23-25 “Cut-up models” (315 units) a way of composing city-structures and building-volumes / Columns in plaster (3 out of 10) / Relief in brass (1 out of 15)



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Through the Filter of Walter Pichler: Life, Art, Architecture

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Abstract

The paper explores the Austrian artist and architect Walter Pichler's (1936-2012) life, art\architecture, work methods, and conceptual framework as a case which contributes to the theme of the relationship between art and architecture. Pichler rose to prominence in the 1960's as a central figure among Vienna's post World War II avant-garde architects. He presented visionary projects with a critical position toward technology and its influence on society. Later on he moved to a farm in St. Martin, Austria. Following this relocation, the nature of his works changed drastically. Pichler's works created a particular atmosphere, and grew ever more puzzling as they evolved over time. His works always mysterious and sensual touching on the body, earth, death, and mythical concepts. The paper reviews critically his life, art and architectural works, his non-complete process, and the way he integrated art with architecture.

Background

Walter Pichler, born 1936 in Austria, in an area which most of its inhabitants were relocated during World War II. This country-side region was populated by many craftsmen, like the Pichlers', who worked in traditional crafts. Following the social and technological change, enhanced by the war, these crafts people and their products become obsolete, the whole economic structure and way of life in this region disappeared. The events of World War II have influenced Pichler on two levels, first as a childhood memory of detachment and hardships, and secondly as a grown man, in which he experiences the distraction left in Europe after the war. He was exposed to the failure of idealistic attitudes that have led to the war, and the devastating effects of technology on society. For a whole generation of Austrian artists, like Pichler, who were born into the war and matured after it, the war came to symbolize the failure of totality on all its forms.¹

Pichler graduated from the academy of fine arts in Vienna in 1955. Soon afterwards he became reluctant to join the main stream of architectural making. This meant for him to be compelled to build, and as a consequence to confirm to the needs of society for utility and economic efficiency.

¹ David Dunster, "Walter Pichler," *Architectural Design* 75, no. 4 (2005): 86-91.



He turns to experimental and visionary images of architecture as means enabling a search for deeper meaning for architecture. For him this was also a way to engage critically with the social changes which had influenced the world immensely during this period. At this point Pichler declares in a defiant way in a manifesto titled “Absolute Architecture”:

“Architecture. It is born of the most powerful thoughts. ...It is a brutal affair that has long since ceased to make use of art. ...It crushes those who cannot bear it. ...Machines have taken possession of it and human beings are now merely tolerated in its domain.”¹

This proclamation, by the young architect, is a strong statement in favor of architecture, yet against its prevailing means.

Pichler started to exhibit alone and with fellow architects such as Hans Hollein, and the Haus-Rucker-Co Practice. In 1967 Pichler, together with Hans Hollein and Raimund Abraham, exhibits in the NY MOMA in an exhibition titled: “Visionary Architecture”. The exhibition showed urban visions on the background of technological changes, their effects and possibilities, especially on the human body and the place of man in the world.²

In 1972 Pichler purchases a farm in St. Martin, a country-side region in south-east Austria, and moves from Vienna to live there permanently. Life and work in an isolated farm allow him to create in a very unique and intense way, while developing a personal language and methods of creation. In the St. Martin area there are many local craftsman and materials that allow him to explore and discuss traditional working methods. From this point on Pichler works almost exclusively from the farm. Although he is known world-wide he chooses the position of the recluse. He rarely exhibits, refuses to lecture, most of his works stay hidden and never leave the premises of his property. He continues to work extensively but under his own terms, detached from the art market, free from the constraints of production, urbanity, consumerisms, conditions that are both constraining and liberating.³ In 2012, at the age of 76 he dies of cancer.

Early Works

In 1967 Pichler, together with Hans Hollein and Raimund Abraham, exhibit in the NY MOMA in an exhibition titled: “Visionary Architecture”. Later in the year he participates in the “Biennale” in Paris. The following year he takes part in “Documenta IV” in Kassel, and several other art exhibitions as well. This fruitful period establishes him as a forerunner of European avant-garde

¹Ulrich Conrads, Programs and Manifestoes on 20th-Century Architecture (Cambridge, Mass: MIT Press, 1984), p.181.

² “Walter Pichler”.

³ *ibid.*



artists of the period. His works showed urban visions on the background of technological changes, their effects and possibilities, especially on the human body and the place of man in the world.

Pichler develops an underground city with dreamlike images of floating or underground buildings and cities suggesting lost civilizations. This visionary project is an elaborate underground metropolis, resembling an ominous defensive artillery battery, with multitude of incisions and protruding shafts offering portals from which to look out or in. The result is dramatic but has no obvious purpose, a clear provocation on the part of Pichler who believed that architectural thought should critique the social atrophy and laziness induced by new technologies.¹

Another, well known series of objects from that period are the wearable artifacts, such as the “Portable Living Room” or “TV Helmet” both simulated a passive consumer of transmitted technological imagery and separation from the physical surroundings and human contact. For Pichler, media is far from participatory but instead ambulating and hypnotizing, pulling humanity’s attention away from its greatest attributes. Instead of making human abilities more numerous, like prosthetics, the “Portable Living Room” and “Small Room” disable a subject from moving with its usual acuity. Pichler’s helmets don’t provide more experience or more engagement, but instead subtract. It’s ironic, therefore, that Pichler subtitles his piece “Portable Living Room,” because it is certainly not portable, and at best a low simulation of a living room. The Portable Living Room enables a person to remain motionless, separating them from their obligations and necessities to simply be entertained.²

The underground city and the series of wearable objects reveal Pichler’s mixed feelings toward machines, which were both an inspiration and an ironic component of his designs. Such works were a fierce critique toward technology and its possible influence on society and the individual. They also were an attempt to expand the meaning of architecture as experimental, visionary, critical, and a symbolic medium; a customary role of art. As such they are also a critique against prevailing architecture and the limited functional use it advocated at the time. His works from that period are polemic in nature, and visionary in their attitude to the relation between technology and man.³

St. Martin

In 1972 Pichler purchased an old farm in St. Martin of the lower Burgenland province in south-east Austria. This countryside area is fairly rural with small communities of farmers, workman,

¹ Michael Abrahamson, “Walter Pichler: Prototyping Escape,” accessed 02 Apr. 2016

<https://criticundertheinfluence.wordpress.com/>

² It is interesting to compare Pichler’s visionary series of objects with current technological development of Virtual Reality wearable glasses and headsets.

³ “Walter Pichler: Prototyping Escape,”



and craftsman of sorts, still working in traditional manner. This area with its vernacular landscape, slow living pace, and remoteness from urbanity, has proved an ideal location for Pichler's mode of creative process. His relocation to the farm resonates two important aspects. First, this is a return to his childhood landscape, not only in the sense of the visual but also in the sense of community, of way of life, and the focus on craftsmanship. Second, this is a shift from passive critical position against social changes, as reflected in his early works, to an active and positive, reaction against the same issues. Simultaneously to the change in life style and location, so did the nature of his works transformed. It can be said that his ideas needed a local context in which they could mature and develop, and in the farm they have found such a place.

Pichler was established early on as a visionary architect, but he chooses to submerge himself into making architecture of his own, in an enclosed detached environment. An architecture that evolve and matures in a more direct correlation to human pace. He chooses deliberately not a position of a famous architect, neither a famous artist; he rejects engaging issues critically and aloof. He chooses to live according to his ideals, according to his fierce statements against laziness induced by technology; he chooses to experiment with his own life, to live the possibility of making architecture and art merged as one.

For the next four decades, until his death, Pichler works almost exclusively in the farm. There he makes his sculptures, and the small architectural buildings which house the various sculptures. He rarely exhibits, refuses to lecture, and almost never sales or moves the objects from their location in the farm. He supports himself, and this architectural experimentation, by selling his drawings, which depict this sculptural and architectural process.

Craft and Materials

Pichler asserts that there is no hierarchy of materials. He works slowly on each of his projects and puts emphasis on craftsmanship and precision. His works in different mediums always carry the characteristics of his hand. Pichler was always fascinated by technology. Early on he tended to be using technological advanced materials. Such as plastic and bubble shapes, induced by science fiction and the image of advanced technological equipment. But this proved to be brief, and the shift was toward handmade and craft work. He uses mainly pencil, ink, and water colors for his drawings, his color palate is grim, consisting predominantly of blacks, browns, reds, with dark and rusty nature. He prefers bronze, wood, and clay for the sculptures. For his architectural pieces he employs concrete, brick, zinc, plaster, iron, wood, and vernacular materials.

The horizon and the earth are important themes in his drawings; the materiality develops from the ground and is bound to it in a sensual relationship. The architecture is also bound to the landscape. Pichler represents the earth as if it exists in constant emotional conflict and dialog with



the architecture in it.¹ Within a dreamlike world the architecture is central, yet its existence is not to be considered reassuring, explains researcher Paul James:

*"The formal language of his architecture is dominated by moments of either resisting or merging with the ground."*²

Time

The isolation in the farm allows Pichler to extend the work on each project for very long periods; it eliminates external requirements to 'finish' works. The works are worked and reworked constantly, and in many aspects resist completion. The works, specifically the sculptures and the houses, are never sold, and rarely ever exhibited outside the farm. Having the works in his possession means that Pichler can continue to work on the artifacts indefinitely, no finished state is required, neither suggested. Pichler continues to move the pieces around, rework them, establish new and refined relationship between the sculptures and the architecture; this process is never complete.

Pichler sometimes worked on projects not only in a slow meticulous fashion, but over long periods of time, sometimes even decades. The time allows the works to develop in a different rhythm. This issue is explained by architecture critic Friedrich Achleitner:

*"...in order to allow things to unfold according to an internal rhythm, beyond the urgency of time constraints."*³

And:

*"By withdrawing from the art world and the consumption of his art by the trade in pieces, Pichler simply asserts that he gained the most valuable commodity - time."*⁴

This reworking, rethinking, perpetual kind of process can be seen in Pichler's drawings in the way the figures are portrayed with a line that repeats over and over as if searching to determine the figures location in the world. Looking for example on the drawing that, in a typical simple manner, is titled: "Draftsman and the House for the Ridge", 1980. A sketchy drawing, a mixture of crude pencil lines with technical measured architectural ones. A draftsman is submerged in drawing, poised and concentrated on his work. This coarse, almost skeletal figure, sinister, and

¹ Paul James, "Walter Pichler's House Next to the Smithy: Atmosphere and Ground," *Architectural Design* 78, no. 3 (2008): 60-63.

² *ibid*, p.61

³ Friedrich Achleitner, *Walter Pichler: Drawings, Sculpture, Buildings* (New-York: Princeton Architectural Press, 1993), p.14.

⁴ "Walter Pichler," p. 91.



psychologically laden human is a re-occurring theme in Pichler's work, which he calls his "dream drawings". The lines that define the figure are entangled, they seem to attack the paper, as if in a turmoil. They continue as if they protrude out of the figure to become a partial lightly drawn plan of some of the buildings in St. Martin, further on the right side the lines converge to become a highly precise and detailed perspective drawing of the "House for the Ridge".¹

Darkness and Ambiguity

A colored drawing titled "House for the Ridge". It is an architectural section of the house which contains the sculpture called the "Ridge". The drawing is precise, highly detailed, clearly done by someone proficient in architecture, someone with deep understanding of details, of the craft of building, of materials. All is clear the concrete base supporting the structure, the door hinges, the base for the sculpture, the sculpture itself monumental in the center of the space like an ancient deity in its temple. The colors are dark. The building rooted into the brown earth, the interior space is black, the sky a mixture of blood red and rusty browns. Somber, sublime, mythical, static, an architecture for art, architecture which is art, art that portrays architecture; Pichler at his best.²

First thing evident in all the works by Pichler is the atmosphere, it can be defined as expressive and poetic. While the architectural representational technique such as plans, sections, isometric are clear, the atmosphere in Pichler's drawing is something which is a bit more difficult to define. This atmosphere is almost a material by its own right; it is a space through which we understand the world.³ This atmosphere has become a hallmark of Pichler's uniqueness. A testimony to this quality of Pichler's architectural drawings is pronounced by English theoretician and architect Peter Cook:

*"Exponents of the art... refer not only to the haunting quality of his subject matter, but more to the range of expression that the substance of the drawing itself can expose."*⁴

and elsewhere:

*"Pichler nonetheless becomes a point of reference in any discussion of the power of drawing."*⁵

¹ Achleitner, Walter Pichler: Drawings, Sculpture, Buildings, pp. 62-63.

² *ibid.* p. 65.

³ "Walter Pichler's House Next to the Smithy"

⁴ Peter Cook, Drawing: the motive force of architecture (Great Britain: Wiley, 2008), p.154.

⁵ *ibid.* p.156.



The earth is an essential element, yet it is not a description of a landscape, but a blurred image, as if seen through constant, thick fog, through some material that everything is submerged in, states James about this:

*"Atmosphere relates to the critical strategy of clouding, to render obscure, to resist rhetorical clarity."*¹

The works are represented in a very realistic and precise manner, yet they contain many features of haziness and vagueness, this creates ambiguity and indeterminacy; it aims at stepping away from clarity and rationality. Pichler brings back into his representations the darkness that was expelled by the light.² Light represents improvement and progress of humanity and it is opposed to values of the mystical past, explains James:

*"Light released society from the dark forces of myth and folklore. Dark space, in contrast, was aligned with the pathological, the unseen and the diseased agent that will harm the social body."*³

Brightness represents a complete state, and allows a total look at the thing; it serves as proof of it being right and justified. According to Pichler this is wrong, deceiving, and not necessary. Only through darkness can objectivity and rationality be opposed, only through darkness and its ambiguity, can subjectivity, relativity, and melancholy appear. This melancholy is self-aware and serves as mask from the real world.⁴

A central issue in Pichler's work, and maybe it is not surprising, is death. This subject is common in art but rare in architecture, this is stressed by Dunster:

*"Unlike architects, artists can be obsessed with death. Architects can only project work that makes life better..."*⁵

Architecture deals exclusively with the creation of a 'better world', through constant improvement of the physical conditions it provides. The subjects, the methods, the representation, the atmosphere, and everything about Pichler's work suggests incompleteness, a resistance to become complete, all is non-complete. In a chilling way the only possibility of the complete exists in death, which is an ultimate finish, conclusion and an end, after which no improvement or progress is possible, a complete condition.

¹ "Walter Pichler's House Next to the Smithy" p.60.

² *ibid.*

³ *ibid.* p. 62.

⁴ *ibid.*

⁵ "Walter Pichler". p. 87.



Art and Architecture

It is not uncommon for an artist to work in series of works, revolving and evolving around a central theme. It is not uncommon to work on a series for extended periods of time. This is also the case with many of the works by Pichler. Examples of this would be his sculpture series the Birds or the Wagons. Sometimes reworking finished works, sometimes returning to a project after years of seemingly not engaging it. Pichler takes this a step further, he creates some intricate relations between himself, the works, and between the different works among themselves. The works are not only reworked but they also change in relation to each other and grow from each other in an endless and non-complete way. Works are complimentary for each other, there are sketches for sculptures, buildings to house sculptures, plans for the buildings, paintings of the sculptures inside the buildings, models for the buildings that are actually sculptures, and drawings for the models, and so on, spanning sometimes over decades. Achleitner states in this respect:

*"Every stage of production has a certain finality, but, at the same time, every ending signals a new beginning. This is not only personalized program of existence, but also an eminently sociable, communicative arrangement."*¹

Certain works are engaged through different mediums, allowing to explore the subject from a variety of viewpoints. This is a common architectural feature derived from the necessity of representing a large scale building, with complex and elaborate spatial and material characteristics, prior to executing it on site. With Pichler's works each different representation becomes a finalized artifact, like an art-piece, a standalone. This can be seen for example in the way he works on the "Door" he was commissioned, a rarity, to install in the MAK museum in Vienna. From 1987 till 1990 he created a large amount of drawings, paintings, models, and partial illustrations, both representing the final installation, and being art pieces by their own right. Each intended to be both a preparatory piece, as part of a thinking\design process, and also a finished work. Sometimes these seemingly preparation sketches are done after the "Door" itself was actually installed.²

Pichler's different works sort of belong to one another, or made to be used for one another. He makes buildings to house his sculptures. He sometimes makes the "house" long before the sculpture has begun, and sometimes the sculpture has to wait years to find its proper place in a house. Sometimes drawings for such houses are made many years after the house has been built. This endless cycle of constant working and reworking, and complex interactions between the projects defies an ending. Even more than that it defies the distinction between what is considered art, architecture, representation, or a simple preparation sketch. This complex woven interaction between drawings, sculpture, houses, consists the core integration, Pichler creates,

¹ Achleitner, Walter Pichler: Drawings, Sculpture, Buildings, p. 15.

² *ibid.* pp. 188-203.



between art and architecture. This dialectic is pointed out by Christian Reder deciphering Pichler's drawings in a retrospective following his death:

"Pichler understood documenting his works in photographs or in drawings as a dialectic means of making clear the relationship he had constructed between his sculptures and their architectural settings." ¹

A typical example for such a process can be seen in the multitude of works done as part of his "Wagon" series. This project was done approximately from 1962 until 1990. Over almost three decades Pichler created the sculpture "Small Wagon", the "Big Wagon" and the "House for the Wagons". Alongside those artifacts Pichler makes a series of many drawings and paintings detailing the Wagons, accompanying their creation, their relations to each other and to other objects and spaces, and their location in the farm. An early Wagon was cast in 1962, the House was erected early in the 70's and many paintings that take the form of architectural drawings appear late in the 80's, decades past the creation of the House.

A sample for this is the drawing from 1990, titled: "Big and Small Wagon". It shows a large white room; its boundaries are unclear. Its floor is dark, detached from the architecture, the human figure, and from the large ambiguous apparatus filling the most part of the drawing. The title does little to clarify the meaning of the drawing neither the purpose of the Wagons. The two Wagons are drawn with technical precision in isometric, an architectural technique. Submerged in dark tones it is drawn precise, detailed, and measured, yet its function remains obscure. The figure standing beside the apparatus which is holding the wagons is drawn in a different kind of line, sketchy, blurred with spots, worked over. The precise actions of the figure and its relation to the Wagons is unclear. The whole meaning of this drawing is puzzling. This is clearly an architectural work, at the same time this is art, and in a defiant contradictory way this is also neither just architecture nor simply art. ²

Discussion

Pichler begins as an architect and evolves to art. An essential part of his aims is to combine between art and architecture and to bring them closer together. This comes from the idea that art can overcome the necessity for functionalism and practicality that drives the human away from architecture. His early works revolve around issues of protest against the war and its outcome, and issues that deal with relations between technology and man. During the seventies

¹ Christian Reder, and Stephanie Weber, "Walter Pichler: Zeichnungen" Exhibition catalogue (Berlin: Snoeck, 2013), p.29.

² Achleitner, Walter Pichler: Drawings, Sculpture, Buildings, p. 56.



he moves to a countryside farm. In this location, over a period of almost 40 years, he redefines his life, his creative process, and his relations with his own artworks.

Pichler stands out not only as a unique artist and architect but more so in the way he lived his life. In the seclusion which he chooses to work in; not as a form of detachment or withdrawal but as means to allow him to have timeless control over his works. In the way he created interaction between the different works and the different type of works: drawing, sculpture, architecture. Having them relate to one another, depend on one another, grow from each other, and constantly blurring the distinction between art and architecture. Keeping the ambiguous distinction between what is the role of architecture, and what is its relationship with art.

Pichler persistently explored means to bring art and architecture together. Being an architect he starts by making architecture closer to art, but later he attempts to bring them closer from 'both sides'. Architecture has to overcome its compulsive need to be built and function, and art has to take upon itself the burden to be limited and not restrict itself to abstract concepts. Pichler's works and methodology cannot be seen as any form of practical solution or a proposal but it is a highly inspiring and personal statement. Maybe the most beautiful clarification of this can be found in Pichler's own words:

*"One works against all better judgment, but it seems to me that this is exactly the most humane way."*¹

¹ ibid. p.16.



User-Made Environments: Reflexivity & Digital Fabrication as Social Experience in Art & Architecture – experiments in pedagogy and practice

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Abstract

The ability to learn how to digitally generate and analyze art & architecture design information, and then use it directly to manufacture buildings, products or art projects, fundamentally shifts the relationships between conception and production – it provides for an informational flow from ideation to implementation and experience. While on one hand the unprecedented production capability of digital technologies have increased the ability to generate and process information, on the other hand it increasingly detaches users from direct experiences with social or material events. This paper seeks to find out how procedure based approaches towards digital technology applications in art & architecture education may provide new forms of augmented learning and social interaction mediated by the translation of generative form in material performance & sensor based kinetic architecture. Rather than opting towards a disciplinary-based process inherent to models of repetition and continuity of proved cannons, nor the explicit embrace of the generative capabilities of computational algorithms for simulation, a procedure-based approach engages the informational flow as animated form, relying on the students 's combination of associative, memory-based and experiential learning methods. Examples of procedure-based learning methods include the design and fabrication of sensory responsive components at the Rhode Island School of Design. Experiences searching to expand the integration of digital generated information towards the enrichment of human-environment social interactions through the relationship between digital and material based fabrication. The projects combine the increasing proliferation of generative algorithmic processes with the largely accessible control of automated-environments in the electronics industry.

The integration of a new type of control based on the movement of the user's body enables the user (student) to become directly capable to generate (and associate) various degrees of privacy and publicity in real time.

The project ultimately aims to take architecture beyond the creation of static forms and into the design of dynamic social, transformable and ephemeral material experimental processes.



The paper is focused on the intention to identify a procedure-based approach to architecture design process in a series of case studies developed at the Rhode Island School of Design as a response to the need to analyse how the increasing changes in the production of architecture design solutions is manifested in the design process. The increasing utilization of computer numerical processes in design and fabrication shortened the distance between generation and implementation. The designer's set of tools can enable simultaneously one of the broadest sets of generative processes as well as a close approximation to actual making.

For this reason the procedure-based approach to the design process is a hybridization of simulation and making-based models, sustaining its principles on the constant actualization of ideation process in material form. The paper will highlight the relevance of a project prototype (Adaptive Cork Screen (ACS)) within the context of case-studies on a procedural-based approach to architecture design, developed at the Rhode Island School of Design in the way it seeks to generate new possibilities for enriching human-environment interactions when the control of automated-environments has become increasingly accessible and where the movement of the user's body becomes directly capable to generate various degrees of privacy and publicity in the domestic space.

Key Words: Procedure-based + Analog + Digital Fabrication + Non Standard + Experience

Introduction

The recurrent criticism on the loss of materiality or haptic value in contemporary architecture has been in many instances affected by a relentless application of digital fabrication processes (Kennedy, 2014). Simultaneously with the criticism towards the disjunction between new standard forms of digital fabrication and traditional production processes, new social protocols arise through the automated customization of form: Such protocols are often provided by algorithmic design processes or physical computing transversal to digital art & design practices whereas author and users may engage collectively in the definition of project variables (scale, size, color, or material) within a precise set of parameters (Gramazio & Kohler, 2008) (Lynn, 1998) (Cache, 1999).

In order to find a balanced educational model that may not prevent the development of the discipline as a material practice and engage in the new models of user-author / producer interaction it may be necessary to revisit the notion of procedure in relationship to material (Cache,1999) and user experience (Benamor Duarte, 2016) . To further situate the paradigm it's necessary to revisit the notion of procedure-based model or design morphology (Cross, 2001) as an essential understanding of the architecture disciplines as material and visual practice according to a set of rules and principles inherently informed by the symbiotic relationship between shape



and meaning, access to resources and the adaptation of form to context. This notion suggests that a procedure-based design process in design disciplines (i.e architecture, interior architecture or landscape architecture) may emerge from the author's actions during the creative process. Rather than limiting a criticism of current proliferation of digital design technologies to an ontological tradition on the reading of architecture practice within its social, cultural, political, technological and environmental context, this perspective enables the possibility to further understand the creative process from within artist or architect role and behavior during the generative stages.

By situating the author's experience of making architecture in the context of an artistic material and visual practice and engaging the rapid proliferation of digital technologies it will become possible to establish a systematic reading on the core distinction between simulation and actualization inherent to the architecture design discipline: At the intersection between projection-based procedures and making based approaches to the design process. A systematic hybridization of these two methods may contribute to face the disciplinary challenges inherent to the rapid integration of algorithmic and computer numerical construction processes in the digital arts and architecture practices. (Benamor Duarte, 2016)

For such reading the notion of uncertainty and reflexivity devised within the cultural ethos of the design discipline (Schon, 1985) further approximate us to a psychology approach to the art & design process and the notion of flow in creative cognition through perceptive imagery (Finke, 1998) may provide architectural designers and students with a procedural based approach by measuring the performance of an individual to produce a larger number of creative inventions when the categorization of a problem happens simultaneously or after the shape manipulation.

This paper discusses and seeks to identify possible ways in which authors can actively shape art & design solutions in real time according to particular sensory data, whether through material flexibility or resistance towards adaptation or the translation of motion into electrical input.

Rather than engage the manufacturing capabilities of digital technologies to translate precise information from the computer interface to material processing, it's proposed a procedural approach to the creative process manifested through a direct correlation between user, design and fabrication inputs. The goal will be to reclaim the haptic presence of art and architecture and position user experience at the core of morphogenetic research.

This paper is organized in five parts. The first references art & architecture design process as a pure visual process in relationship to Creative cognition. It's proposed that the association of meaning and imagery may contribute to analyse the capacity for the author to produce unprecedented morphological innovation and meaning. The second part dwells on procedural based design through the case study for a spatial component whereas the hybridization between analogue & digital means of design and production generates a non-standard spatial installation.



The third part situates the translation of digitally generated morphogenetic algorithmic processes in to traditional manufacturing technologies in the making of an artefact through glass blowing. The fourth part reports on the emergence of a production paradigm based on a new social protocol between a designer, producer and user by focusing on the disposition and randomized stacking of ceramics porcelain blocks in a sited installation. The fifth and last part analyses the findings from a case-study in which a full-scale 1:1 interactive prototype was developed through sensor based motion form. The purpose of this last case study research undertaken at the Rhode Island School of Design is to investigate how active motions of designers and users determine the morphology of an automated screen divider in a domestic environment. The research involved the generation of an automated system based on the relationship between material, form and interactive systems of control.

1. A procedure based approach to the creative process: Creative cognition in relationship between language and imagery

The ability to flow within rational and subjective processes is recognized to become an essential component of the artistic process. Whereas the research in cognitive psychology (Martindale, C & Dailey, A. 1996) points out the primary process is prolific in developing combinations of disparate and real images, the secondary process is focused on orienting its process towards reality. When analyzed within the context of other scientific research on creativity these results demonstrate how Creative individuals develop a higher and more stable shift between primary process and secondary process modes of thought than demographic groups outside of the creative process. Creative individuals are capable to process in a primary state where thoughts are freely associative, promoting the emergence of new combinations of mental elements, although the necessary elaboration requires a return to an abstract representation in direction towards a reality goal.

Comparatively to other studies on the creative process, this empirical research is based on the argument that creative inventions can be generated first by producing a pre inventive image, and then evaluating its utility and application. Finke (1998) developed cognitive tests that have relevance for artists, designers and architects in the understanding of the generative process based upon the relationship between shape and function role. Such research was developed in two stages, analyzing distinct timing for induced changes in the creative process by phasing the association between function and shape. During the first tests, users were instructed to use three-dimensional shapes and simple object parts to construct a single object or device with a particular function. Afterwards a similar test was extended to the goal of producing a variety of objects according to several object categories with the intent of achieving a level of originality and practicality. Results lead to a critical point, fundamental to the understanding of the role of imagery in cognitive creativity: Subjects developed a larger number of creative inventions when



shape and function have been picked randomly prior to the combinatorial development to produce a new object or device.

Finke research contributes to the possibility of measuring the performance of an individual during the creative process whether through the categorization of a problem needs to happen simultaneously or after the shape manipulation. The Generoplore model of creative functioning (Finke, 1998) is as a broadly descriptive, heuristic model rather than an explanatory theory of creativity in which many creative activities such as architecture design process can be described in terms of an initial generation of candidate ideas or solutions followed by extensive exploration of those ideas.

Taking the principles enunciated in the Generopole model into spatial practice lead to the planning of a series of assignments developed in the pedagogical realm at the Rhode Island School of Design Interior Architecture. Situated at the intersection of design, art & architecture disciplines, interior architecture students create site specific installations from assignments intending to dwell on the premise that design process' outreach is far beyond than the creation of spaces and artifacts in context. It often offers the opportunity to further understand the inherent logic of individual's creativity and invention, but also to unfold a reflexive practice of teaching, learning, producing and reflecting upon the process of making and re-making. If creativity is a component of the art & design process that helps us to further understand how, where and why individuals adapt novel solutions to the making of new artifacts.



Fig. 1: Experiential learning in design studios.

Installation, Rhode Island School of Design, MDEs Class 2013 – 25lbs of objects for recycling handed to 25 students An exploration on the making of space through experiential learning. No drawings only a score with specifically assigned times for installation. Experiential Learning became aa new focus on the student-centered experience outside of the studio / atelier as a form of learning in the interior architecture



curricula. Influenced by the writings of David Kolb the notion of *Experiential Learning* has concentrated this method on the individual's direct experience in gaining knowledge and making decisions in confrontation to a succession of events. The context for experiential learning in interior architecture curricula may then be focused on site interventions simulated at 1:1 scale. Acknowledgements: MDes Interior Architecture class of 2015; critics Eduardo Benamor Duarte, Wolfgang Rudorf, Skender Luarasi, Rhode Island School of Design, Photo credit: Wolfgang Rudorf

The principles of Experiential Learning tested in spatial installations enable students and teachers to develop a reflexive pedagogy where both are active participant and involved in an experience, where each individual shares, reflects and possesses the analytical skills to be able to conceptualize or abstract the experience in collaboration.

The learning model facilitated an accumulation of knowledge through a self-directed process or peer-to- peer interaction. Both teachers and students experience an exploratory situatedness (Gero,1998) and by constant validation by their peers. The final product may, or may not, respond to a defined performance and; the resources available during the learning process may or may have not been used in the making of a final product is evaluated. The notion of reflexivity may then be a possible vision to position today's pedagogical practices. Intrinsic to design disciplines, reflexivity has been closely linked to the intuitive process commonly found in Art practices as capable to relate to situations of uncertainty, instability, uniqueness, and value conflict.

The understanding of the creative process in cognitive psychology research and the examples of experiential learning in the making of 1:1 art installations constitute case-studies to identify the strategies and tools that contribute to the origin of creative solutions in architectural design: Its analysis will serve to engage the reciprocity in generative and exploratory making tools. To further situate the generation of creative imagery across the dialogue between art & architecture the following parts will be dedicated to the relationship between standard and non-standard strategies in the making of a space component.

1. Expanding the application of common industrial manufacturing techniques with algorithmic design towards new applications

The increasing proliferation of generative algorithmic processes in architecture design demand for an increasing customer's participation in the design process. This demand is often achieved through the development of new fabrication processes beyond standard practices often developed in the building industry. In order to further bridge the gap between design solutions often driven by algorithmic processes and the necessary available resources designers often



search to adapt common building practices or materials applied in precise practices towards new applications.

Such phenomenon mitigates the often pre-conceived notion that a digital design principal leads necessary to a digital fabrication process. Analog means of production have intertwined relationships between material resources, labor and production methods which may offer designers directions for new custom applications.

A generative algorithmic approach to design process could fall only on a strictly simulation-based visualization where every prototype could become strictly produced independent of specific methods inherent to the material performance or processing methods. The opportunity to engage with the material performance of a given material independent of its application may help designers to identify short-cuts in industry standards towards the invention of new methods and systems in tune strictly to the material performance and expected behavior.

The case study of the Onion Pinch, cork fiber art installation developed by the author with artist & architect Caterina Tiazzoldi is an example of a non-standard synergy between a generative algorithmic design process and the cork industry. The first prototype was developed through modular components and to become adaptable to many locations. The algorithmic design process is a pure analog experiment on combining, corks' flexibility, textural granularity, size, thickness and responsiveness towards pressure. The available digital simulation tools lacked to provide enough material evidences in respect to the performative behavior of each cork components structural stress. By addressing the formal variability and shape deformation through the disposition of the hardware systems a solution was found independent of the potential variability provided by the digital genetic algorithms. The prototype became itself the test ground for the genetic algorithm. The material performance lead then to the design of a configuration based on the adaptive set of configurations independent on users interaction and site constrains. First appearing in a Lisbon subway station and then moving across greater Europe, this organically shaped cork public art installation serves as a unique playground for all ages. The presence of these oscillating rings transforms unfamiliar and cold spaces into a lively oasis brimming with adults and children, inspiring user interaction. The flexibility of the cork results in a series of 15 tactile and dynamically pinched spaces that fluctuating between shelter, hammock, and open space. The internal paths between the onion profiles provide pathways for the children to run, walk, climb, lay and rock upon.



Fig. 2: Onion Pinch Art Installation, Caterina Tiazzoldi and Eduardo Benamor Duarte, 2010. Onion Pinch was also utilized as set for a dance performance by Arke Danza. The dancers' bodies react to the installation's flexibility and oscillation, exploring the reciprocity between the choreography and the installation's materiality; between dancers' movement and the spatiality that blossom from cork's flexibility.

To further identify the theoretical model that may serve to contextualize the case-study for the Onion Pinch Art Installation within a procedure based approach to architecture design process it may be possible to reference the principles inherent to designer's reflexive practice (Schon, 1985) and list four factors that constitute itself an iterative phase model.

The procedure-based model includes a contextual analysis of the intrinsic physical behavior of the selected material. Such process provides the tools for further extrapolation and interpolation of structural performance. The following phase is defined as a generative modulation through recursive geometrical operations following the creative imagery principles previously outlined (Finke,1998) and leading to the final process of an exploratory adaptation of generative geometrical operations in physical tridimensional information.

The procedure-based model provides then artists & architects with a research framework that hopes to be capable to identify in standard and non-standard, analog and digital processes, the decision making solutions behind the generation of modular, adaptive or site specific prototypes. Ultimately providing users the possibility to experience material flexibility in adaptation to site independent from any building conventions.

While the Onion Pinch art installation constitutes a direct translation of algorithmic processes strictly in physical form, the subsequent examples evidence the possibility to translate literally the



generative capabilities of digital designs to become fabricated simultaneously through digital and analogue processes.

2. Non-Standard or Procedure –based exploratory and generative architecture design processes

The method in which a set of techniques is consciously transferred from one material to the other engages the principles that computer control numerical machines CNC operate either by cutting, subtractive and additive process. Rather than a reductive set of operations, a procedure-based process may expand art & architecture's materiality to promote a new social protocol between author, producer and user. (Gramazio & Kohler, 2006) (Koralevic, 2006) (Lynn, 1999) (Cache, 1995).

A further understanding of the relationship between a standard and a non-standard making process is intrinsic to the notion of art or architectural procedure: A systematic association of design or artistic principles and rules with concrete making processes. This process may be organized along a table-based methodology that articulates procedures involved in the development of technical arts with the properties of the materials inherent to its applications. Cache (1999) identifies Semper' inquiry as the foundation of architecture discipline, not as a strictly based arts & crafts knowledge but as a composition of several lineages of transposition by which a number of abstract organizational techniques are articulated from one material to the other.

The notion of non-standard or procedure and the ability to relate a number of attributes between a series of materials and the abstract procedures applied in their transformation shifts the notion of process intrinsically to a transmission of a disciplinary body of knowledge to an associative generative process. The principles of Non-standard architecture processes become then related to the translation of information into algorithmic process in order to help automate and generate a series of recursive operations exploring difference and adaptation towards localized conditions.

The cross-disciplinary seminar digital fabrication at the Rhode Island School of Design seek to further test the possibilities of translating morphogenetic digital design processes manufactured through digital fabrication into casting class artifacts. A group of art & design students from interior architecture, furniture design and architecture participated in a series of workshops developed by the author and glass artist Stephanie Pender to provide knowledge of associative modeling coding and fabrication methods within the tradition of the tectonics and the applied arts. The class explored the generation of tectonic elements through Rhino Grasshopper parametric modeling definitions for further analog and digital fabrication of a one cast-glass prototype of an artifact in collaboration with RISD Glass Department.



Fig. 3: Generative Digital Design for the making of Glass artifacts.

Rhode Island School of Design, Advanced Digital Fabrication, instructor Eduardo Benamor Duarte with Glass Artist / Professor Stephanie Pender. 2014.

The seminar referenced the notion of transposition evidenced in Semper's gap between intuitive and the so called rational decision making processes in design of form and space has become increasingly vanishing with the evolution of digital design technologies. The digital simulation of hand-built formal manipulations or the systematic and geometrical rigorousness of computer aided drawing technologies in design has become an automatic process, universally accessible, largely effective and no longer traceable in a specific tectonic craft .

An identification of the associative nature involved in the notion of transposition contributed to establish a pedagogical apparatus where the fluid nature of design process may offer an unlimited specificity independent of distinctions between analog or digital processes; and the scales of production involved in the design of architecture artifacts.

A further inquiry on the characteristics of the design process inherent to non-standard methods may be focused in the study of morphogenetic principles for the design of a spatial installation defined by the stacking of modular unit. Whether constructed in analog or digital means the focus of this study is to identify how the project algorithm constructs a system to automate the generation of information. The users' experiential knowledge is key to the methods' assessment.



3. Adaptive, modular and sited constructs for human-interaction systems

Whereas the translation of morphogenetic art making or design principles from digital fabrication to glass manufacturing may offer the possibility to bridge the gap between disciplines its application may also offer the opportunity to associate the morphology of modular units for human interaction.

When referencing the impact of mass-customization or the architecture of the non-standard authors (Koralevic, 2008) found a considerable interest in addressing the making of a participatory spatial installation and the relationship between designers, users and producers. As much as generative digital art & design processes may convey simultaneously variability and a literal transformation of input in material through computer control numeric processes, authors & users may also participate (or provide input) towards the customization of art, fabrication and assembly processes on site. This possibility helps artists, designers, users and producers to customize and identify contextual differences during the process of optimizing the generation of building components during the algorithmic design. In particular these may be evident in the design of structural elements or providing most advantageous shape in natural ventilation systems to better optimize the building performance.

Fijiji blocks is an art installation based on the design, making and stacking of porcelain building blocks developed in collaboration with the Ceramics Department at the Rhode Island School of Design and installed at Art Lab / Museum of Art at University of Memphis. The project is generated from a computing generated modular system based on a series of Rhinoceros iterative operations followed by the construction of a wood prototype to enable the fabrication of plaster moulds for later casting each modular unit into a series of modular surfaces.

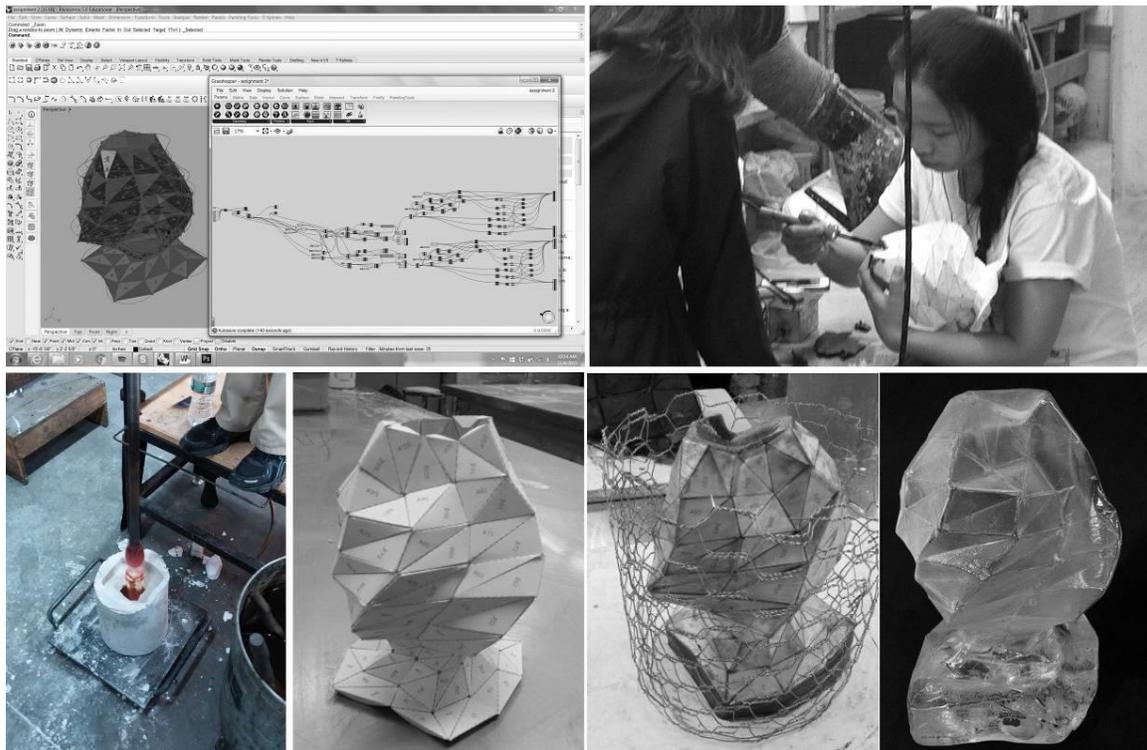


Fig. 4: Fijiji Blocks, Installation, porcelain blocks.

Art Lab Museum of Art University of Memphis, Eduardo Benamor Duarte Larry Bush,
mold-making / acknowledgments Rhode Island School of Design. 2014

The modular system is based on the octahedral polygon figure. This figure resulting from the subdivision of a circle in 8 equal sides, proved to become fundamental in the discovery of the tiling process to generate a series of planes that could become the structure and enclosure of the sleeping surface. Inspired by a series of geometry exercises developed in the Ulm School of Design (Hochschule für Gestaltung) the generation of the tridimensional form from the bidimensional figure was developed along an elementary process of abstract geometric procedures based on successive rotations.

The art installation at the Art Lab / Museum of Art at the University of Memphis becomes a non-standard building process exploring clay's hand-made plasticity in combination with the recurrent availability of mass customization in digital technology and fabrication. Fijiji blocks dwells on the duality between hand-modulated clay and the mathematical reproducibility of a ceramic module engaging clay's tactility to construct a combined building process exploring ceramics plasticity and formal complexity: Maintaining its hand-made qualities and being simultaneously manually, mechanically and digitally reproduced through CAD/CAM technologies.

Even if the basis for a prototype is to become mass-produced. The term prototyping for architecture interventions simulated at 1:1 considers the processes of distilling the programmatic



ambitions or requirements; the resources and technologies available to produce a model; the site assembly; and ultimately the user-interaction (Kottas, 2010).

Besides the actual making of a full-scale construct the Fijiji blocks installation enables a direct inquiry on the direct relationship between scale of prototype, assembly and site integration to become visible for social validation. Independently and in collaboration, visitors may become active participants in the assembly of blocks purposefully ideated for stacking.

By being simultaneously adaptive, site-specific and modular the porcelain units' installation define a construct that is reactant to changes of scale, material, location and distinct user interactivity. Its site specificity is inherent to the context of where it's installed offering the opportunity to understand clearly the principles of an intervention in its capacity to alter a site and constitute new relationships with user.

If the incorporation of digital tools enables the production of increased variability and more complex forms and structures, how many of the intuitive and uncertainty driven processes inherent in art based practices are lost? The case study research analysed below sought to engage automated systems inherent in sensor based motion hardware to simulate the designer's decision-making process beyond the computer screen and towards the actual physical prototype.

4. The Adaptive Cork Screen (ACS): The creation of an automated reflexive environment for domestic space or the making of a social protocol between designers, producers and users

The central focus of the project is to prototype an adaptive wall screen that changes the configuration of space while responding to movements of the user's body. The study engages how technology creates an automated spatial prototype that can become adaptive to its occupation and reflexive to its environment. Central to this project is the duality between spatial adaptation and empathy through a performative appropriation of signs of affect and familiarity commonly associated with systems of ornamentation. The space in the research setting is divided by a screen that adapts its shape in reaction to the user's distant presence rather than any physical contact. As a final outcome the installation ultimately seeks to address the potential for spaces to become responsive to the dialectical exchange between a user and an architectural element, whereby they both model and influence each other.

The Adaptive cork screen (ACS) is a space divider that searches to dim sight and sound in response to human movement. The research draws on the intrinsic acoustical and elastic properties of cork composites to absorb sound and bend under relative pressure. The point of departure is based upon research developed in the cork composites industry and my previous



collaboration with cork manufacturer Amorim Cork Composites before the construction of the award winning public installation Onion Pinch. The research into the Adaptive cork screen (ACS) has addresses the following issues:

What kind of screen structure might be the most appropriate in accommodating formal transformation of cork composite sheets;

How to implement an adaptive system for formal transformation; and ultimately

How to control the adaptation of the structure in response to the body movement.

Adaptive cork screen (ACS) has the ability to become both visually opaque and permeable in response to the user's distance from it and motions. ACS ultimately may generate a new kind of space-use protocol for domestic environments based on a flexible relationship between shared private and public space. The screen is constructed from a cellular organization of cork composite panels in which units are repeated along a 5'-0" x 5'-0" area. Each panel is automated to open and closed individually, based on the user's movement to reveal the space on the opposite side. The goal is to give users the opportunity to be a catalyst of change in the morphology of the screen and offer them the possibility to tune the visual and acoustic privacy of spaces at either side of the screen.

The research project is undergoing development in two prototyping phases¹. Phase 1 (Parametric Interface & Physical Actuator) consists of shape optimization, connecting deformation data of a physical model to a computer model. The physical model is constructed from a sheet of composite cork panel to become measured according to the degree of flexibility to pressure under the power of external electrical forces. The digital tools based on Rhinoceros software and Grasshopper plug-in parametric interface are utilised for the purposes of defining various forms of shape adaptation to different degrees of permeability. The parametric modelling information is transmitted as electrical output to a physical model that allows for a real-time data flow and reversible shape optimization between the parametric model and the flexibility of the physical model.

¹ The required skills for students to participate in the project were the opportunity to Digital modelling during prototyping phase1 & 2; Fabrication during prototyping phase 1 & 2; Computer programming of physical interactivity during prototyping in phase 1 (Parametric Interface & Physical Actuator) and phase 2 (motion sensing & Shape adaptation) and finally, the ability to manage the project schedule and completion of deliverables.

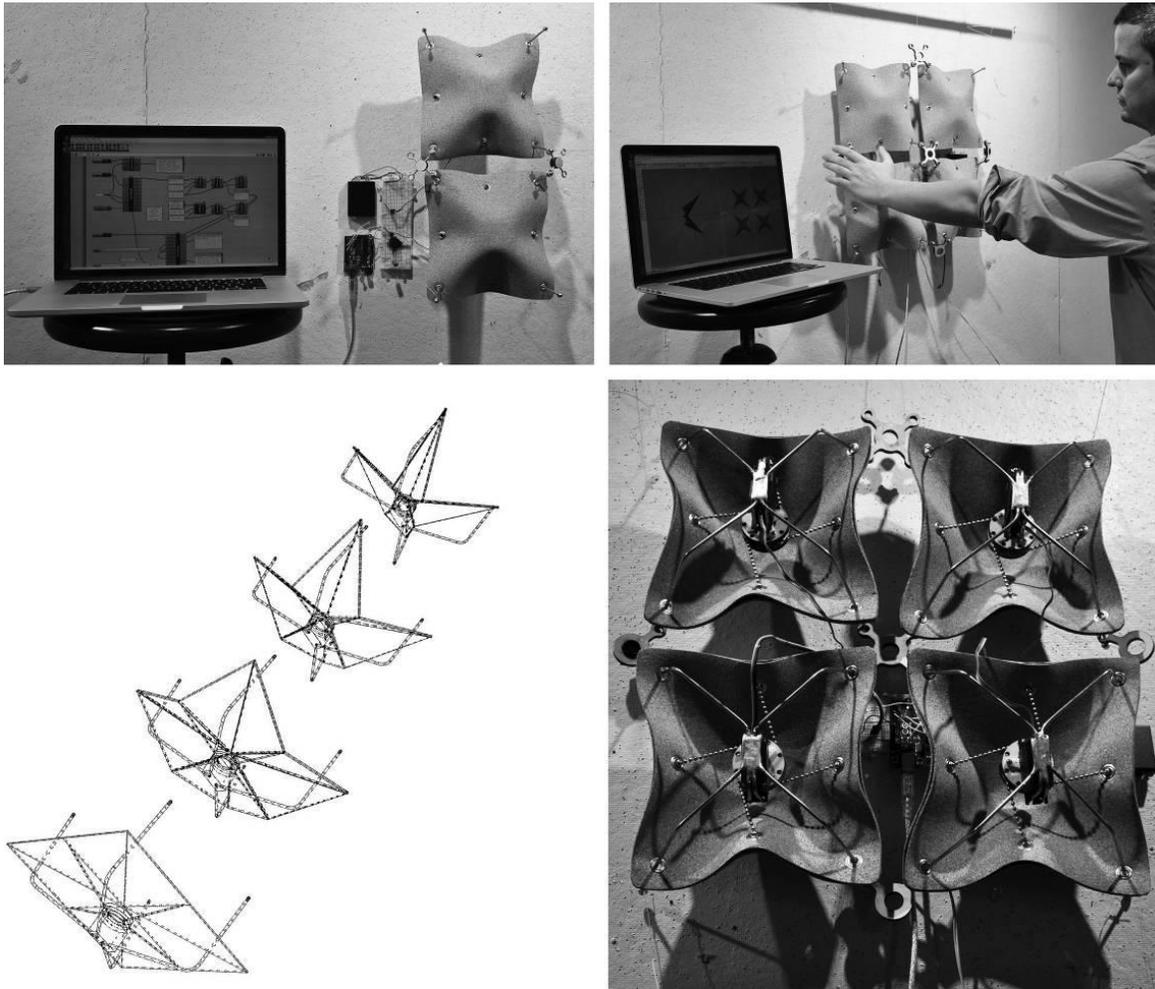


Fig. 5: Adaptive Cork Screen – Kinetic research on adaptive screens through sensors and arduino micro controllers at the Rhode Island School of Design. (Lead researcher: Eduardo Benamor Duarte. Research Assistants: Iok Wong and Eun-Shin Kim.). The graduate students participating in the project as research assistants collaborated in planning, programming and fabrication of prototypes. Their skills allowed them to manage and implement the research project, coordinate the research work schedule and contact suppliers to purchase tools and material supplies necessary for project implementation. Acknowledgements: Eduardo Benamor Duarte, 2014.

The research process was drawn from an online community of users working on the development of Firefly (and the work of the software developers Jason Kelly Johnson and Andy Payne), a set of comprehensive software tools dedicated to bridging the gap between Grasshopper and the Arduino micro-controller (an open-source micro controller intended to make the application of



interactive objects or environments more accessible). Phase 2 of the project consisted of planning the Motion sensing & Shape adaptation so as to determine the aperture and location of panel cork composite prototypes in a wall assembly based on the distance to the user's body. This phase processed the shape optimization developments in phase 1 through an interactive system based on a feedback-loop measured from a kinetic motion sensor. In order to identify body movements based on depth and distance the team will connect the data processed from the Kinect motion-sensing device to Processing and Arduino so as to provide electrical input to the assembly of the cork composite panels and control the degree of visual and acoustic privacy.

5. Conclusion

The premise of this paper and the case-studies presented is to situate how a procedure-based approach across art & architecture design disciplines in response to the changes in current systems of production. In the context where the increasing utilization of computer numerical processes in art & design and fabrication shortens the distance between generation and implementation it's necessary to identify new procedural strategies. The present set of tools for artists & designers can not only enable some of the broadest sets of generative processes but also the opportunity for a close approximation to actual making.

For this reason a procedure-based approach to the creative process may become a hybridization of simulation and making-based models constantly actualizing an ideation process in material form.

Rather than the application of a vocational or purely generative basis, a procedure based knowledge to practice & pedagogy in art & architecture does not necessary lead to an exclusive application of digital fabrication skills but to a robust method capable to create unprecedented forms and uses that combine simultaneously digital with the experiential hands-on making.

The examples highlighted in this paper evidence how impact of site integration in the shapes' morphology, the assembly process or the relationship between the intervention performance and its components' shape demonstrate a tendency for towards the combination of more than one type (adaptive, modular or site-specific): A prototype or assembly where the parts may not be associated with the projects' ontology although their shape is recognized in their performance.

Whereas the opportunities to bridge the gap between analog and digital manufacturing techniques enables artists and architects to associate material performance with algorithmic design process, it's necessary to further situate a procedural based approach by simulating how the configuration of space may respond to human behavioral input. The paper focuses to further situate such study faces increasing appropriation of automated systems for space control and



human comfort whereas the application of sensor based motion hardware in shape morphology enables artists & architects with the opportunity to simulate a decision-making process beyond the computer screen and towards the responsiveness of the actual physical prototype.

It's expected that advances across the fields enable the application of practice and educational models to simulate responsive systems focused on the dialectical exchange between author, user and environment in the making of architectural components whereby all three model and influence each other.

The Adaptive Cork Screen (ACS) case-study seeks to generate new possibilities for enriching human-environment interactions now that the control of automated-environments is increasingly accessible. ACS proposes a new type of control based on movements of the user's body that are capable of directly generating various degrees of privacy and publicity in the domestic space.

One of the main contributions of the project has been to carry out a research experiment that became further developed in the classroom across art & architecture students to further expand the research scope of human-environment interactions. Its pedagogical potential for addressing questions and implementing procedures transversal to art & architecture disciplines continues.

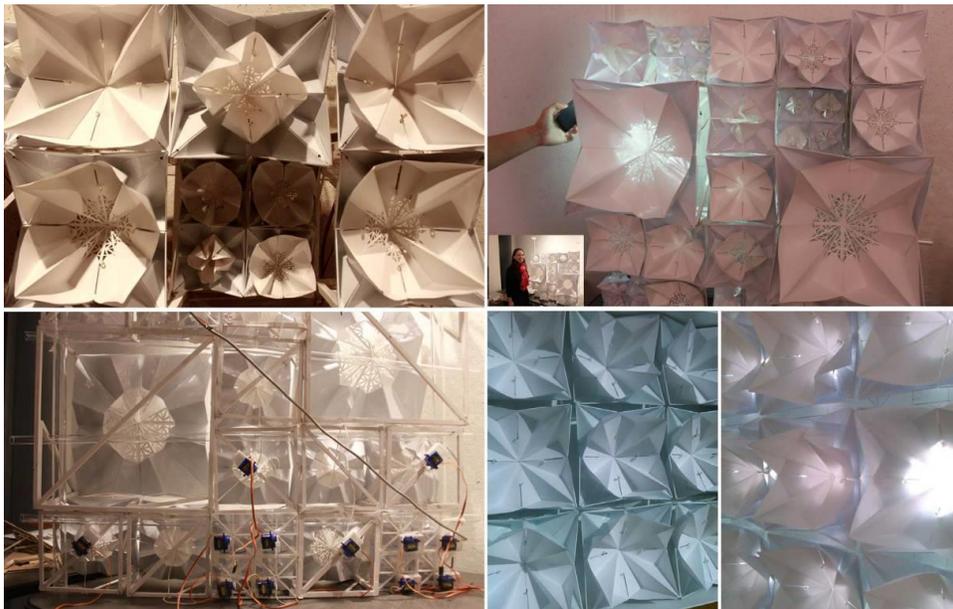


Figure 6. Adaptive origami skin – Kinetic research on adaptive screens through sensors and arduino micro controllers developed in a studio at the Rhode Island School of Design by student Eugenia Rieutort-Louis, Professor Eduardo Benamor Duarte, Acknowledgements: Eugenia Rieutort-Louis



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7. Illustrations

Fig. 1: Experiential learning in design studios. Installation, Rhode Island School of Design, MDEs Class 2013, Instructor Eduardo Benamor Duarte, Wolfgang Rudolf and Skender Luarasi

Fig. 2: Onion Pinch Installation, Caterina Tiazzoldi and Eduardo Benamor Duarte, 2010.

Fig. 3: Generative Digital Design for the making of Glass artifacts.

Rhode Island School of Design, Advanced Digital Fabrication, instructor Eduardo Benamor Duarte with Glass Artist / Professor Stephanie Pender. 2014.

Fig. 4: Fijiji Blocks, Installation, porcelain blocks. Eduardo Benamor Duarte

Fig. 5: Adaptive Cork Screen – Kinetic research on adaptive screens through sensors and arduino micro controllers at the Rhode Island School of Design. Eduardo Benamor Duarte

Figure 6. Adaptive origami skin – Kinetic research on adaptive screens through sensors and arduino micro controllers developed in a studio at the Rhode Island School of Design by student Eugenia Rieutort-Louis, Professor Eduardo Benamor Duarte, Acknowledgements: Eugenia Rieutort-Louis



THE ARCHITECTURE AND FASHION DESIGN – An Examination of the Relationship between Fashion and Architecture Design in light of Technological Advancements

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Abstract

The article focuses on the mutual relationship between two seemingly distant fields of art - architecture and fashion design. It describes a common basis for the process of creating art in the approach to both fashion and architecture. The following considerations, which are based on principles of composition, attempt to reach beyond just the form and analyze also context or perception. The article quotes famous creators and depicts interdisciplinary examples of fashion combining the principles prevailing in different styles of art and architecture as evidence of an unbreakable bond that exists between these seemingly different fields of creation. The analysis focuses on modern sources of inspiration from the virtual world, considering parametric vision of the futuristic, cybernetic art as a common denominator bringing the design process in architecture and fashion even closer to each other because of the mathematical, algorithmic notation.

Key words: Architecture, Art, Fashion, Fractals, Parametric Architecture, Parametric Art

1. Introduction

As Pablo Picasso once said “*The chief enemy of creativity is good sense*”.¹ Since art left museums long ago it has come to reside among people in many different forms; is this not true for all areas of creativity? The introduction of the term applied arts combines even such distant areas of creativity as architecture and fashion. Architecture is an expression of the progress of civilization, and fashion is a form of creation closest to the human body. Is there anything that combines the creative processes involved in the design of clothing and buildings? Is creativity an absolute

¹ Pablo Picasso Quote in Franca Sozzani “The chief enemy of creativity is good sense” Editor’s Blog, Vouge (2013);<http://www.vogue.it/en/magazine/editor-s-blog/2013/02/february-20th>



requirement in these processes? Ray Bradbury once said, “Don’t think. Thinking is the enemy of creativity.”¹ So, where is the line between creating art and designing architecture?

2. Process of creation

Architecture represents the city, and clothing represents a person. Buildings, by forming an urban landscape, often create the most important landmarks in the perception of the city and allow the creation of its mental map. Likewise, clothing is an integral part of the evaluation of a person as a first impression, as fashion and appearance is likely to reflect a lifestyle. An inherent aspect of the dress code for women is also their make-up. Among people, women especially can more easily express their tastes and preferences in clothing. What affects the correctness of a project in these cases?

Both in architecture and in fashion, the creative process begins with an analysis of already existing conditions. Studies of the initial conditions, context or function cannot be ignored. While searching for inspiration, an idea that guides the project is being formed. The creator is often guided by a certain motto whose interpretation gives the work a personal significance and makes the project unique in the eyes of the creator or the receiver. Sometimes the intention is to create something to fit in a predetermined style. The general idea is slowly being dressed using the principles of composition, which are similar in many fields of art. At this stage, consciously or unconsciously, the piece surrenders to the rigid, logical and measurable indicators of the composition.² The primary means of composition are: geometric characteristics of forms, divisions (articulations), weight ratios, rhythm, symmetry, symmetry of axes, accents, hierarchies, colour, texture and proportions. When creating a work of art (or a building or dress), we bring together the above elements.

2.1 Designing architecture

A starting point in architectural design is analysis of the given conditions for a building plot. Such analysis often occurs in the form of planning documents for the area. Another important aspect is the context. Harmonious interaction with the environment and fitting into the urban order must be taken into consideration. The following should also be taken into account: prevailing geographical conditions, line of the sun, the occurrence of winds, local geology, topography, climate, water conditions and the occurrence of living organisms, such as trees (which may be an additional value of the project). Architecture is a very clear translation of the culture or religion in which it arises. At the same time, (under the still valid Louis Sullivan Form Follows Function rule) at the beginning of the creative process, functionality of the building has to be carefully analyzed. After accepting the initial requirements, while searching for inspiration, the first ideas and plans are being formed. The designer is often inspired by the context itself. Driven by the evolving idea,

¹ Cheryl Lavin, "Thinking is the enemy of creativity. It's self-conscious...", Chicago Tribune (1997)
http://articles.chicagotribune.com/1997-11-16/features/9711160116_1_ray-bradbury-creative-carl-rogers

² Rudolf Arnheim, Art and Visual Perception: A Psychology of the Creative Eye. (Berkley: University of California Press, 1974).



the project is being developed by the search for the perfect form. In the work of architects, building models makes these attempts. The most important and most interesting aspect of architect's work is the search for forms that correspond with the function and guiding idea. After finding the intended form, what follows is the search for the most appropriate textures, structure, material and colour. While working on the arising form, the designer should be aware of the principles of perspective considering the location of the building in order to emphasize those qualities. For example, this could be achieved by using foreshortenings, like in the colonnade in front of St. Peter's Basilica, or by the play of light at the right time of day. In the modern world, a very desirable feature of any project is also its flexibility to adapt to spatial or socio-cultural changes. Moreover, the architect being a professional of public trust should design in accordance with the ethics of the profession. Also, funds are often a key aspect affecting the project.

2.2 Designing fashion

Initial conditions given to the designing of clothes include the silhouette of a model, the intended function of the clothes and the occasion for which they are to be used. In this case, a wider framework such as cultural or religious context should also be considered. For example, in Hindu culture the designer can afford the splendor of decoration and ornament, yet while designing robes for monks, simplicity is strictly required. The appropriateness of dress to the place and occasion is an extremely important aspect. It is also worth thinking about the weather conditions, which often dictate the specific use of fabric. In a good design, the concept should fit the existing canons, tastes or trends, but should also be boldly mixed with the individual means of expression of the creator. In the case of fashion, the context may also come from understanding the personality of the model as the main source of ideas. During fashion shows, the perception of the audience may also be enhanced using light, music, stage design and props to bring out and emphasize the designer's idea. The fashion shows of Alexander McQueen between 1997 and 1998, where models walked on flooded runways, or presented clothes in artificially created rain can serve as courageous examples. An inherent aspect of the dress code for women is also their make-up. Moreover, the use of make-up is an attempt to bring the appearance of women closer to the existing canons of beauty, as it responds to the prevailing trends. Make-up artists can be described as architects of the face, because their intention is to obtain perfect proportion in the oval of the face given initial conditions, such as individual skin tone, the shade of irises or colour of hair.

3. Interdisciplinary approach

In the case of architectural design and fashion design, can we speak of an interdisciplinary approach to the creative process? Do these areas influence each other, overlap and mix?

*"Fashion is architecture: it is a matter of proportions."*¹ - claimed the famous fashion designer Coco Chanel. Head of Chanel house, the artist, photographer and fashion designer Karl Lagerfeld

¹ Coco Chanel Quote in: Marcel Haedrich, *Coco Chanel: Her Life, Her Secrets* (London: Robert Hale Ltd, 1972)



believes that: *"We need houses as we need clothes, architecture stimulates fashion. It's like hunger and thirst — you need them both."*¹ Tom Ford, a contemporary fashion designer and film director who graduated with a degree in architecture states: *"Fashion is everything. Art, music, furniture design, graphic design, hair, makeup, architecture, the way cars look - all those things go together to make a moment in time, and that's what excites me."*² Even Salvador Dali did not divide creativity into subcategories and saw the broader context of the arts, believing that they cannot be separated from other areas of life: *"If you do not intend to study anatomy, art and perspective, mathematics and aesthetics and the science of colours, let me tell you that this is more a symptom of laziness than a genius."*³ The above statements suggest the unbreakable bond between seemingly different fields of creation such as architectural and fashion design.

3.1 Surrealism and deconstructivism

Following in the footsteps of Salvador Dali, both fashion designers and architects have gained inspiration from the surrealistic trend represented in his paintings. The desired effect here intended to demolish the logical order of reality through the visual expression of inner perception. Artists obtained such an effect by trying to move away from rationalism and be guided by the world of dreams, fantasy and hallucination.⁴

In the spring season of 2010, Dutch designers Viktor and Rolf presented a collection inspired by a surrealistic trend, where tulle dresses were arranged in absurd atypical forms. (Fig.1a b c) Sometimes certain pieces of the creation seemed to be missing, while the remaining parts hung in the air around the model, other times the cut of the dress suggested that it was accidentally being worn sideways. In architecture, deconstructivism with its interference in static impressions⁵ can serve as a reference to the above ideas. Curvilinear shapes, fragmentation and a sense of chaos and unpredictability can be found in projects such as the Jewish Museum in Berlin by Daniel Libeskind, and the UFA-Palast in Dresden by Coop Himmelblau (Fig.1d).

¹ "Interview with Karl Lagerfeld and Zaha Hadid", Wallpaper magazine 91 (September 2006)

² Brenda Polan, Roger Tredre, The Great Fashion Designers, (New York: Berg Publisher, 2009), p.239

³ Salvador Dalí, Richard Howard (transl.) Diary of a Genius, (London: Creation Books, 1994)

⁴ Mary A. Caws (eds), Surrealist Painters and Poets: An Anthology (Cambridge: MIT Press, 2001)

⁵ Mark Wigley, The Architecture of Deconstruction: Derrida's Haunt. (Cambridge: MIT Press, 1995)



Fig.1(a),(b),(c): Surrealistic fashion collection by Viktor and Rolf, source: <http://www.viktor-rolf.com>;

Fig.1(d): Surrealistic architecture design, source: <http://www.coop-himmelblau.at>

3.2 De Stijl

Artists of various disciplines have also drawn inspiration from Piet Mondrian and his De Stijl. De Stijl, or neo-plasticism (fascinated by the mystical Schoenmaekers) was based on the principle of opposites, where verticals contrasted with horizontals, and the active forces with the passive. The vertical line in the composition meant dynamics (masculinity), and the horizontal stability (femininity). The style used three fundamental colours – yellow, blue and red three non-colours - white, black and gray. De Stijl rejected decorativeness, and admired simple angles, nature and the belief in the power of abstraction.¹

In fashion design, the Mondrian Collection by Yves Saint Laurent (Fig.2a) can serve as a reflection of the above style. The collection consisted of six dresses made of wool, silk and jersey. The A-shaped dresses were not printed, but formed a composition of pre-dyed fabrics, where each colour in the design was an individual piece of fabric. Mixing graphic white lines and white or colour blocks accounted for the rather direct translation of Mondrian paintings into clothing. Similar example is the Herzog de Bach shoes collection. (Fig.2b)

¹ Bernard Jaffé, De Stijl, 1917–1931, The Dutch Contribution to Modern Art. (Amsterdam: J.M. Meulenhoff, 1956)



Fig.2(a): Yves Saint Laurent Mondrian collection, source: <https://upload.wikimedia.org/>;

Fig.2(b): Herzel de Bach shoes collection, Fig. by author: J.Borucka

Fig.2(c): De Stijl inspired architecture, source: <https://upload.wikimedia.org/wikipedia>

In architecture, De Stijl strongly influenced the international style and the Bauhaus. In the project Schröder House in Utrecht by architect Gerrit Rietveld (Fig.2b), which is the flagship of the De Stijl group, further inputs of Kazimir Malevich can be noticed. The object is designed as a geometric form with white plane walls, rectangular windows with black borders and simple handrails. Driven by the idea of elementarism, the building was divided into components, so that it was no longer a whole with separate details, but was the sum of deliberately isolated parts ignoring their hierarchy. Such a breakdown of solids creates separation as the coherent vision of the building and makes it more like a sculpture. As complementation, the furniture and interiors were designed in the same stylistic as the elevations.

3.3 Origami

Architects and fashion designers have also found a common source of inspiration in origami, the Japanese art of folding paper. Origami comes from China, but because it was developed in Japan it is therefore considered a traditional Japanese art. The rules of origami are simple: the starting point must be only a square sheet of paper, which must not be cut or glued, but in order to create a 3D form it can only be folded. The process of folding the paper is written using an algorithm of procedure.¹ Origami, as an example of algorithmic paper geometry, can be a strong base for experimenting with new forms while starting the design process. Creating small, easy to make models, for example paper miniatures, in order to search for the intentional form is an essential aspect of the artist's or architect's work on the conceptual level.

The influence of origami can also be noticed in many other areas of art including fashion runways, for example in the collection called *Sculpting Mind* by Yuki Hagino from 2013 (Fig.3a) Examples of contemporary architecture inspired by the art of origami can be discerned in designs such as *Ice Cube* by McBrige Charles Ryan in Melbourne (Fig.3b) or *Embedded Project* by HDD FUN in Shanghai (Fig.3c).

¹ Takeo Kanade, A Theory of Origami World, North-Holland Publishing Company (1980)

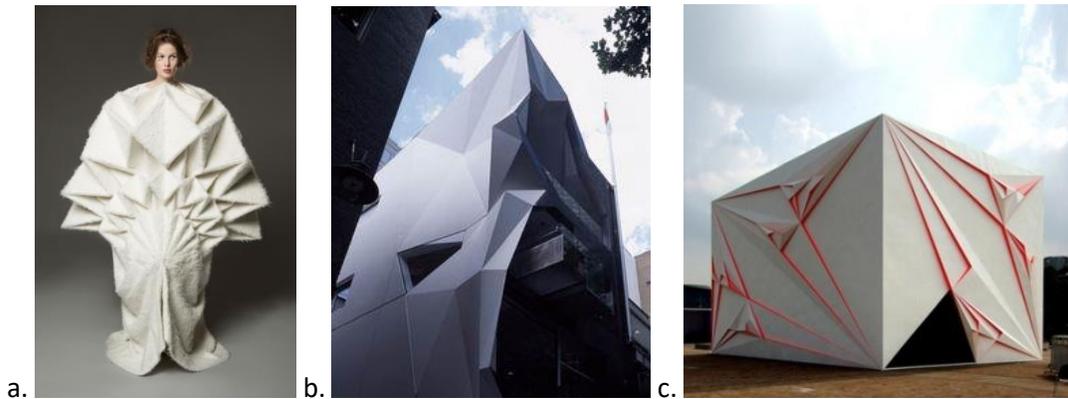


Fig.3(a): Origami inspired fashion collection, source: <http://www.yukihagino.com>;

Fig.3(b): Origami inspired architecture, source:<http://www.mcbridecharlesryan.com.au>;

Fig.3(c): Origami inspired architecture, source: <http://www.hhdfun.com>

3.4 Fractals

The issue of fractals concerns a new level of inspiration for contemporary artists, as their use announces a deeper level of complexity in the algorithmic record of geometry and indicates a movement towards the idea of parametrization in both fashion and architectural design. Fractals are a part of nature, which can be represented by mathematical algorithms, and they serve as inspiration for non-trivial geometry in interesting spatial forms. The word fractal (lat. fractus) means exactly broken, partial, or fractional. Commonly it refers to a self-similar object (the fragments of which are similar to the whole object) or "infinite subtlety" (showing the subtle details even with multiple enlargement). Due to a wide variety of examples, mathematicians avoid forming rigid definitions and suggest determining fractals as sets that have all of the following characteristics, or at least the majority of them: fractals in every scale have a non-trivial structure, which cannot be easily described in traditional Euclidean geometry; they are self-similar, if not in the exact sense, then approximately; they have a relatively simple recursive definition and their Hausdorff dimension is greater than the topological dimension.¹ Through the development of computational capabilities in modern technologies, fractals can be considered as inspired by the natural, algorithmic notation of the complicated language of mathematics. This gives a new insight for artists and architects to gain inspiration from the surrounding nature, as nowadays they can be inspired by "computerized" nature. Fashion and architecture have come full circle back to nature, but with completely new meaning that has adapted to the cybernetic world in which we live today. This is why the article points to the issue of fractals as the most accurate, symbolic indication of the idea of the parameterization in contemporary art and architecture.

¹ Benoit B. Mandelbrot, The fractal geometry of nature.(NY: W. H. Freeman and Company 1983)



In the search for fractals in art and architecture, examples can be found in Hindu culture and art. Fractal design often occurs in the form of ornamentation, for example on vaults (Fig.4a). Also in other parts of the world, we can come across fractals in various forms. As an example, in Tokyo, inspired by a simple geometric fractal, Kisho Kurokawa designed the *Nakagin Capsule Tower* - office and residential building, which represents the architectural style of metabolism (Fig.4b). In fashion design, contemporary designer Lisa Shahno created a collection called “The Iteration” (Fig.4c), which was inspired by fractal cosmology and driven by the idea that the universe may consist of an infinite number of levels that are similar to each other, but different in scale.

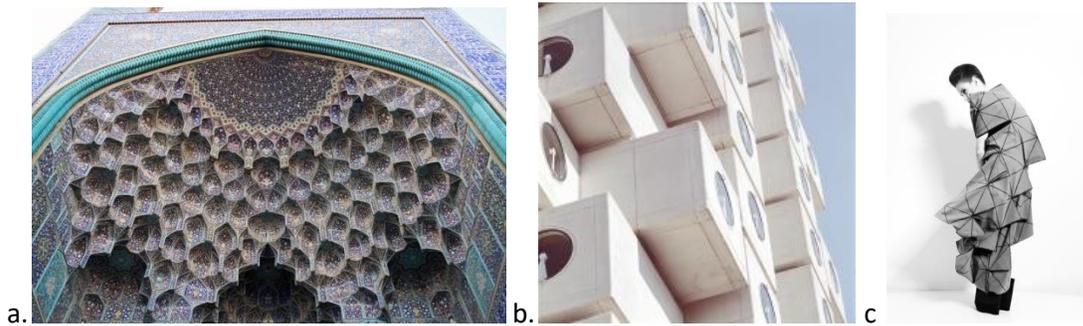


Fig.4(a): Fractal ornament, source: <https://upload.wikimedia.org>;

Fig.4(b): Geometric fractal of metabolism, source: <http://www.kisho.co.jp>

Fig.4(c): Fractal cosmology inspired fashion, source: <http://lisashahno.com>;

4. Parametric architecture – Parametric fashion

Reaching the present day, we should take into account the current technological possibilities, the computing power of modern computers and the strength of the impact they now have on the design process. One can even say that modern fashion and architecture increasingly derive from modern technological capabilities. This way, when observing contemporary design we can see how more and more mathematics, parametrization and algorithms enter into the creation of spatial forms.¹ As a result, the approach to architectural and fashion design has now changed. This parametric approach to creating forms involves a way of thinking that under the given restrictions ensures the largest number of parameters the designer cares about. Computational design comes down to finding functional dependencies among individual elements both in space and compositions, as well as (what is most important in the parametric approach) the functionality of the form.² If the intention is to affect the correctness of the project, then mathematics is a tool that enables optimization in the design.³

¹ Wassim Jabi, *Parametric Design for Architecture* (London: Laurence King Publishing Ltd., 2013)

² Kostas Terzidis, *Algorithmic Architecture* (Oxford: Architectural Press/Elsevier, 2006)

³ Michael Hensel, Achim Menges, *Morpho-Ecologies: Towards a Discourse of Heterogeneous Space in Architecture*, (London: AA Publications, 2006)



Therefore in architecture, thanks to parametric design, we can reduce energy consumption, provide cooling in the summer, ensure the sunlight analysis, simulate the movement of people, adjust the ratio of glazing to the weather conditions or the amount of heat penetrating facades, etc.

In architecture, the Absolute Towers project by Mad Architects is an example of form generated parametrically (Fig. 5a). To illustrate such an approach to design, the author has depicted an algorithm for a twisted ellipsoidal tower in figure with Grasshopper algorithm. (Fig. 5b).

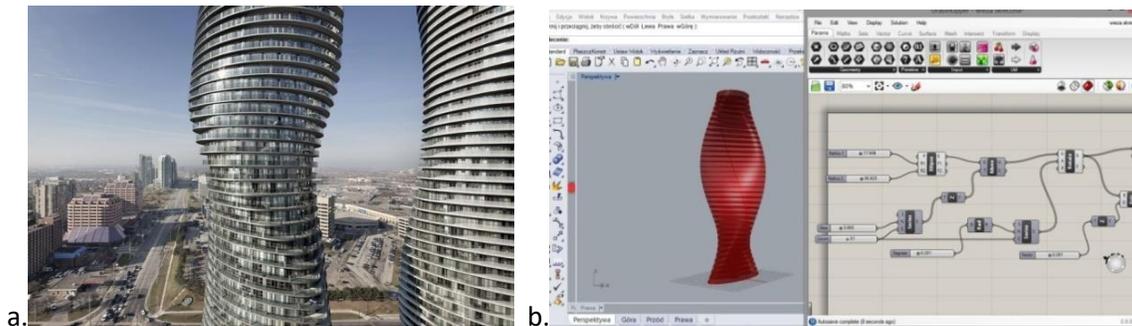


Fig.5(a): Parametric tower, source: <http://www.i-mad.com>;

Fig.5(b): Parametric tower - Grasshopper algorithm, Fig. by author: A.Czech

Another example of parametric design is the Swallow's Nest For Taichung, new cultural center by Vincent Callebaut (Fig. 6a). Again, the attempt the author has made to reproduce the algorithm of its creation is depicted in figure with Grasshopper algorithm. (Fig. 6b)



Fig.6(a): Parametric architecture design, source: <http://vincent.callebaut.org> ;

Fig.6 (b): Parametric “nest” - Grasshopper algorithm, Fig. by author: A.Czech

Similarly, fashion designers search for aspects of their projects that can be related algorithmically using mathematical functions, while maintaining a level of flexibility, for example, when needing to make changes in size. For example, when designing parametric shoes, the designer depends on the possibility of giving them as little weight as possible, while maintaining stiffness and size. The



parametrically designed shoes by Alessio Spinelli can provide a good example (Fig. 6a). Julia Körner is an Austrian architect who collaborated with the Dutch fashion designer Iris Van Herpen on the digitally fabricated Haute Couture collection (Fig.6b) Körner works on transferring technology into everyday clothing production, as she believes:

*"Body scanning and 3D-modelling techniques allow you to design towards a perfect fit, and through minimal changes in the code I can create variations of adaptations in the design (...) This automated process is a revolution in customized fashion pieces within ready to wear."*¹



Fig.7(a): Parametric shoes design, source: <http://www.alessiospinelli.com>;

Fig.7(b): Parametric fashion design in Biopiracy collection, source:
<http://www.irisvanherpen.com>

5. Conclusion

Considering the design process, fashion and architecture are not such distant fields of art, as they may first seem. Quite similar algorithms guide the formation of clothing and buildings: analysis of initial conditions, determination of function, formulation of ideas and development of form. Logical thinking seems to be a key aspect of this process. Since the design process cannot reject common sense, is fashion design and architecture actually art? Because both buildings as well as clothing are products that primarily have to be functional, creativity is only one of the components of their formation. A good, proper project cannot be realized without logical thinking.

Cybernetics, algorithm, and parameterization – seems to indicate the direction in which the modern world is heading. This trend is more and more noticeable in art, fashion and architecture. In fashion and architecture, the use of a computer to make algorithms for creating new forms

¹ Dan Howarth Interview with Julia Körner: "Technology adds an incredible advantage to fashion design" Dezeen Magazine September(2014)
<http://www.dezeen.com/2014/09/23/julia-koerner-interview-fashion-technology-3d-printing-haute-couture-ready-to-wear/>



reveals a new common denominator in the creative process that takes the form of logical mathematical notation. This form of creation has many advantages and gives the design a broad spectrum of possibilities, such as: optimization of forms (e.g. energetically), "extinction" of unfavorable forms (e.g. non-functional), full use of technological advances, innovative approaches to spatial forms. In general, it opens our minds to a new way of designing. But it also raises the question as to whether the human element is getting lost in the design process, and whether it leads to the loss of the "soul" of the building or clothing. Because the design process begins to roll out itself after the inception of the algorithm, the creator seems to be significant only at the beginning while specifying targets. Such an abandonment of standards and habits generates a transformation of civilization and is contrary to the archetype of the building or clothing.



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The Public Space - A Platform for Developing Interdisciplinary Tactics – Gym as a Study Case

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g^ym

"... a talent for speaking differently, rather than for arguing well, is the chief instrument of cultural change."

¹

Abstract

gym is an interdisciplinary think and do group which dedicates its operation to the public arena. The group operates as an independent school, based on discussion and creation. Members of the gym are architects, artists, designers, programmers and researchers, who wish to expand the discussion in their fields of expertises in order to create sharing spaces.

gym - without a capital G, is an open source project that offers a model for communication between disciplines.

This article will deal with interdisciplinary tactics that were formed in the gym, which have distinct characteristics: learning, planning and intervening.

We consider the overlapping of architecture, arts and design an answer to G. Debord's call (2002) to create experimental interventions in the urban space, in a way that will provide an alternative to the cultural hegemony. We are aided with the tactics that De Sarto planned, and the inspiration we were given by Hakim Bey, in their pursuit to create time and place dependent actions.

¹ Rorty, R., Contingency, Irony and solidarity, Cambridge, 1993



Studies rely on the participants' knowledge and experience, each participant in his or her own field, combined with the Knowledge resulting from the place itself (local knowledge).

The school was created by its students and sees them as a major source of knowledge. As part of an inspiring to interaction approach, the gym works in a model of being hosted, thus moves every semester to the residence of another civil organization. In return for the hospitality, the school offers to the host its contribution as a thinking and operating group.

So far, gym has held two semesters, and it is due to open a new semester in the coming summer.

The 2014 semester was held in the Jessy Cohen neighborhood, in Holon, at a school that was transformed into an art center (The Israeli Center for Digital Art). The object of our interest was, infact, an old gymnasium that was to transform into a part of the art center. The administration of the art center wanted it to become a multi purpose hall. For us, it was a trigger to create a receptacle that maximizes dynamic actions, resembling a send-box, allowing constant reconstruction of reality.

The "send-box" was a mutual need of the neighborhood, the art center and the gym - the new independent school. A neutral space where individuals can interact and create. It was there where we defined our interest in developing tools to construct a public space that can be part of it surroundings while having qualities of isolation and borders.

The semester of 2015 was held in the area of the northern entrance to Bat Yam, also known as 'Hamatzeva' with the hospitality of the center for mediterranean urbanism and culture.

The semester was far more complex than the first one due to the dense urban area we referred to. The semester was highlighted by a series of lectures, held in the many passages of Hamatzeva square. Learning outdoors provides a continuous experiment that reveals the potential possibilities in the different spaces. Experts in different areas were invited to pass lectures and workshops. The lectures were open to audience and passers by.

The semester of 2016 will take place in the Bet neighborhood in Herzelia, hosted by The Artists Residence, where we were invited to promote a connection between the art institute and it surroundings.

The timing of the gym is not a coincidence. We are part of a world wide phenomenon of interdisciplinary work, of social design, participatory art, place making groups and independent academies.

In the tension between global economy and the potential of DIY technology, acknowledging the academy difficulty to provide an answer to the growing changes in language and technology on one hand, and availability and flexibility on the other, creating operation and learning networks is a necessity.



In continuing effort to define the practice of gym, we use terms taken from well known educational forms, such as “school”, “semester”, “students” and “teachers”. We find those terms to have greater depth than it appears in everyday use and we embrace the opportunity to reinvent and rethink them. We refer to gym as a school simply because our main goal is to study, to better ourselves as the designers, constructors, artists, economists, bureaucrats and anti-bureaucrats of the future. gym members are called students, as we see ourselves in a constant learning process.

School performance

One of the main benefits of an independent school is that the students are able to choose their teachers. We use the term “teacher” to refer to a short list of cutting edge professionals who all relate to the public sphere in a unique and intriguing way, whom we asked to come and share their approach with us. Among them: architect Adar Sekker - who attempts to redefine the role of architects in Israeli society. Shira Wilkof - planning historian with a comited political angle, Dr. Maayan Amir - artist and curator of the ‘ex-teritory project’, Sigal Barnir - urban curator, Gilad Ratman - artist, And so on.

as much as learning from those remarkable people was exciting, we all shared a growing understanding that the true potential of gym was the encounter between the students with our different work processes, knowledge and experience. With time, we turned to learn from each another.

In the second semester every participant was invited to share ideas, notions, works in the making, or to offer tasks for the group - anything he’d liked to use the gym for. gym functioned as a think and do group for every matter that a participant brought up. That, along side with our researching of our hosting surrounding, became the greater part of our studying sessions.

We will present some of our principles and modes of action:

Interdisciplinary

Out of our first encounter with the question: “How can one act in the public space?” grows the beginning of an answer - together, through a joint, interdisciplinary effort.

While the virtual public-sphere continues to be improved, perfected and re-designed ceaselessly, as does the programing languages and digital means that are being used in its making, The manufacturing patterns of the physical public sphere are left behind, unchanged.

Interdisciplinary co-operations are harnessed to the R&D sections of most commercial and army owned companies, but almost none exists in regard to the planning and designing of the physical public environment.

It is easy to conceive a gathering of a chemist, a designer, an engineer and a programmer in the creation of a new app. But what about public transportation systems in peripheral areas? And



what about the design of demonstration designated areas in cities? Or the conjunction points between different social groups?

In an environment of multidisciplinary, Every participant becomes unified with his field of knowledge and reference (as one of the artists said - you become a bit more of an artist, entering a room full of architects and planners).

On the other Hand, our vocabularies became obsolete. the terminology we were accustomed to in our work processes needed to open up for new eyes & ears who knew little of the language we were taught.

Language

In his book "Contingency, Irony and solidarity" Richard Rorty wrote as follows:

"The world does not speak. Only we do.

The world can, Once we have programmed ourselves with a language, cause us to hold beliefs. But it cannot propose a language for us to speak. Only other human beings can do that".

One of our main goals in the gym, is to learn other "languages" or "dialects" which deal with the human space. we seek to interact better and collaborate more with each other with the purpose of creating a mutual ground and greater understanding between agents of change in the public space.

We strive to teach ourselves new dialects and develop new forms of communication.

In the intersection between terminologies we often find strange overlaps. significant terms which perform differently in different fields. such is the word "performance". in Art the term "performance" relate to the concept of showing an act or an object to audiences, focusing on the manner in which something presents itself. In contemporary Architectural discourse, speaking of "performance of a building" is to refer to its degree of functionality, and 'effectiveness of plan' compared to the resources used for its production and maintenance.

Beyond the reflection on terms with vary meanings in different vocabularies, we also gain new perspective by exposing known terms to new points of view.

Such is the 'blue line', which stands in local architecture for planning area limits.

It was used by the architects in the group in order to discuss the possible frame of action for the gym in its first semester. The artists understood it as dialectic trem, placed as a barrier which calls inherently for redefinition by the architect (or gym member) who approach a new project.



Ideas by the art critic and curator Nicolas Bourriaud as presented in his book 'Relational Aesthetics' which is widely used in the art realm, equipped architects with new instruments for rethinking the city and the architectural act in a context of human relations and as a Catalyst for happenings.

Contingency

A Degree of Contingency, is immanent to the gym.

Back in our preparation for the gym's first semester, in a desire to engage in contemporary discourse, we ask Lecturers to confront the group with whatever notions and ideas they struggle with at the moment, regardless of the defined matter that was agreed. We asked them to use us as a think tank and hoped to achieve some mutuality in doing so.

With a decline in the number of guest lecturers in the second semester, we kept avoiding planning ahead the semester as much as we could.

It is our mean of resisting hierarchy and control. We wish to participate in a group of equals, and for that we must put management and control to a minimum. We believe one can not plan in advance a conversation between equals.

Through the use of contingency we keep our studying based on people and the encounter with them.

Encounter

The encounter occurring in a gym semester are combined with learning and working with one another, and of approaching to the group surrounding.

In the second semester every participant was invited to share ideas, notions, works in the making, offer tasks for the group - anything he'd liked to use the gym for. The gym functioned as a think and do tank for every matter that a participant brought up. All this unique experiences, alongside with our researching of our hosting surrounding, became the greater part of our studying sessions.

It was early in the gym's second semester that we realized that sharing ideas and the learning of and with the public, should happen outside, within the public space.

Taking the gym to the streets and passages of the city (in that case - Bat Yam) made the gym interact constantly with people. While approaching people on the streets and inviting them to participate or take part in activities usually result in raised suspicion and estrangement. On the other hand, asking people for help (may it be the use of electrical outlet, borrowing an extra chair etc') made people engage with the open sessions with enthusiasm. Once people became hosts, public participation became inherent to gym's mode of operation.



Site specific learning

Every semester starts with a study of the location. We learn from locals, from wondering around and from a personal or group search process. We create a site specific learning process, suited to the location.

We investigate the site properties through mapping projects of every member of the group.

It is not a totally factual research though it is empiric, and based upon the perception of individuals.

From this research grows a wide and multi layered understanding of a place. The discussion about the different aspects of a place, brings about criticism. Different approaches reject one another and ask to make a stand.

The place generates the discussion.

The critic urges us to act.

We believe that merging research approaches, production procedures and thinking ways which design the public space, is a fertile platform for cooperation and development of mutual understanding between transition agents in the space.



Artistic Intervention and Architectural Conservation of Sites in Conflict: The Story of Ein Hawd/Hod - an Arab Village and an Artists' Colony

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Abstract

Moderator: Prof. Alona Nitzan-Shiftan

The paper attests to the relationship between art and architecture through a local case study of the village Ein Hawd/Hod on the slopes of Mount Carmel, examined within the realm of interdisciplinary and historiographical discourse. It juxtaposes the architectural narrative of an agricultural based Arab village of the El-Heija Clan dated back to the Middle Ages, with the artistic act of a Jewish artist and an architect, Marcel Janco, in establishing an artists' colony on the village's ruins in 1953. The paper aims to explore the ideology formation which constitutes the artistic intervening allowing it to generate an opposed ideology within the system.

This case reveals a rare situation in 1950s Israel, in the first years after state inauguration, in which a confiscate Arab village was not demolished by the Israeli authorities. In 1949 the village's Palestinian inhabitants were dispersed, exiled or went into hiding in the nearby hills, on which later on, one of the sub clans rebuilt the village of Ein-Hawd-Al-Jadida. By the Absentees Property Law 5710-1950, the state of Israel categorized them as absentees and appropriated their land and village; there were several unsuccessful attempts to resettle the village houses with Jewish immigrants and also to use the site for training army soldiers in door-to-door combat.

Janco immigrated to Israel in 1941 as a well-known Dadaist artist and took part in local organizations as well as subserviced initiations. He was also educated and practiced as a modernist architect with experience in post war building preservation. He was employed by the Planning department of the Israeli Inner Affairs office, and as such succeeded to receive a formal permission to settle in the former village of Ein- Hawd to establish an artists' colony - a cooperative artists' village. His vision pictured artists settling in the village's houses, repairing, restoring and re-making art and crafts studios as part of a creative working community (Nowadays the Israeli UNESCO branch is working on its recognition as a heritage site).



The proposed paper aims to explore the interrelation of art and architecture by revealing the personal manner of Janco carrying a unique avant-garde background - as the main agent participating in the shared realm of the local architectural planning of a conflictual postwar context. The paper will expose the post factum deciphering of a contemporary art action as conservation, regardless of the dispossession act.

As an interdisciplinary research it ties together contemporary theories on the field of contextual art and site specificity, theories of architectural modernism, as well as re- reading relevant conventions and theories on the field of heritage conservation; stating them under the discourse dealing with political philosophy in general and the Israeli- Palestinian conflict in particular. The research questions the acceptance of contemporary artistic intervention within the political system, destabilizing institutional modes of thinking; it also asks how the poetical visionary art embodiment relates to the ethical issues involved. The discussion sheds light on sustainability and community-based approach with espoused values of democratic multi-cultural and multi-ethnic views.



The Making of Ar(t)chitecture: Constructing Objects of a Special kind

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Abstract

The central question of this conference is the question of the connection between architecture and art. In this paper I will focus on the question that the problem of connection between architecture and art implicitly presupposes. This is the question: what each of these practices *is*; what is architecture and what is art?

In response to this question I propose the following hypothesis: both art and architecture are creative practices. As such they produce objects of a special kind. They are trans-situational and trans-temporal objects; that is, objects that pierce the given temporal and spatial or cultural determination, that persist in different times and different cultures as something significant for art/architecture and society. In developing this hypothesis I will limit myself to the practice of architecture.

1

As the starting point for defining architecture I take two definitions that only appear to be in opposition. The first one was posited by Kenneth Frampton as the starting point for his theory of tectonics, and which goes as follows: architecture is a *thing*, that is to say, it is something *material*.¹

The second is the definition Jacques Lacan outlined in his seminar Ethics of Psychoanalysis, from the chapter on creation. At first sight it seems that it states exactly the opposite. He defined

¹ For Frampton's conceptualization of products of architecture as things and his definition of architecture as something material see Kenneth Frampton, "Rappel a l'Ordre: The Case for the Tectonic," in *Labour, Work and Architecture: Collected Essays on Architecture and Design* (London and New York: Phaidon Press, 2002), pp. 93–95 et.al., and Kenneth Frampton, *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture* (Cambridge-Mass./London: MIT Press and Chicago: Graham Foundation for Advanced Studies in the Fine Arts, 1996).



architecture as something that is *organised around the void*.¹ But this void, as Lacan made clear, isn't something null. Rather, it is the mark of a human presence in the world. It produces material effects in the world.

My thesis is, that in order to address the question of what architecture *is*, one has to think these two definitions together. This leads us to the following result: architecture is a *material thing that is made of the void*. This also means: its materiality, the materiality of architecture as a thing, is a *special kind of materiality*.

2

I will try to show now that architecture produces its own special kind of objects, which are things, by constructing joints, architectural joints. With this statement I subscribe to an established view in architecture, according to which architecture is the art of constructing, or the art of building.

This view is advocated also by Frampton, who in his theory of tectonics describes a structural joint as "the fundamental nexus around which a building comes into being, that is to say, comes to be articulated as a presence in itself."² Thus in architecture a structural or generic joint isn't simply a connection. But it is, according to Frampton, the fundamental architectural element. It is, if I quote him once more, a *point of ontological condensation*.³

What does this mean? It means that an architectural joint is that key architectural element, around which architecture as a thing is articulated. In a joint, with a joint, architecture itself is present, both corporally and materially. Of course, this happens if the joint is well articulated.

A well articulated joint, an *architectural joint* is the way in which architecture is made, and it is the way in which it appears in the world. And I would argue that it appears in the form of joints of various scales, from the details of structural joints, that is small scale joints, to the large scale of what I call a gigantic joint, with which I mean the connection between a building and its context.

In my presentation I will present a small joint, a detail of a structural joint. Using an example of such a joint, I will try to show how this *special materiality* is produced and appears with a joint or through a joint. This is the materiality of *architecture as a thing*. That is, the materiality in which the *void takes effect*.

3

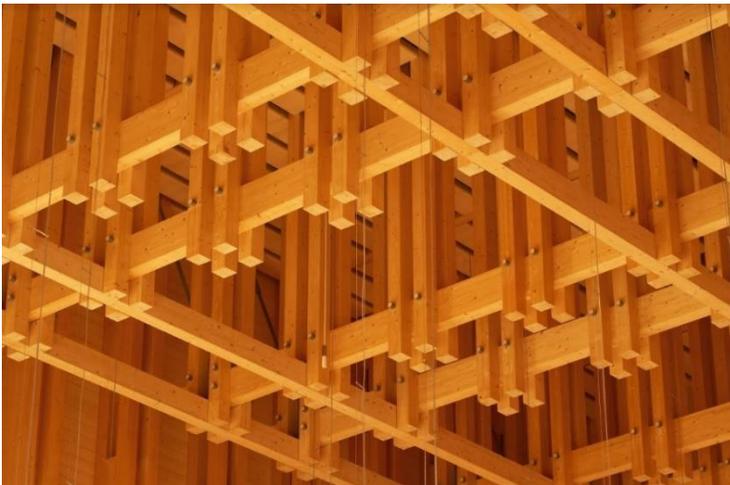
¹ In Lacan's words: "To put it briefly, primitive architecture can be defined as something organised around emptiness. That is also the authentic impression that the forms of a cathedral like Saint Mark's give us, and it is the true meaning of all architecture." In the English translation two terms are used for the French term *le/un vide*, void and emptiness. We will turn to the French original (and its Slovenian translation) where only one term is used (*le/un vide*); within the context we find it appropriate to use the term void. Jacques Lacan, *The Ethics of Psychoanalysis. Seminar VII, 1959-1960*, edited by J.-A. Miller, transl. D. Porter, Tavistock/Routledge, 1992, pp. 135-136.

² Frampton, "Rappel a l'Ordre: The Case for the Tectonic," p. 95.

³ Ibid.



As an illustrative example I will use a structural detail of a church and community centre in Viikki, Finland, designed by the Finnish architectural firm JKMM.¹



Here we see six wooden structural elements, four vertical and two horizontal, and at the same time we don't see simply these six connected elements. We see also something else: we see before us, as we would probably all agree, a *successful architectural solution*.

¹ "Viikki Church," JKMM Architects, accessed December 26, 2015, http://www.jkmm.fi/selected_work/12-viikki-church.



In what is this successful architectural solution?

As 'objectively' speaking there is nothing else in front of us but six connected elements, there is only one answer to this question: a successful architectural solution is contained precisely in the way these elements are connected. In short, in the joint.

So, how does this connection work? What is being produced in it?

Here we have just six connected elements. Their joint, the specific way according to which these elements are connected, isn't present as some additional, seventh element. We can't see the connection as such. We can't see the joint itself. The joint is present only in its *material effect* – in the way that we see or are able to see the connection of the six elements as a *successful architectural solution*, as the *materialisation of architecture*.

The joint disappears, so to speak, in the solution and comes to life as the solution itself. It has a paradoxical status: *it is present as absent*. This *present absence* is precisely that *void* around which architecture is organised. We can't see the joint – in that sense it is *absent*. And it is *present* in the sense that it produces material effects: it causes us to see the six wooden elements as a *body of architecture*. Although 'objectively' speaking there is nothing else before us but six wooden elements that are interconnected.

As the result of a good articulation, that is a successful construction of an architectural joint, we get an object, which is also 'something else' than itself – it is also 'something else' than the six wooden elements from which it is composed – without *actually*, as I have to emphasize, being 'something else'. If I repeat once again, 'objectively' speaking there is nothing else before us but six pieces of wood that are connected.

So, the operation of constructing joints is not an operation of adding parts and elements in accordance with a simple formula: $1+1=2$. In order to define architectural joints, we have to leave behind the elementary logic of mathematical addition. We can describe the operation of architectural construction only by an inequation, $1+1\neq 2$. Or in our case: $1+1+1+1+1+1\neq 6$.

This happens if the connection of elements is successfully articulated, if the joint is good. If the connection is poorly articulated – if elements are badly connected – we see only the elements and a failed attempt to connect them. In this case there is no architecture present, only a technical, structural detail.

If the joint is successful, however, things become more complex. As the result of a successful construction we get an object of a special kind. This is an object that is *Two in One*. More precisely, this is an object that is *One*, which is split in itself. In short: we get an object with an *inner difference*. This is an *architectural object*, a *successful architectural solution*.

I will further explain this with the help of what is generally understood as a successful architectural solution. Such a solution can be a structural detail, a small joint, and it can also be a building



(which is itself constructed of joints of elements and materials). Now I will take a building as an example of a successful architectural object.

4

A generally accepted view is that there is a difference between a mere building and a building that is an architectural object. Just like most of us would agree that there is a difference between a mere text and a work of literature. The crucial question, however, is how to understand this difference that differentiates an architectural object from a mere building.

One established way of understanding an architectural object is, that it is a built structure that we can enter and use in various ways. According to this view an architectural object is first of all a response to various technical utilitarian demands such as functionality, firmness and structural stability, resistance to climate and the impacts of weather, as well as the sustainability of the materials and technologies employed, the economy of the building scheme and similar. However, an architectural object should also be designed according to a certain aesthetic scheme, it has to be beautiful. It is distinguished by a supplement or surplus of the *aesthetic*. According to this understanding, the aesthetic supplement is that which makes a building-architectural object different from a building as a 'pure utilitarian object'.

The second established understanding of an architectural object is that it is an object whose primary function is to address or instigate our sensual perception and express an idea of architecture. In tune with this view, an architectural object is an aesthetic object, one essentially no different from an art object, like a sculpture. Its specificity lies only in the fact that it can also be used in some way – for instance, it can be inhabited. According to this view an architectural object is therefore an aesthetic object with a supplement of some utilitarian value. This is what differentiates an architectural object from objects produced by the 'pure art'.

My thesis, however, is that for an architectural object a difference of a utilitarian and an aesthetic object is indeed constitutive. But this difference doesn't appear as a supplement to the produced object – either the supplement of the aesthetic on the utilitarian object, or the supplement of the utilitarian on the aesthetic object. Rather, we can talk about an architectural object – about architecture as a thing – only when the difference of the aesthetic and the utilitarian is *intrinsic* to the object itself.

So, an architectural thing is Two at the same time, but this Two isn't simply the sum in the sense of: 'utilitarian object plus an aesthetic supplement' or 'aesthetic object plus a supplement of the utilitarian'. The simultaneity of Two in One is the result of an architectural joint. And an architectural joint is a joint that at the same time connects and separates the Two. It is their joint, which is at the same time also their difference, the *inner difference*. On this difference, from this difference an architectural object is made. To put it briefly: an architectural thing is an object with an inner difference. Because of its inner difference it is an object of a special kind – one that is always also 'something else than what it is – without actually being something else'.



5

A good architect is one that succeeds in creating Two in One. Or, which means the same, one that succeeds in creating an object with an *inner* difference. We can't see this difference – there is a single object in front of us. And yet this difference isn't something null. For architecture it is absolutely crucial. If an architect doesn't succeed to articulate this inner difference, we get only a utilitarian object with an aesthetic cover, or an aestheticized object that with its spectacular form obscures the fact that it is nothing but a utilitarian object.

In this minimal difference the *void*, which is decisive for architecture, *takes effect*. The void works in the way – and this is essential – that we see, so to speak, in a perceptibly sensorial way, a building or a detail as a *body of architecture*, as the *materialization of architecture*.

This is why for such a building or a detail we can say that it has a double materiality: the ordinary materiality of building materials, wood, concrete, brick, steel, and the materiality of architecture itself. Both materialities are inseparably connected: there is only a single object in front of us, such as this structural detail (Fig.1). The materiality of architecture itself is 'objectively' speaking invisible. Yet it is more durable and enduring than the materiality of wood, concrete, bricks or steel. It is that which gives architectural objects that particular resistance to time and place, which is in an architectural product the trans-situational and trans-temporal. This is the materiality of architecture as a *thing*, which is the result of a successful articulation of the architectural joint. It is the materiality that is, as I said at the outset, *composed of the void*.

Philosopher Rado Riha defines the act of architectural construction very articulately when he says that it is a "radically materialistic variation of transubstantiation".¹ *Radically materialistic* because what in the case of religious ritual belongs to the order of faith and miracles, that is the conversion of bread and wine into a transcendent body, is in the case of the architectural construction a matter of worldly and rationally explainable activity. There is no miracle here, nor some unexplainable architectural talent. An act of architectural construction is an example of that creative way of working that is characteristic for *human* activity, that is, the way of working that is located in the sensorial, material world and its order of worldly knowledges.

6

This special way of working, that is, the making of a special kind of objects, is that which both art and architecture have in common. And they both appear in the world in the form of such objects of a special kind.

Both art and architecture are about constructing objects of a special kind, objects that are always *also something else than what they are*. The inner difference in those objects, their not being identical with themselves – their so to speak eternal 'something else' – is that which makes us

¹ Rado Riha, "Arhitektura kot operacija z objektom", in Vid Zabel and Urška Jurman, eds., *Arhitektura#umetnost* (to be published).



think and to which we keep returning. We keep returning in order to find out what it is that triggered our thinking and that we recognised as that which is essential for architecture/art. We keep returning in order to repeat this in our own work. Of course, not to repeat the object itself, but to repeat that which makes this object an architectural/art object – its inner difference. And thus its specific materiality – the materiality which is trans-situational and trans-temporal.

I suggested that a *good* architect is one who succeeds in constructing an object with an inner difference. But actually I should have said that this individual is simply an architect or simply an artist. I should have said that because only by constructing such an object does one reach that which as an architect/artist guides or drives him/her in his/her work. Only in this way does s/he confirm himself as an architect/artist – and an architect/artist *is* as long as s/he persists in (re)constructing such objects.

This (re)constructing is of course not only the constructing of details and buildings but it is also drawing, writing, composing, painting, etc. In this sense I understand Zvi Hecker's idea that he "draws because he has to think".¹ He *has to* think, because the thing of architecture, the object with an inner difference, forces him to do so. He has to think in order to be – be as an architect and an artist, that is, as a creative being, as the one who thinks. In the field of creative practices the thinking is inseparable from the making. The maker – an architect or an artist – has to think, and he also thinks in order to be that what he wants to be, that is, an architect or an artist. And this is why he draws, paints, designs, constructs objects with an inner difference.

This is what architecture, art and other creative practices are all about. They are about constructing objects of a special kind, which are always a response to their own time and situation, yet at the same time they also puncture the given time and situation. They puncture them with their specific, that is, potentially trans-situational and trans-temporal material presence. The material presence that is, if I return to the field of architecture, a result of constructing joints. That is to say, the creation of the Two in One, or, equally, the creation of One that is split in itself – One that is, because of its inner structure, always potentially something more and else than what it is.

With their materiality, in their material presence, such objects confirm that in this world and for this world something else and more is possible than merely that which 'objectively' exists in this world. That it is precisely this 'something else and more' which is essential. Thus they open the world into the world, which is not only the world as it is described today – the mechanism that develops according to some automatism in the face of which we have no power. Rather, it is the world as the territory for creative thinking and working. In short, a human world.

¹ Zvi Hecker and Andreas Lepik (ed.), *Sketches* (Ostfildern: Hatje Cantz, 2012), p. 21.



LIST OF ILLUSTRATIONS

Fig. 1 Church and community centre in Viikki, Finland, designed by JKMM Architects; photo by Jussi Tiainen

Fig. 2 Church and community centre in Viikki, ceiling structure / structural details; photo by Kimmo Räsänen



Surfaces en Argos in Albis: The Artistry and Rhetoric of Whiteness in Modern Architecture

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Abstract

By the time the understanding of Architecture under the Modern Movement had fixed its sway from traditional form towards technical function, it reached, however, an ontological formulation as an art of geometric volumes or the masterly, correct and magnificent play of masses brought together in light. Such a dictum by Le Corbusier has been taken as a principle of sheer aesthetical values and pure artistic intentions regarding the supposedly neutral notion of clarity and rationality. Nonetheless, as it resulted, from the formal outputs by Le Corbusier himself to the ones of Frank Lloyd Wright, from Alvar Aalto's to Álvaro Siza's, in the occurrence of washed white walls, it is likely inscribable in the classical tradition of the *enargeia* (liveliness), meaning the rhetorical function of putting works and words (*ekphrasis*) in bright evidence. According to the Greek etymon, bringing *en argos* (in clear white form) is thus an artifice as any other of ornamental type in order to, more than foster light and purity, enhance and feign formal vivacity. Therefore, what this presentation will argue is that the blank white surface (*in albis*) is to modern Architecture in the age of mechanical reproduction (*photographein*), what *enargeia* and *visibilia* were to the artistry of historical descriptions and drawings (*graphein*): a rhetorical device leading the cult value into the exhibition value (*Benjamin*).



The art of Computational Design

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Abstract

Since the outbreak of computer-driven technologies, innovative designers, architects and artists have been preoccupied with the pursuit of digital techniques. With the wide spread of various computational tools observed in recent years, computational design as a field of research and of architectural and artistic creation is no longer restricted to the academic community, but has become a central tool for many architects, artists and designers. Working with robots and 3d printers gave them the opportunity to achieve results that surpassed the conventional way of thinking.

This paper examines this current design tendencies and brings them together to present a new type of architectural and art creation; one that combines advanced manufacturing knowledge with aesthetics.

Exploring the mathematical relationship to design

The references in mathematics and in particular in arithmetic and geometry constitute a general feature of the architecture and art during the history. The math has been frequently treated as the true foundation, the theoretical documentation of the architectural discipline, and other times as a collection of useful tools for the design and art creation. Towards the end of the 18th century with the development of calculus, the gradual alienation among those sectors made its appearance, since the architects and artists found it difficult to monitor the rapid developments and the increasing specialization of mathematics of their time. During the last decade with the initial use of our computers they had the opportunity not only to reconnect architecture and art to geometry but also to explore the potential of Non-Euclidean Geometry and in addition to realize the opportunities offered by the other branches of mathematics, such as topology, the differential and integral calculus and algorithms. Today's mathematical tools are more



sophisticated, with digital technology fast becoming a primary choice. More and more architects and designers used daily the math in order to embrace their longing for creation and for the achievement of their objectives. Whereas in the hands of an artist, computers can produce art, powered by unseen complex internal mathematical processes that provide their magical abilities.

A shift from the drawing to the algorithm

The last 20 years, architecture has changed significantly since the advent of computer technology and information. The design software and numerical fabrication machinery have recast the traditional role of geometry in architecture and have opened new limits of knowledge to the possibilities offered by parametric design.

As a result, architecture is currently experiencing a shift from the drawing to the algorithm as the method of capturing and communicating designs. This computational way of working enhances the designer's intellect and allows us to capture not only the complexity of how to build a project, but also the multitude of parameters that are fundamental in a building's formation. When designers have sufficient understanding of algorithmic concepts, when we no longer need to discuss the digital as something different, then computation can become a true method of design for architecture, and not only.

Computation is redefining the practice of architecture. Architects are developing digital tools that create opportunities in design process, fabrication and construction. Using in this paper some built architectural and art projects we provide an insight into emerging design approaches that use computation as a design method.

But what do we mean by computation?

To start with, the terms computerization¹ and computation shall not be confused. Computerization refers to the use of the computer for representational reasons, while the latter is what we're focusing on this paper. Computation pushes the boundaries of the design skills and takes the concepts to another level, allowing the designers to familiarize themselves with complex situations. It contains the understanding of the three dimensions in terms of algorithms and it questions how the relations between elements can affect the space. Thanks to that, designers are capable of producing complexity from simple codes and of understanding how a modification in these codes could further affect their potential of their design. For some architects and artists the scripting is the mean to develop their own tools and design environments.

¹Kostas Terzidis, *Algorithmic Architecture*, Architectural Press (Oxford), 2006, p. XI.



Sean Ahlquist and Achim Menges define computation as the processing of information and interactions between elements which constitute a specific environment it provides a framework for negotiating and influencing the interrelation of datasets of information, with the capacity.¹

Computation in Architectural Practice

Architects are increasingly experimenting with computation to simulate building performance, to incorporate performance analysis and knowledge about material, tectonics and parameters of production machinery in their design drawings. These new custom digital tools allow for performance feedback at various stages of an architectural project, creating new design opportunities. Using these tools, structural, material or environmental performance can become fundamental parameter in the creation of architectural form. The development of computational simulation tools can create more responsive designs, allowing architects to explore new design options and to analyze architectural decisions during the design process.

Asymptote, Zaha Hadid Architects, Foster + Partners UN Studio, are all studios who even a decade ago were regarded as avant - garde as much for their inventive digital techniques as for their experimental designs.

Their work includes peculiar forms, sculpture-like, which are extremely elegant by its suggestion of fluidity and dynamism. This high aesthetic and elegance of these architectural composition, reasserting architecture's position as a primary art. Visual intelligence that has arisen from the use of relational equations and scripting gives to the architectural results the opportunity to be seen as artistic creations.

In addition, given this digital nature of architecture and design today, experimenting to code and to use 3d printing technologies is essential for innovative architectural and design studios such as Kokkugia and MY Studio. Many of them have started to explore the emergent relationships between architecture, engineering, biology, and computation. Based on the idea that architecture can be understood as a material body with its own intrinsic and extrinsic forces relating to form, growth, and behavior, architects investigate methodologies of performative integration through geometric and material differentiation. Their work ranges from speculative and built projects to the crafting of new tools which facilitate an interdisciplinary approach to the design and fabrication of architecture.

As they are working for the establishment of a project experimentation is essential both for the exploration and promotion of the full potential of the tools used, and for the encouragement of research and extension.

¹ Sean Ahlquist and Achim Menges, Computational Design Thinking, John Willey & Sons (Chichester), 2011



For example, when an architect uses scripting to solve a design problem, further options can then be explored through modifications to the script - sketching by algorithm¹. An algorithm is a particular set of instructions, and for these instructions to be understood by the computer they must be written in a language the computer can understand, a code.

So, operating through design experimentations and focusing on implementing complex and abstract forms into 3D printed prototypes, there are many examples of first developed pieces which contain an aesthetic and elegant result. Architects who have been able to add this layer of aesthetic sophistication, due to the use of scripting, to their designs often immerse themselves with other forms of art too.

What is of great interest is the fact that innovation derives from experimentations, which architects consider as their own state of art.

Digital morphogenesis is what is being meant, when talking about computational architecture; processes of form-finding with the substantial help of the computer. Concepts such as genetic algorithms, parametric design and topological space have emerged, while several material techniques of digital fabrication have made their way in an anticipated means to bring the ideas to the three dimensional world. "Installations allow architects to comment on and critique the status quo, and to imagine new forms, methods, and ideas in architecture."² Bernard Tschumi insists that installations help architects achieve better results by leaving needs of a client behind and exploring to the greatest point their own idea; experimenting and figuring how materials work; being innovative.

Undoubtedly, one could begin by mentioning the works of the design studio Matsys, as by their experimentations in both the screen and the fabrication process they have come up with impressive results. The project "C_Wall" is a good first example where one can clearly see in one installation the complexity of constructing the voronoi algorithm in the space. From scripting to the use of the CNC machine, volumetric cells have been reassembled into larger aggregates producing astonishing patterns of light and shadow.³ This kind of installation is an artistic approach of three-dimensional projects that are site-specific and aim to transform existing spatial conditions. In addition, after strong research on natural fiber composite shells and experimenting on parallel bottom-up design strategies, the ICD/ITKE in Stuttgart showed in 2014 a pavilion, entirely developed by a custom robotic fabrication method. Even though some installations hide behind them a great range of study and experimentation, they act just as a visual focal point; they do however explore conceptual ideas in the built environment. On the other hand, others are asking the visitor to experience the space, while human senses and human body are being

1 .Brady Peters, " The Smithsonian Courtyard Enclosure: Computer Programming as a Design Tool", in Brain Lilley and Philip Beesley (eds), *Expanding Bodies : Art, Cities, Environment*. Proceedings of the ACADIA 2007 Conference, Riverside Press (Waterloo, Ontario), 2007.

² Bonnemaison and Eisenbach, *Installations By Architects-Experiments on Building and Design* (Princeton Architectural Press, 2009) p.14

³ Lisa Iwamoto, *Digital Fabrications – Architectural and Material Techniques* (Princeton Architectural Press, 2009) p.84



activated with the domination of the space by this kind of art. Specifically talking, the dance performance piece "California"¹ developed by John Jasperse contains a surface-form characterized by flexibility. Deep knowledge of the tessellation fabrication method, combined with structural knowledge, become another example of an architectural vocabulary which was based on computation and was then translated in form of art. Additionally, origami, a paper sculpting technique, has inspired many architectural works thanks to the computers. Today's tools such as Grasshopper and Kangaroo for Rhino has helped perceive the geometrical complexities within double- curvative folding, while programmable folding explores the design possibilities of a geometry on multiple levels; it delivers a final product whose design is embedded in generated folding patterns. These patterns have been used by architects in order to produce building forms or building facades such as Al bahar towers by Aedas Architects or even to create art works such as Issey Miyake with a line of foldable, origami-like clothing. . An example project which is based on folding technique and produces a form which has both artistic and architectural features is the master thesis of student P. Papastergiou "spatial changes in a setting "; folding forms for the ancient greek tragedy Oedipus the King are explored.

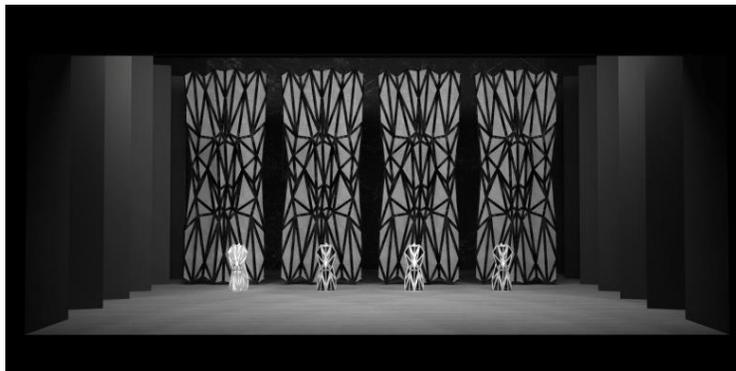


Fig. 1,2: 3D unfold and fold presentation of the thesis "Spatial Changes in a Setting", P. Papastergiou

¹ <http://digit-all.net/California-Stage-Set-for-John-Jasperse>



Computational design is often influenced by other sectors, as well as nature itself; a transdisciplinary combination is thus achieved. Tomas Saraceno's installation "in orbit" in Dusseldorf, Germany, was a net construction that allowed visitors to walk on the metallic nest in a big height, and it was a collaboration between architects, engineers and arachnologists. The artist, in this case, was also interested in translating all his experimentations into this gigantic structure in order to explore the relations between the people experiencing his aesthetic work. Modern technology has given the artists the ability to investigate further the human behavior, as Bourriaud says. ¹ The organic-like, biomorphic architectural forms that arose from the generative scripts of R&Sie "seek to elucidate the sense of the world as is today by stressing the embodied nature of human and artificial consciousness and bodily existence as the original and originating material premise of sense". Their installation "I've heard about" proposes an utopian approach of a city growth based on algorithmic procedures. What is of importance is that the experiments done together with programmers, biochemists, nano experts has been translated into an experiment that the visitor keeps alive by "transforming it into his own biotope". ²

A project by Charalampidou and Lili based on the study of spider nests and can also be presented as a public art. Their proposal attempts to reapproach one particular region of Athens (Evrpidou), through the management of its voids and of its boundaries. The project aims to alter the indifferent repetitive spatial experience of the street, through the introduction of a form (produced with help of a rhino plug -in Spider) that highlights the decay and attacks to the disuse, suggesting new ways of perception of public space.

¹ Nicolas Bourriaud, *Relational Aesthetics* (translated by Pleasance & Woods with the participation of Copeland) (Le presses du réel, 1998)

² <http://www.new-territories.com/hypnosisroom.htm>

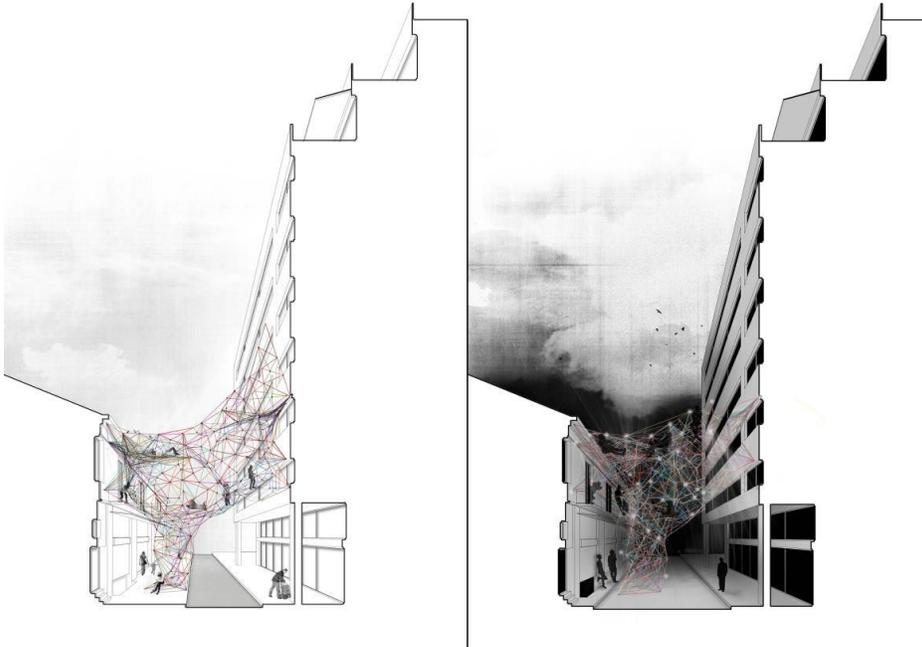


Fig. 3 : illustration from the project " A noiseless patient Spider"

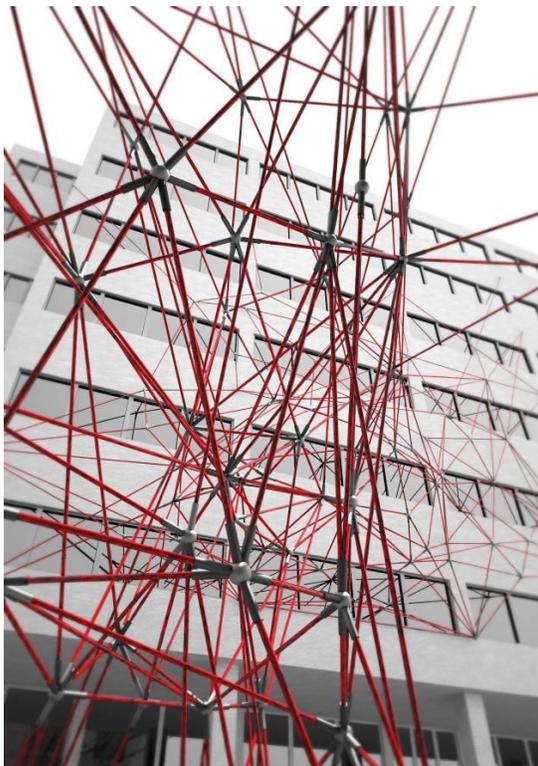


Fig. 4 : 3D view from the project " A noiseless patient Spider",
Athina Charalampidou, Efthimia Lili



Epilogue

Possibilities that were entirely theoretical few years ago, are now beginning to be implemented and to be built. The architects and designers in general are found, more than ever before, faced with a plethora of tools to make their job, with each one of them to have excellent strength. Subsequently, the scope of how these tools affect, approve or facilitate the designer is developing rapidly and the challenge is to navigate between such dynamic circumstances with a clear sense of criticism about how this helps promote architecture and in which direction. As one delves deeper into the era of Human-Computer Interaction, improving our relationship to these machines by making them more approachable, adaptable, functional, and safe, will become of paramount importance¹. Hence, architects and artists have already included in their common area of research, the 3D printing technology, which has already enabled great advancements. Leila Kinney, executive director of CAST (Center for Art, Science & Technology; M.I.T.), said that good matches between artists and scientists “really contribute to the development of an artist’s work and also challenge our researchers.”²

Today's architects and artists should not be limited to the kind of mathematical data that can be imported from an environment or inserted on it, but they shall have access to the full range of possibilities and participate in a more thorough investigation of the world of geometry and mathematical models. Unless we want to get lost in an inhomogeneous archipelago geometric experimentation, we need to evaluate and understand the quality of the machinery with which plans, and not the projects are produced.

Complex, sculpture-like or algorithmic designs are undoubtedly expressive, but isn't there an ethical consideration to be taken into consideration?

¹ <http://b3dgeable.staging.wpengine.com/2016/02/20/exo-biote-project-breathes-life-into-3d-printed-soft-robotics/>

² Hilarie M. Sheets, 04.03.2016, http://www.nytimes.com/2016/03/06/arts/design/at-mit-science-embraces-a-new-chaos-theory-art.html?_r=2



Embodying Architecture: A Speculative Conversation Between Bruno Taut and Rudolph Laban

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Abstract

Dance can provide architecture with a means for qualitative evaluation of the interaction between body and space. It can contribute to the architectural design process a flexible approach for adjusting external representations of space and users' inner worlds. This article examines Bruno Taut's modern domestic space as a flexible system of bodies and spaces. This condition is approached through the *Effort* Theory of dance theorist Rudolph Laban for the characterization of its architectural representation. Viewing the domestic space as a dynamic and emotional condition makes it possible to consider architecture as an extension of the individual human experience, allows adaptation to changes of time, and also suggests the active participation of the architect in the creative process.

Introduction

"Cities so transformed certainly stood in the most beautiful harmony with their being, which according to the laws of nature, always provokes a unity of content and form" (Bruno Taut, The City Crown, 1919)¹

Body and movement are two primary aspects of our being that have always influenced the human perception of harmony between architecture and the human user. It is here proposed to consider this notion of harmony in the work of German architect and city planner Bruno Taut (1880-1938) as emerges from a two-fold system of interactions. First, what I define as *architectural body and space*, and second - user *body and space*. These interactions are foremost depending on the nature of movement that is here defined according to the *Effort* Theory (1947) of the Hungarian dance theoretician, Rudolph Laban (1879-1958). *Effort* enables us to characterize the emotional qualities that control human physical movement by interpreting the attitudes towards the four motion factors of *weight, space, time* and *flow*.

¹ Ulrike Altenmuller-Lewis, Matthew Mindrup, *The City Crown* by Bruno Taut (Farnham: Ashgate, 2015), p. 78.



Bruno Taut objected to the assumptions of the international style and modern standardization. He argued that the modernization of culture requires transformative ideas that would assure the "autonomy of architecture" and its local representation.¹ This article examines written and built case studies of Taut's modern domestic space as external representations of their inner qualities. Therefore, defining his dwelling as a dynamic system of bodies and spaces, allows what Laban defined as "thinking in terms of movement" as opposed to "thinking in words" – the former serves the inner world orientation, while the latter does it in the external world.² Hence, the act of characterization of Taut's dwelling external representations is a proposition for their re-examination as dynamic spaces that are the extension of the individual experience. Here, dance is approached as a vehicle for qualitative evaluation of the architectural space and modes of interaction. Dance indeed has the potential to provide architecture with flexible tools for creation based on personal needs and desires, while maintaining the architect's subjectivity.

Following an initial background overview, this paper will develop in three parts. The first relates to Anthony Vidler's model which uses three phases in the history of the body in architecture to describe three types of bodily projections and embodiment. Thus, possible types of interactions between the human body and the architectural body will be examined. The second part introduces specific case studies of Taut's practical and theoretical work between 1914 and 1938 through the two-fold system of interactions: architectural body and space, as well as user body and space, and through their characterization by *effort* qualities. In order to build a narrative of Taut's modern dwelling, the pairs of interactions have been classified into four features: *expressiveness*, functionality, movement and development. The third part presents the meanings drawn from the flexible evaluative analysis of the ability of Taut's domestic space to adapt to man-space-time changes, and the ability of the architect to participate in the creation of individual experiences.

Background

Bruno Taut aspired to social renewal and intellectual revolution through a new definition of architecture. Born in Königsberg in Prussia, he studied architecture, history of art and town planning in Stuttgart and Berlin. In 1909 he opened his office in Berlin and a year later became a member of the German Werkbund. In 1918, as one of the founding members of the 'Workers' Council for Art', and as a member of the 'November Group', he called for the establishment of the

¹ Manfred Speidel show Taut's presentation in his book *Mimari Bilgisi* (1938) of the notion of use that adapts its form to different cultures and conditions, through the image of a Zeppelin airship flying around the world and changing its position from horizontal to vertical. See Manfred Speidel, "Japanese Traditional Architecture in the Face of Its Modernisation: Bruno Taut in Japan", in [Shigemi Inaga](#), ed., *Questioning Oriental Aesthetics and Thinking Conflicting Visions of "Asia" under the Colonial Empires* (Kyoto: International Research Center for Japanese Studies, 2011): 103.

² "Movement-thinking could be considered as a gathering of impressions of happenings in one's own mind... This thinking does not, as thinking in words does, serve orientation in the external world, but rather it perfects man's orientation in his inner world in which impulses continually surge and seek an outlet in doing, acting and dancing", Rudolf Laban, *The Mastery of Movement* (Plymouth: Macdonald and Evans, Ltd., 1980, Original work published 1950), p. 15.



'cathedral of socialism'. He led the secret correspondence of the Crystal Chain group of German architects in 1919-1920, in which utopian visions were developed, and the scholar, *Nathaniel Coleman*, saw in him the most convincing example of utopianism in modern architecture.¹ Taut was the city architect for Magdeburg between 1921 and 1924, and the architect of the GEHAG Building Society in Berlin between 1924 and 1932, for which he designed more than 10,000 apartments. During those years, he established himself as one of the early preeminent architects of residential housing estates (*Siedlungen*), which arose in Germany under the inspiration of the movements of change.² Later on, he worked for two years in the Soviet Union, and after returning to Germany – escaped to avoid Nazi persecution. Between 1933 and 1936 he lived in Japan, where he explored the local architecture. From there he moved to Turkey, where he served as head of the architecture department at the Academy of Arts, and head of the building department of the Ministry of Education, designing several schools. He died there in 1938.

Rudolph Laban, the 20th century leading dance theoretician and pioneer of German 'expressionist dance', also had a flourishing career in Germany after World War I, becoming the leading figure of German professional, educational and community dance until his exile by the Nazi regime in 1936. Like Taut, he was also a member of avant-garde, Nietzschean and utopian circles. His interests included the landscape, crystal, and the Orient. Laban sought to promote dance as an independent field, and to this end he researched and defined principles of movement, on the assumption that space and human movement reflect each other. When he moved to England in 1938, he continued to develop his Movement Analysis – Labanotation, and together with Lawrence, a management engineer, he developed the Effort theory.³

Laban defined *effort* as an internal function that organizes and controls human physical movement. The components that create the different *effort* qualities derive from an inner attitude, towards the interconnected motion factors of weight, space, time and flow (Fig. 2).⁴ The use of movement for a particular purpose, be it as a means of external work or a reflection of a state of mind, derives from the power that enables us to choose between an approach of resistance and limitation and an approach of yielding and acceptance for each of the motion factors: weight, space, time and flow. Hence, the choice can be characterized by sequences

¹ Nathaniel Coleman, "Utopic Pedagogies: Alternatives to Degenerate Architecture", [Journl](#) Utopian Studies 23 (2012):314-335.

² The first source of inspiration for them was the earlier models of the Garden City and workers' homes, and to some extent also the "City Crown", See Altenmuller-Lewis, Mindrup, The City Crown by Bruno Taut.

³ Together they applied the analysis of movement to training and selecting workers for industry and proposed a method of measuring the "kinetic quality" of units of work, an idea applied also in physiotherapy and psychotherapy. Rudolf Laban, Frederick C. Lawrence, *Effort: An Economy of Human Movement* (London: Mac Donald & Evans, 1947).

⁴ "It is a mechanical fact that the *weight* of the body, or any of its parts, can be lifted and carried into a certain direction of *space*, and that this process takes a certain amount of *time*, depending on the ratio of speed. The same mechanical conditions can also be observed in any counter-pull which regulates the *flow* of movement." Laban, *The Mastery of Movement*, p. 20.



between two opposites: light weight – strong weight; indirect space – direct space; sustained time – sudden/quick time; free flow – bound flow. These sequences enable us to interpret the mover's choices which create personal style. Since the choices may be conscious or unconscious, the possibility of studying them and imagining the efforts, is important for the actor-dancer's visual and vocal representation,¹ and for this study - it is important as an incentive to examine the use of *effort* in the architectural setting –i.e. the visual representation of space.

1. User body – space; architectural body – space

This paper examines Taut's modern dwelling as a flexible system constructed between bodies and spaces (Fig. 1). This system is analyzed as a model that first enables characterization of the quality of the simultaneous relationships: the user body and space, and the architectural body and space. I define the first as the physical relations between the human body and its direct space, and the second as the physical links between the architecture and its direct space. Secondly, the model enables characterization of the quality of relations between these two relationships.

In his article, "The building in pain: The body and architecture in post-modern culture", Anthony Vidler describes three stages in the history of the body in architecture, from Vitruvius to the present day. We can use the characterization of the type of interactions that Vidler described between the architectural body and the human body to understand the possibilities of movement between the two relationships we have defined: architectural body and space, and user body and space.

Vidler describes the first phase in the body-architecture relationship in which, according to Vitruvian theory and during the Renaissance, the body was projected directly onto the building, as a proportion and as a composition, and in return, the building established not just the individual body, but also the social body in relation to the world. He positions the start of the second phase in the early 18th century, when the bodily projection expanded as inspired by the esthetics of the sublime, and the building represented not only the body or its parts, but also expressed its physical and mental states. This enabled an understanding of the inanimate qualities of the architectural object through the projection process, creating amplification and not just replication of the bodily experience. However, Vidler sees the replacement of the judgment of classic design theory with perception as marking the end of the bodily projection. In the third phase, he describes an approach based on animism, which projected a general human sensation onto objects. This attempt was to turn unfeeling, unresponsive, external reality into something sensitive, responsive, and imbued with human qualities.²

These three phases present a transformation of bodily projection and embodiment, expanded by the anthropomorphic analogy to a state Vidler characterizes as a loss of the body's authority in

¹ Ibid, p. 20-21.

² Anthony Vidler, "The Building in Pain: The Body and Architecture in Post-Modern Culture", AA Files, 19(1990): 3-10.



architecture. These phases in fact describe three types of interactions between the human body and the architectural body: the building as a body; the building as representing physical or mental states; and the environment as a whole with bodily or organic features.¹ In other words, Vidler sees this model also as a-temporal, one that can be examined through every embodiment.²

In the spirit of this value-oriented a-temporal reference, I approach the relations between the two-fold system of architectural body – space and user body – space, as it manifests itself in Taut's concept of the modern dwelling, as multi-layered relations. This layered viewpoint of bodily projection and embodiment, which sees the interaction between the building and the human as a simultaneous expression of biological physicality, experiential states of mind, and general human characterization, enables a deeper look into the mechanisms that create the harmony between the architecture and the user in Taut's modern dwelling.

2. Effort qualities in bodies and spaces interactions

Expressiveness

"Light floods out of the cosmos into our rooms. The colors that we put on the walls (even if the walls aren't made of glass) are its issue, our discourse with the depths from whence it comes, and our pact with the stars..."³ This "Crystal Chain" letter excerpt that Taut wrote to his group of architects, expresses a relationship between the architectural body and space characterized by expressiveness, which I propose to read in Taut's modern dwelling. This design/artistic quality that Taut describes, which is an external reflection of an inner essence, has been defined by the Sturm philosophy which he was influenced by, as the goal of any kind of art, and as an exposition of an essence with limitations of neither descriptive nor empirical reality. The English historian Iain Boyd Whyte, one of the main researchers of Taut, parallels this expressionist quality in Taut's work to Kandinsky's reduction process, in which he tried to expose the inner resonance of his paintings' color and line.⁴

The "Glass Pavilion" that Taut designed in 1914 for the Werkbund Exhibition is an architectural manifestation of the architectural body - space relationship, characterized by expressiveness. Glass expresses purity and simplicity, as his friend, German writer and poet Paul Scheerbart, saw glass as belonging to the new post-industrialist era. Scheerbart argued for the irrelevance of function and practicality, and Taut also stated that "The Glashaus has no function other than to

¹ In fact, Vidler notes that the chronological development of these phases is not historically accurate. The historic use of the model was employed to describe the move away from the archaic, tactile projection of the biological body and to claim that this distancing, which began with the modern sublime, created a sense of loss of body. Ibid.

² For example, a chair may be perceived as a mimetic body part for the spine, as a mimetic physical property for the body's weight, or as the place of the desire for comfort, which is mimetic for awareness as a whole. Ibid.

³ Iain Boyd Whyte, *The Crystal Chain Letters: Architectural Fantasies by Bruno Taut and His Circle* (Cambridge: The MIT Press, 1985), p. 117.

⁴ Iain Boyd Whyte, *Bruno Taut and The Architecture of Activism* (Cambridge: Cambridge University Press, 1982).



be beautiful".¹ In addition to the use of glass, Taut referred to the architectural body - space relationship characterized by expressiveness by painting streets, buildings and details, thereby invigorating his residential projects, making them humane. Firstly, he related to the esthetic aspect of color, with which he emphasized spaces and created either uniformity or contrast. His effort was to liberate the plan from its two-dimensionality, so that the spaces could be experienced in a novel manner, and also to connect the landscape with the colorful spaces. Secondly, he related to the energy facet. For example, façades facing west, which encountered the sun in the afternoon hours, were painted in pale colors in order to balance the warming, while façades facing east, which encountered it in the morning, were painted darker colors to retain the heat.²

Taut's most famous public housing project, the *Hufeisen Siedlung* (Horseshoe Estate) in Berlin, which he began designing in 1924 with Martin Wagner, also displays the architectural body - space relationship characterized by expressiveness through its materials and colors. Taut considered its reference to the wooded environs of the estate, to the movement of the sun lighting up the balconies, to the reflection of the sky and the surrounding pathways in the central pond, and to the moderate contrasts of Berlin weather. At the same time, the project maintains a user body and space relationship characterized by expressiveness: the curved scheme enables observation, interaction and reflection, giving a sense of intimacy and focus created by the central garden. Taut describes this relationship in one of his Crystal Chain letters: "My world-picture. That is to say: I carry within myself an image of the world. "I"- a man, an (apparently) indivisible being, an individual. The world-picture is a product of man - initially. It derives from restraints specific to his type. In this state of restraint, his mind draws nourishment from the act of perception. And this perception is founded on the five senses".³ Humans are thus in a mutual relationship in which they create what surrounds them, but are also influenced by their perception of it. A Site Specific performance event, 'The Earth, a Good Apartment', created by theater practitioners Forster and Heighes in 2007 at Taut's Seidlung project tries to reestablish the user body – space relationship on site. Over the water they built a structure as an "observation mechanism" on which actions, images, sound and text were displayed, enabling interaction with the apartments and balconies. For Forster and Heighes, the Seidlung project was an urban testimony to pacifism and democracy.⁴

Can we characterize the quality of the movement between these two relationships as they exist in the Seidlung project using Laban' motion factor of *weight*? According to Laban, this factor involves the person's inner *intention*, and affects his ability to *sense*. Since the qualities of *weight* are characterized through and across a continuum between two polar elements, we may characterize the quality of the movement in the project with a specific point along this continuum.

¹ Ibid, p. 38.

² See Altenmuller-Lewis, Mindrup, *The City Crown* by Bruno Taut, p. 152.

³ Whyte, *The Crystal Chain Letters: Architectural Fantasies* by Bruno Taut and His Circle, p. 159

⁴ Ewan Forster, Christopher Heighes, "The Earth, a Good Apartment", [PAJ: A Journal of Performance and Art](#) 33(2)(2011) : 18-25.



The first element is *firm*, characterized by *fighting*. It encompasses the objective function (or measurable aspect) of *resistance*, which manifests as *strength* (or lesser degrees of *weakness*), and the movement sensation (or a classifiable aspect thereof) of *firmness*, which manifests as *heaviness*, or the sensation of *weightiness*. The second element is *gentle*, characterized by *yielding*. It encompasses the objective function of *resistance*, which manifests as *weakness* (or lesser degrees of *strength*), and the movement sensation of *levity*, which manifests as *lightness*, or a sensation of *weightlessness*.¹

For the *Hufeisen Siedlung* project, first we can try to characterize the expressionist relationship of the horseshoe body and its inner space as relatively *firm*, in which there is an objective function of relatively *strong resistance* and a movement sensation of *firmness* or relative *heaviness*. Second, we can try to characterize the expressionist relationship of the human body standing on the inner path ring and the open-closed space surrounding him, which is a relatively *gentle* relationship with an objective function of relatively *weak resistance*, and a movement sensation of *levity*, *lightness* or relative *weightlessness*. Finally, we can try to characterize the quality of the movement between the two demonstrated expressionist relationships as having a *weight* that is balanced between *firmness* and *gentleness*. We could also try to characterize the quality of the relations between the other expressionist relationships within the project, for example, between the body of the curved, sunken blue balconies and the pond's space in the center, and someone standing on the edge of the pond and its space.

Functionality

On April 14, 1920, Taut wrote to the Crystal Chain: "I am now finished with intuitive, illustrative works, I might almost hope for ever. Concrete matters, hard objects must now strike me. Wherever I can I will always defend the objectivity of a building, as embodied for me in the concept of glass architecture."² Iain Boyd Whyte explains the change of direction that Taut and his circle took in 1920, from an imaginary, subjective position towards objectivity, in an approach he proposes, which sees continuity from expressionism to the functionality that characterized their works, and underplays the differences between them. First of all, labeling Taut as an expressionist adversely influenced the study of his work during and following World War I, among other things because the term 'expressionism' covers a very broad phenomenon. Moreover, even though Taut based many of his ideas on expressionist writing and painting, Whyte also sees his circle as a natural extension of the 'Arbeitsrat für Kunst'. Hence, Whyte positions Taut's functionalism as the offspring of his expressionism.³

¹ Laban, *The Mastery of Movement*, p. 73, 77, 115.

² Whyte, *The Crystal Chain Letters: Architectural Fantasies by Bruno Taut and His Circle*, p. 82.

³ In fact, Whyte sees in Taut's works of 1914-1920 an expression of the continuity between two poles of the Sturm philosophy, which stressed moral and esthetic considerations, and the Garden City movement, which favored pragmatic reformism. Since they both suited the spirit (Zeitgeist) of the new era, Taut tried to unify them. Hence Whyte proposes a new frame of reference for Taut's movement: activism. Whyte, *Bruno Taut and The Architecture of Activism*.



A successful Berlin architect, when Taut emigrated to Japan in 1933, he expected to work as housing consultant, but he was not given much architectural work. He was invited to give lectures and write about his initial impressions of the country, and indeed, between 1934 and 1937 he published four books and several articles. Taut argued the need for radical functionalism, i.e. fulfilment of a building's purpose, in order to create unity and harmony in architecture,¹ but he also objected to the assumptions of the international style and formulated his attitude towards the results of modern architecture in the West even before he began roaming the world. Consequently, it is interesting to examine architectural expressions which he perceived to be functional within the framework of his research work in Japan, where, together with his non-acceptance of the misuse of modern architecture, he expressed tremendous enthusiasm for historical local architecture and design.²

Taut's worldview of the architectural body – space relationship characterized by functionality, as he formulated it in reference to Japanese architecture, was based on the close, fundamental bond between traditional Japanese architecture and its surroundings, nature and climate. Thus he saw the built elements of the clean wooden structure, the refined colors of the paper covering and paper doors through which the light gently passes as existing in harmony with their space, because of their purposefulness.³ Lainez and Verdejo see Taut as a precursor of regionalist movements in architecture and as a pioneer in environmental architecture, and they examine the efficacy of his architectural solutions using simulation tools, for example, of the window that is like a folding screen, which he designed for the Hyuga House – a functional element that relates to climatic aspects of ventilation and sunlight control in Japanese houses.⁴ This functional perspective expanded during his second exile in Turkey, and in his book, *Mimari Bilgisi*, published there in 1938, he ascribed important world cultures different architectural tasks that they fulfil in relation to world culture. These tasks related to technique, structure and function. Thus, for example, to Greek and Japanese architecture he ascribed outstanding use of technique – of materials and detail, and to Japanese architecture also function – the practical aspects such as climate solutions, as well as spiritual aspects; to Gothic and Turkish architecture he ascribed importance in structural aspects such as vaults and stone domes.⁵ Taut praised vernacular Turkish architecture, like Japanese architecture, for the simplicity and functionality that characterized the relationship between the architectural body and space, for example, the broad roof sleds and

¹ Speidel quotes from *Modern Architecture* (1929): "The task of architecture is to create beautiful (and good) use." Speidel, "Japanese Traditional Architecture in the Face of Its Modernization: Bruno Taut in Japan", 102.

² Ibid.

³ Taut's full study of the history and culture of the Japanese house was published in 1937 in *Houses and People in Japan*, which was intended to be methodological basis for architects wishing to build in contemporary Japan. Bruno Taut, *Houses and People in Japan* (Tokyo: The Sanseido Press, 1937).

⁴ Jose M. C. Lainez, Juan R. J. Verdejo, "The Japanese Experience of Environmental Architecture Through the Works of Bruno Taut and Antonin Raymond", *Journal of Asian Architecture and Building Engineering*, 6:1(2007): p. 33-40.

⁵ Speidel, "Japanese Traditional Architecture in the Face of Its Modernization: Bruno Taut in Japan".



means of shading above the windows, which he included in the schools he, himself, designed in Turkey.¹

Taut examined the notion of the user body – space relationship characterized by functionality, by way of the Japanese culture, even while still in Berlin. In his book *The New Home*, which he published in 1924, he argued for the need to rethink the spaces in the average family home, and was amazed by the functionality of traditional Japanese elements such as the tatami floor adapted to the seating customs. When in *Houses and People in Japan* he presented a sketch with the differences between the European and Japanese male body, he not only argued for the versatility of the connection between man and his surroundings in the cultural context, but also responded to the modern standardization adapted to Western norms. In 1934-1936, Taut designed objects for daily life in the modern Japanese home, which combined traditional materials and handicrafts with the esthetics of the German Werkbund and industrial processes. These objects expressed the connection between the user body and space characterized by simplicity and functionality, for example in their adaptation to the shape of the body and ergonomic aspects, or in their parallel to the shape of the body, for instance, uncovering the network of tree veins as a kind of organic ornamentation, the bending of bamboo to create a new curvature.² German historian Manfred Speidel mentions Taut's visit on his second day in Japan to the imperial Katsura Villa as an important milestone in the formulation of his Western perspective of Japanese culture, in which he sought meaning. In this 17th century complex, Taut identified a response to three functions: regular daily utility, official community uses, and higher thinking.³ Through this interpretation of the buildings and gardens of Katsura as a sequence of parts that together constitute a whole, Speidel claims that Taut formed his notion of the relativity of utility, which expanded the definition of functionality he worded in 1929. Following this, I propose that this is also an attempt to define the relationship of the human body and space characterized by functionality, unlike the functional architectural body – space relationship. Since the meaning of functionality in this relationship is the fulfilment of human needs, Taut saw the Japanese Tea House as a cultural achievement, the pinnacle of which is the Katsura Villa, a kind of second definition of "Alpine architecture" from 1919: a place in which the goal of its human physical and spiritual activity is to bring peace and is a model, for any culture, of a better society.⁴

Can we characterize the quality of the movement between the functional relationships, as Taut interpreted the Katsura Villa, using Laban's motion factor as *space*? This factor involves inner *attention*, and affects a person's ability to *think*. The qualities of the *space* will be characterized through and across the continuum between two polarities: the first is *direct*, characterized by *fighting*. This contains the objective function of the *direction* of a *straight* line (or lesser degrees

¹ Sibel Bozdoğan, "Vernacular Architecture and Identity Politics: The Case of the 'Turkish House'", *Traditional Dwellings and Settlements Review* 7:2(1996): 7-18.

² Speidel, "Japanese Traditional Architecture in the Face of Its Modernization: Bruno Taut in Japan".

³ See Taut, *Houses and People in Japan*, p. 291

⁴ Speidel, "Japanese Traditional Architecture in the Face of Its Modernization: Bruno Taut in Japan".



of *waviness*), and the movement sensation of *extension*, which is a *threadlike* feature in space, or the sensation of *narrowness*. The second element is *flexible*, characterized by *yielding*. It contains the objective function of *wavy line directionality* (or lesser degrees of *straightness*), and the movement sensation of *pliant*, which is *extension* in space, or a sense of *everywhereness*.¹

For the Katsura Villa, first we can try to characterize the functional relationship of the sliding shoji screens body, with their latticework wooden frames and translucent rice paper, and the exterior gardens space as relatively *direct*, in which there is an objective function of relatively *straight directionality* and a movement sensation of *extension*, which is a *threadlike* feature in space, or the sensation of relative *narrowness*. Second, we can try to characterize the functional relationship of the human body standing in an interior room when the window-doors are open and the open-garden space in front which bursts indoors, as a relatively *flexible* relationship with an objective function of relatively *wavy line directionality*, and a movement sensation of *pliant*, which is *expansion* in space, or a sense of relative *everywhereness*. Finally, we can try to characterize the quality of the movement between the two demonstrated functional relationships, which is dependent on the screens situation, as having a *space* that is relatively *direct* in an open- door situation and relatively *flexible* in a closed-door one.²

Movement and Development

To continue exploring Laban's *effort* model of four motion factors, architectural manifestations characterized by movement can be specified using Laban's motion factor of *time*. This factor involves inner *decision*, and affects a person's ability to *intuit*, and is defined through and across the continuum between *sudden* (i.e. *quick speed, short span of time, momentariness*) and *sustained* (i.e. *slow speed, long span, endlessness*). Additionally, ones characterized by development can be analyzed using Laban's motion factor of *flow*, which involves inner *progression*, affects a person's ability to *feel*, and is understood by the continuum between *bound* or hampered flow (i.e. *readiness to stop normal flux, pausing*) and *free flow* (i.e. *released flux, fluidity*).³

3. Embodying Architecture: A provisional conclusion

Examining the model of the relationships via a flexible evaluative analysis as suggested in *Effort*, concurs with Taut's sources of inspiration. Manfred Seidel mentions the Taoist philosophy as a basis for his ideas throughout the years. For example, in a lecture he gave in 1923, Taut discussed the importance of the process through which one strives for perfection as opposed to perfection in design, since "true beauty could be discovered only by one who mentally completed the

¹ Laban, *The Mastery of Movement*, p. 73, 77, 115.

² See Taut, *Houses and People in Japan*.

³ Laban, *The Mastery of Movement*, p. 75, 77, 115



incomplete".¹ The domestic space, according to this approach, is an entity that constantly aspires to perfection, and thus has a constant potential for change. Indeed, Taut's criticism of the modern dwelling was that it was not capable of adapting itself to a man-space connection that changes over time, and to change itself according to man's active participation in the space development. These man-space qualitative changes over time are addressed by Laban's *effort*: first, by defining the interlinks between the four factors of *weight*, *space*, *time* and *flow*, so that various combinations have different meanings,² and second, by addressing the combinations' changes over time. "The change in which some effort components disappear and new ones appear in a movement phrase constitutes the *rhythm* of the effort sequence... rhythm can be observed in each individual performance as the order of succession and relationship of efforts within a sequence, as well as in the relationship of several sequences to one another".³ Following that, regarding architecture as an ensemble of flexible characteristics of internal, individual functions and attitudes not only supports the position that home is a natural extension of the individual experience, but also implies its ability to incorporate the changes of time and maintain Taut's aspiration for an ongoing process of embodying architecture.

Characterization of the movement between the two body-space relationships does not have to relate only to the individual experience we are examining, but may also suggest ways to create that experience. *Effort* Theory is based on a person's ability to change the quality of the *effort* that creates the movement, i.e. how the internal nervous energy is released. This ability for change is consciously acquired and learned in training, and is based on our ability to understand the nature of the *effort* qualities, and to identify the rhythms and structures of their sequences.⁴ Hence, the use I make of the term 'characterization of movement' to relate to the interaction between the two body-space relationships derives from the proposition that the architect can actively participate in the experience of movement between the two relationships. This active participation is also implied by Laban himself, who had formal education in architecture in his early years: "...architecture may outlive its designer. The architect has a sudden vision, an intuitional idea, and he embodies it enduringly in stone... the dynamic power of the creator is enshrined in the form of his work. The movements he has used in drawing, painting or modelling have given character to his creations... The activity of his mind is revealed in the form he has given to his material."⁵ Following Laban, approaching the inner essence of body and space relationship should encompass the architect's possibility of using this dynamic power. We have related to Vidler's a-temporal model, which proposes three types of bodily projection and embodiment, as

¹ Speidel, "Japanese Traditional Architecture in the Face of Its Modernization: Bruno Taut in Japan", p. 101.

² The combination of a pair of factors relates to movement experience and expression, and presents the inner drive. Thus, for example, the *space* and *time* combination indicates an attitude of being *awake*, while the combination of *flow* and *weight* indicates dreaminess. A three-factor combination relates to a more communicative expression and presents the movement drive. See Laban, *The Mastery of Movement*, p. 77-81.

³ *Ibid*, p. 185.

⁴ *Ibid*, p. 11-12.

⁵ *Ibid*, p. 8.



a preliminary description of three possible types of interaction between the human body and the architectural body. However, this multi-layered embodiment model may also suggest ways to intervene in this interaction, and to make the transition from evaluative analysis of bodies and spaces interactions to operative design action.



Fig. 1: Bodies and spaces model

Motion Factors	Effort Elements
	<i>Yielding</i> ----- <i>Fighting</i>
Weight (Intension)	Gentle ----- Firm
Space (Attention)	Flexible ----- Direct
Time (Decision)	Sustained ----- Sudden
Flow (Progression)	Free ----- Bound

Fig. 2: Laban's *Effort* qualities

A list of illustrations

Fig. 1: Bodies and spaces model

Fig. 2: Laban's *Effort* qualities



Between art and architecture - Bogdan Bogdanovic and new formula of memorials in Socialist Federal Republic of Yugoslavia

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Abstract

Memorials without memory is a survey on memorial production of socialist Yugoslavia, with particular reference devoted to the work of the architect Bogdan Bogdanović, whose *"new formula of memorials"* played a major role in Yugoslavia's new, modern, progressive and *"non-aligned"* image during the bipolar division of the world. Memorial in its typological reference has always been product of both fields; art and architecture, represents the prolific and constant relation between the two areas of interest. Specific case studies of Bogdan Bogdanovic's memorials represent a unique and authentic art production of large scale. His memorials transcend the boundaries between architecture, landscape and sculpture, blurring the lines between traditional and modern methods of construction. More importantly overcome the previous triumphal rhetoric and pathetic commemorative symbolism towards open archetypal forms of forgiveness and celebration of life. Through the comprehensive bibliographic analysis and the analyses of the case studies common conclusion on the new formula have been reached.

Introduction - Memorial between art and architecture

Memorial in its typological reference has always been product of both fields; art and architecture. Mainly for its typology and its formal structure memorial very often bonds with sculpture. Its size and formal characteristics, materiality and geometrics tend to exchange it for the work of art, sculptural presence in public space or landscape environment. Its physical presence in the public sphere and its ability to be penetrated by the observer, to be experienced in the individual and collective manner distance it from the exclusivity of artistic sphere and approaches to architecture, or in some cases to land art or landscape architecture. There is a very blurry line of definition, and memorial in its structure is positioned in the overlapping areas of art and architecture.

Despite of abundance literature on the memorials and monuments, there is still missing one single general theory. The analyse of the term monument or memorial today represents a topical and interdisciplinary study in the fields of Cultural studies, History, Social studies and also Architecture, Aesthetics and Art History. In the simplest way, a monument can be defined as an object of great dimensions, made of durable materials, dedicated to commemorate a person or



events important for the collective memory and social identity of the society. Both terms; monument and memorial, derive from the same semantic origins from Latin *monumentum* which means “a monument, memorial structure, statue, votive offering, tomb, memorial record” or literally “something that reminds” from *monere* “to remind, to warn”.¹ Monument through history had gain different and wider signification, not only: a statue, building, or other structure erected to commemorate a notable person or event, but also a building, place, or site that is of historical importance or interest and also an enduring and memorable example of something.² Some more contemporary researchers separate monument and memorial in different ways. Andras Renyi³ differentiates two often interchangeable terms. According to him, publicly erected site markers and visual signs have two different functions in a modern society: they celebrate past events, persons or symbols that are of great importance for the “*positive identity*” of a given community, or they may warn the community not to forget negative events, persons or symbols, that people would rather not remember. Architectural and sculptural signs referring to “positive identity” he defined as “*monuments*”, while those claiming more reflectiveness and critical thinking on behalf of the beholder, are “*memorials*”.

Andrea Pinotti, whose particular interest is in theory of aesthetics, empathy and memory, notes that, a monument, perhaps the first time, relate two seemingly contrary concepts; the concept of death and the concept of power. Pinotti continues “*given its phenotype and its structural relationship with the power and death, the monument cannot by its nature be approached from a perspective exclusively aesthetical or historically artistic: often, only for its size and its grandiloquence, invades and clutters the public space.*”⁴ Here we can trace the origins of the often used term Public monuments. According to this, there is to conclude that monument is an ethical, theological and political object. Monuments and memorials are to be analyzed disabling its dual nature: on one hand semantic associations, symbolic meanings and ideological and political background and on the other esthetical and architectonical values of the deliberated form of art. Therefor the most interesting relation is between monuments and totalitarian regimes, and SFR Yugoslavia is an interesting case study.

Monument and the national state – context of Socialist Federal Republic of Yugoslavia

The existing phenomenon of memorial architecture in the territory of Ex- Yugoslavia may be presented as the most massive, important architectural programs and at same time the least

¹ <http://dictionary.reference.com/browse/monument%20?s=t> visited 10.4.2014

² <http://www.oxforddictionaries.com/definition/english/monument> visited 12.4.2014

³ Andras Renyi is a professor at Central European University and one of the European theorists in Nationalism studies. Teaches a course Monuments and Memorials: aspects of constructing national identity and public memory through the visual arts in 20th Century Central and Eastern-Europe.

⁴ Pinotti, Andrea, “*Antitotalitarismo e Antimonumentalità*”, in *Memoria di pietra I monumenti delle dittature* edited by Gian Piero Piretto (Raffaello Cortina Editore, 2014) p.18



known experience of Yugoslav and European architecture. More than 20 000 memorial features were erected all over Yugoslav territories during its forty year lifetime.¹ Socialist Federal Republic of Yugoslavia as a new born country was helped with the creation of Yugoslav identity through carefully chosen cultural content and social practices. Yugoslav identity through architecture can be traced in different moments of urban and architectural production in the country. First of all through the construction of the six capitals of the republics, through their political and public institution, and new residential dwellings in order to meet the housing needs of always growing urban population (figure 1). Great attention was addressed to the Yugoslav presentation in the international events; such as pavilions on the International exhibitions, but also through the architectural infrastructure of the international events hosted in Yugoslavia (Winter Olympic Games in Sarajevo, Mediterranean games in Split, or the International Non-Aligned Movement conferences). Finally, one of the most important segments in the symbolic legitimization of the system was the construction of the memorials and monuments to the anti-fascist war and the socialist revolution. Monuments became main mediators in two-way communication between the state and the individual. *"It would be incorrect to say that the Memorial Parks are just scenery for theatrical interpretation of history."*² Although they are designed to talk about the past, commemorating the tragic past, they also reflect the contemporary socialist society; they are abstract forms that refer to the modern future. In a country with many different cultures, ethnicities, identities and truths, these monuments, regardless of their location, belonged to every Yugoslav. These monuments parted with a history of tensions and constantly shifting borders, their abstract and modern design is focused on the universal ideas of equality and unity, and social justice, and their most important contribution is in the inclusive and emancipatory idea of common life.

Bogdan Bogdanovic and new formula of memorials

The figure of Bogdan Bogdanović³ (figure 2) is closely related with Yugoslav memorial architecture, sometimes elevating his role as the state memorial architect, but in the years

¹ Lajbensperger, Nenad, *„Memorijali drugog svetskog rata u sluzbi dnevno politickih potreba socijalisticke Jugoslavije“*, in *Prostori pamcenja 2* (Filozofski fakultet and Muzej Primenjenih Umetnosti u Beogradu, 2011) p. 286.

² Manojlović Pintar, Olga, *Ideolosko i politicko u spomenickoj arhitekturi prvog i drugog svetskog rata na teritoriji Srbije*, PhD dissertation (Faculty of Philosophy, University of Belgrade, Belgrade, 2004) p.145

³ Bogdanović was not only an architect, urban planner and professor, but also as a writer, theorist, essayist, he proved to be a creative personality of versatile talent. During his active life he was the President of the Union of Architects of Yugoslavia (1964-68), Vice-Dean (1964-66), the Dean (1970-71) Faculty of Architecture, as well as the mayor of Belgrade (1982- 86). He has received numerous awards and public recognition; two October prizes for memorial complex in Sremska Mitrovica in 1960 and for the memorial complex in Jasenovac six years later, the annual award of Union of Architects of Yugoslavia for the memorial park "Slobodište" in Krusevac in 1964, as well as the „Borba“republic award in 1965 for the Memorial Cemetery in Mostar. He also received Seventh July Award for the Lifetime Achievement in 1976, the Grand Prix for architecture Union of architects of Serbia, the prestigious Piranesi Award in 1989, the Herder Prize in 1997 for the "construction of anti-fascist monument and symbolism of separation of good and evil," Austrian Cross of Honour for Science and Art (Ehrenzeichen für Wissenschaft und Kunst)



following the Yugoslavia dissolution, lives a rather open conflict with the nationalist streaming of Serbian political elite. Due to its conflictual relationship with Milosević politics he was forced to exile in 1993. During the exile period, the figure of Bogdan Bogdanović was erased from school curriculum, public and academic discourse. His writing were officially forbidden and removed from the national libraries, and his legacy remains forgotten and unknown to the future generations. Specific architectural and artistic language, archaic symbolism, the absence of pathos and political iconography gave Bogdanović's memorials universal value and quality, recognized in the West.¹ This popularity has suited Tito's government, which after the conflict with the Cominform sought to appear in the West as a liberal variant of socialism, in contrast to the Soviet Union and Warsaw Pact countries, elevating Bogdanovic at the position of state's memorial architect, producing 20 memorial sites around Yugoslav republics (figure 3).

Bogdanovic surrealist beginnings

Most representatives of Belgrade intellectual elite of the interwar period were francophone, educated at French schools and gathered around certain new ideals and political goals originating from Paris, centre of European avant-garde at the time. They were mainly left-wing, supporting surrealist movement, whose main representative and founder in Belgrade was a writer, essayist and artist Marko Ristić, closely linked with the Paris Surrealist movement. Intoxicated with new

in 2002 and the Gold Medal of the city of Vienna a following year. Finally in 2007 he was awarded with a prestigious Carlo Scarpa award for the landscape design. He was a corresponding member of Serbian Academy of Arts and Science, elected in 1970, but in 1981 decided to leave the Academy because of the political disputes. Since 1993, being dissident with Milosević's nationalistic politics, Bogdanović was forced to exile, and he moved to Vienna where he lived till his death. In this period he was honoured as member of the Russian Academy of architecture and construction science (1994), member of the Bavarian Academy of Fine Arts (1998), and member of the Academy of Architecture of Serbia (2008). During his prolific career, has published numerous books, professional articles, essays, newspaper articles. His first published book is named "Mali urbanizam" (Small Urbanism), he conceived this title as an opposite to "big urbanism", expression that he used to define bad examples of urban design practice in Yugoslavia during that time. It is actually a collection of newspaper articles published weekly in Borba newspaper, where he fought for a more human-scaled approach to urban design. "Zaludna mistrija: doktrina i praktika bratstva zlatnih brojeva" (The Futile Trowel: Doctrine and practice of the Brotherhood of golden numbers) is an oneiric fantasy about the esoteric meaning of architecture, elaborated through the arguments of Brotherhood main characters: Bramante, Palladio and Piranesi. "Zelena kutija: knjiga snova" (The green box: book of dreams) is a sort of diary collecting of his dreams, an homage to surrealism. "Urbanisticke mitologemes" (Urbanistic Mithologeme) and "Krug na četiri ćoska" (The Four Cornered Circle) deal with the symbolic meanings of architecture and history of the city. His later written work addresses more political and social themes. "Mrtvouzice" (Dead Ends) is a book containing the message of a 60 pages long letter previously sent to Milosević, expressing his opposition to nationalistic politics. "Ukleti neimar" (Doomed Architect) is a collection of autobiographical essays, translated also in German. In the exile he published several books in German, some of them never translated in Serbian: "Die Stadt und der Tod" (The city and the death), "Vom Glück in den Städten" (The city and his future). The last works are influenced by the recent troubled Yugoslav history and address the themes of the devastation of city and the future recovery.

¹ Well-known professional magazines have published a very commendable contributions of these works, as, for example, Paris' L'Architecture d'aujourd'hui of 1963 published texts on monuments in Prilep, Sremska Mitrovica and Jasenovac. Italian L'Espresso, in the same year, published a text written by Bruno Zevi about the memorial in Sremska Mitrovica.



ideas of Surrealism and inspired by leaders of this movement, such as Breton and Ristić, Bogdanović, very young, writes a kind of Manifest of Surrealism in Architecture named “*Vers une architecture surrealiste*”. With a clear reference of his opposition toward modern movement and Le Corbusier, Bogdanovic combats for a free architecture, liberated from modernist schemes and regulations. Bogdanović was fascinated by the possibility to find an alternative reality, the surrealism, escaping the restricted cultural dogmas imposed by the Yugoslavia of that period. Inspired by recent similar Paris situation, Loos’s house for Avant-guard artist Tristan Tzara, young Bogdanović designed a house for Marko Ristić that was his first attempt of surrealist design. House was, as he said, designed through play, humor, and it was full of extravagant situation, but unfortunately today there are no physical traces of the project.

Surrealist influences are very important, essential for understanding his future work. One of the most important surrealist legacies that would later define his architecture is an “*open form*”. In surrealism there was a striking tendency towards the destruction of the hierarchical order of art. Cancelled boundaries of genres, types have resulted with bounds and links between different arts; architecture, sculpture, poetry and visual arts, creating in this way a *visual symphony* or *literary collages*. The idea of the work of art as an open form became very topical; art becomes open to various creations and interpretations, different psychological experiences, since it is born from the deepest subconscious.

The second important surrealist influence is the idea of *the “collective subconscious”*. Georges Bataille, founder of the journal Documents, was the first to introduce the issue of the unconscious in the ethnological cultures, and later in his writings he attempted to detect the unconscious in mass culture, photography, film, tribal ritual items. Bogdanović, in the similar way, taking advantage of the stratified and complex Balkan unconscious, which means to dig into the fantastic repository of country’s memories, ancient tales and folks, will create an enriched surrealist world where he will find his models for memorial design.

Drawing was the basic medium of expression of Bogdanović’s production¹ and in one interview, when asked about the significance of a sketch for his work, he melancholically answered, “*Sketch it’s me*”.² The sketches of Bogdan Bogdanović testify that are not only associated with the designs of the monument entities; these drawings evoke an undoubted poetic multi-layered and trans-disciplinary world in which architecture solutions are mixed among images originating from the collective subconscious and anthropological memory. This means that architect is completely aware to use the surrealist method of *écriture automatique* (automatic writing) to define his

¹ Bogdanovic has donated his rich legacy to Vienna Architekturzentrum, which is the part that he has managed to save before the destructive attacks of the representatives of the repressive political regime. Currently the centre is hosting about 25 000 drawings, sketches, and working models. Architekturzentrum, http://www.azw.at/event.php?event_id=876

² Ristić, Ivan, “*Sketch it’s me, On (agreeable) impossibility of classification*”, in SAJ (Serbian Architectural Journal) n.3, 2011, p.16



personal design methodology, but also to dive into the deepness of Balkan unconscious culture, where the observer can meet surreal creatures and settlements, not only fantastic architectural realizations.

Case study: Monument to Jewish victims of fascism in Sephardic cemetery in Belgrade, 1951-1952.

Completely unplanned, with an invitation for a smaller closed competition for monument to Jewish victims of fascism in Belgrade, Bogdanović begins architectural career, which he will, almost exclusively, dedicate to the memorial architecture. As young, ambitious and promising architect (assistant at University of Belgrade) of that time, he was invited with other five young architects (among others A. Josić¹, and M. Vasiljević) to participate in preliminary design competition for the memorial to Jewish victims. Later in his autobiographical essays he gladly remembered this particular and incidental episode and gave an imaginary explanation of non-existing project which led him to the architectural solutions.²

The jury, consisted of eminent architectural critics and designers; Aleksej Brkić and Momčilo Belobrč, praised the *"absence of the trivial and monumental ritual pathos, welcoming archaism of the project that opposed to the functionalist technicism of that period"*³, awarding Bogdanović with first prize.

Monumental complex consists of three parts: the access ritual paths, two monumental slabs and a shrine (figure 4). The ritual path leading up to and between the slabs is lined by two walls of approximately 1 meter height, upon which are installed memorial plaques to families killed in the Holocaust. Each side is dedicated to one of Belgrade's two Jewish communities: Ashkenazi and Sephardic. The pathway itself is paved with old Jewish gravestones, and the walls incorporate fragments of construction material from buildings razed in the Dorćol district, traditionally one of the Belgrade's Jewish Quarters, demolished during the Second World War. Two monumental slabs open towards the sky in the height of 10,5 meters.⁴ Taking the path in the sacred ritual and

¹ Aljoša Josić, later Alexis Josic, is a Belgrade born architect, who will later become one of the founder of world famous architecture and urban office Candilis, Josic, Woods.

² A friend asked me "do you have an idea?" The answer is known in advance, which architect, especially at the beginning of his career, would admit to have no idea ... And because there was no other way I bravely speak, invent, fabulise. "Do you remember that alley of catalpas at the Sephardic cemetery, that confluence of perspective in an imaginary point ... From that point down there is growing the new "anti-perspective". And to clarify what this nonsense might mean, I further explain: "There in the depths, in the "depth of the depths" two pillars draw a sort of "the gate at the end of the road".² Immediately after telling the story he started designing the narrated project; the anti-perspective, the gate." Bogdanović, Bogdan, *Glib i krv*, Helsinski odbor za ljudska prava u Srbiji, 2001, p.36, translated by the author

³ Brkić, Aleksej, *Znakovi u kamenu, Srpska moderna arhitektura 1930-1980*, (Beograd, 1992) p.133

⁴ The slabs are made of granite-clad concrete, and bear a number of wrought iron traditional sacral decorative elements; when viewed from the graveyard entrance, a Star of David and the Hebrew abbreviation of a quote from



passing the gate meant entering in the sacred area of the shrine or a sanctuary with a sculptural performance of candlestick Menorah, one of the most recognizable symbols of Judaism.

The study of Kabbalah, in the preliminary design process for the memorial, will mark for a long period his career. The wide world of symbols would become an eternal inspiration for the future work. The symbolism of the monument can be interpreted in numerous ways; as the split of the wall towards the eternity, or the two plates of Moses, or even the wings of an angel, etc. Bogdanović had never explicitly explained nor interpreted his memorials. Openness of symbols and architectural forms to different interpretations (polisemiosis) is an important characteristic of Bogdanović's works. He believed that the answers and the meanings of the symbols we should search in ourselves, in our anthropological and cultural past, because each unilateral and unambiguous definition of symbols meanings, according to Bogdanović, meant its degradation and death.

The recycled material for the access ritual path and two low walls that define the path, of the remains of a stone facade from the demolished buildings in the Jewish quarters during the war, underline the symbolism of continuing life, never ending energy that flows and continues in different forms of life. Monument to Jewish victims in this particular way, "*with dignity and hope in the eternal renewal of nature*"¹, encourage thinking about the universally valid topics of human existence and the never ending circle of life.

Case study: Memorial park Slobodište, Kruševac, Serbia, 1960-1965.

The place where Slobodište memorial park was erected has been a place of stermination, where German occupiers and "domestic traitors" have killed hundreds of civilians, mainly locals.² The memorial park occupies an area of approximately 10 hectares on a site previously known as Bagdala hill. Sacral character of this place can be traced, first of all, from its name. The idea of the architect was to erect in this particular place "The Sanctuary of Freedom" (in Serbian Svetilište

Samuel I (25:29), and at the rear an image of hands performing the Priestly Blessing (Nesiat Kapayim) and a Levite pitcher.

Lawler, Andrew, *The Memorial works of Bogdan Bogdanović: Their condition and situation as of 2012*, p.4 available on:

https://www.academia.edu/5227153/The_Memorial_works_of_Bogdan_Bogdanovi%C4%87_Their_condition_and_situation_as_of_2012, visited 12.02.2015.

¹ Brkić, Aleksej, *Znakovi u kamenu, Srpska moderna rhitektura 1930-1980*, (Beograd, 1922) p.133

² It contains graves and cenotaphs commemorating 1,642 Partisan soldiers and civilians taken as hostages and executed, including 324 executed at the site on 29th June 1943 alone.



Slobode) and renamed through a seductive play of words Slobodište by famous Serbian writer Dobrica Ćosić.¹

Here, Bogdanović designed a memorial complex, defined as landscaped parkland.(figure 5) The park is conceived as a big sacred area “8” shaped (250 meters long) engraved in the territory in which are dislocated in free order some sculptures that seems to recall flying figures. The entrance into the memorial complex, the passage from the profane to the sacred ambient is defined with "The gate to the Sun" (figure 6). Initiation begins passing through “the gate to the Sun” and continues along the sinusoid path. The limes, the border between the profane and sacred space is clearly defined with landscape articulation. It represents an invisible architectural line which demarcates the changed landscape, the limes between crater intervention and natural landscape. The Gate to the sun is situated on limes line, and represents its interruption, in a form of semicircular stone intervention. Formal similarity inspired Vladimir Vuković to compare the stone gate to the reverse omega sign. *“Omega is the last letter of the Greek alphabet, which in our culture has a universal meaning of the end. Bogdanović, reverting the symbol, turning it upside down, used the principle of anagram, and can be interpreted as the end, which, in terms of the eternal renewal of nature, marks a new beginning. The method of anagram author has used very often, finding inspiration in the Gnostics's "topsy-turvy world".*²

Entering the sacred landscape, immersing into the landscape, memorial reveals its hidden drama. The access path continues to the "Valley of the living", an open-air amphitheatre, where even today local recitals and shows are performed. From the "Valley of the living" dynamic sinusoidal path continues into another crater area, called "Valley of the memories" (figure 7), 16m deep crater where are located six pairs of "stone wings", while another six pairs of wings are disposed on the slope of the crater. The stone wings are engraved with abstract patterns and designs, evocative symbols of life. The wings on the slope are of slightly smaller dimensions, so that the perception of perspective is heightened. They represent the most important symbolic and semantic element of the memorial. They could be understood as a kind of spread sanctuary. The so-called "horned birds", from the deep soil of the crater, are taking off to the sky. When Slobodište was erected, it represented completely new and disruptive formal solution for the existing memorial scene in Yugoslavia, especially because of his main topic consisting in a very deep manipulation of the landscape. Sculptures may be representing the flying figures or the gates tracing an ideal passage, however the clear semantic association of freedom, flight and hope is self-imposing.

¹ Dobrica Ćosić was responsible for the literary aspect of the park. He also contributed the inscriptions on the millstones in front of the two burial mounds, saying: Под овим небом, човече, усправи се (Under this sky, man, raise yourself) and Хлеб и слобода исто су нама (Bread and freedom are the same to u).

² Vukovic, Vladimir, *“Arhitektura sjećanja, Memorijali Bogdana Bogdanovica”, in Arhitektura Hrama* (edited by Ljubomir Folić), (Kriticki osvrti, Belgrade, 2012) p.406



Memorials were conceived as cities of the dead, as "necropolis", as sacred cities, chthonic cities. His research on the myths and archetypes, the imaginary cities here could be physically investigated, through the architectural presentations of personal and collective subconscious, he created new sacred or transcendental landscapes. The physical structure of the memorial sites is to be analyzed as sacred landscape, necropolis (City of dead) or sacred city, analyzing its urban structure, its formative elements. Many of memorial site could be analyzed by sequent urban elements: the definition of "threshold", "gate", (filter between the secular space and the sacred space); the definition of "limes", "boundaries"; the definition of "traces"; the definition of "ritual access path" (perceptual or practicable); the definition of "shrine", meditation or sacred place. Memorials always start with a threshold, a gate, the entrance to the sacred landscape, and continue with a predefined path that calls for the contemplation in the style of Peripatetics in the ancient gardens of Cicero and Pliny.¹

The inspiration for the formal design of the wings, Bogdanović elaborated in his book "Horned birds" (Rogate Ptice)² created more than ten years later, as design process, according to him, did not end with the completion of memorial complex, but continues, in the form of infinite elaborations of creative thought.

Case study: Memorial park Jasenovac, Croatia, 1959-1966.

Jasenovac is located on the left bank of the river Sava, one of the largest and most important rivers in the former Yugoslavia. On the border of the republics of Bosnia Herzegovina and Croatia, during the World War II Croatian pro-Nazi forces called "Ustasha" organized on this site, in Jasenovac, a concentration camp from the existing brick plant. Jasenovac was the largest and the most notorious concentration camp in the Balkans where thousands of Serbian, Jewish, Muslim and Roma nationality as well as Croatian communists lost their lives, in the most horrifying ways.

These scars on the history of the new Yugoslav state, with the aim to preserve the new fraternal atmosphere of the beginnings, have been intentionally erased immediately after the war and remained forgotten. After the completion of the war, the concentration camp was completely destroyed, erasing memories and any physical remains of its existence. It was only 20 years after that the government decided to open the Jasenovac question and to raise a memorial to the victims of the camp. In September 1960, the Central Committee of the Federation of War

¹ Fontana Giusti, Gordana Kololija, "Bogdanovic dissident in life" in *Architecture and the Paradox of Dissidence* (Routledge, 2013) p.38

² The book *Horned birds* (Rogate ptice) is a product of work with students in the school for the philosophy of architecture in Mali Popovic. It's a drawing diary of numerous inspirations and symbolic reminiscences of the memorial elements. In this particular way, the author continues the design process. This procedure is not intended to change or "improve" already presented project, but to explain the emergence of the idea and its numerous symbolic meanings and possible future developments.



Veterans' Organizations of Yugoslavia invited Bogdan Bogdanović to present proposals for the memorial complex at the site of the former Jasenovac concentration camp.

The river Sava in this section slowly meanders through gently sloping landscapes of Slavonia following a tortuous course that forms many canals and ponds. This particular natural configuration of the river is the cause for its very often overflowing during the year, which aids to the feeling of disorientation by the presence of the water. A sort of legend says that even if the prisoners of the concentration camp succeeded to escape they would wonder for days and eventually get lost because of the difficulty to orientate because of the rivers. The unique wetland landscape and terrors of the place left a deep impression on Bogdanović, provoking a series of ideas and drawings, clearly suggesting the archetypal natural labyrinth based on dualism earth-water. The architect himself defined it as a *"labyrinth in the labyrinth"*¹ meaning that sense of deep psychological penetration in the experience of confusion and disorientation.

As inheritance of his Surrealist creative roots, drawing was the basic meaning of expression to arrive to a project design. And it's free-hand, quick drawing, seemed led by subconscious. In the sketches, dualism between water and land is clearly represented as an obsession: the water and land penetrates each other like two fighting snakes or they burn together in the vision of a flaming fire. These images testify the creative process of the architect to be inspired by suffering and torture feelings. Somehow this phase must be seen as preliminary and absolutely necessary within the evolution that leads to the final birth of the flower, a clear symbol of new life, forgiveness after the storm. Bogdanovic says: *"I recall the first sketch for a monument in Jasenovac. I recall the confusing plural plotted labyrinths that I, one after the other, lie on the pile. During the nights, meshes snakelike filled with water and earth embankments, flickered before my eyes, which are reminiscent of the Lucifer's dark angel tails."*² In this huge production of sketches it's very hard to create a chronological order but we can surely claim that Bogdanović tried simultaneously different path in which is possible to individuate elements of connection. In all the drawings flames or snakes is probably intended to be the land manipulation but is possible to see the presence of a focal point where all the flowing signs are converging. This point marks the presence of a memorial sculpture that seems to be the three-dimensional "continuation" of the signs ruling the landscape arrangement. This allows us to state that, in the mind of Bogdanović, the famous flower before to be a flower could have been an eruption of flames. Metamorphosis happened, the flame has turned into a wonderful 24 meters high *"Stone Flower"* or *"Melancholy lotus of concrete"*, a strong symbol of forgiveness and eternal renewal which stands as a sign that no one ascribes guilt, nor calls for revenge, but anticipates the hope in life and the future. In line with typical symbolism of Bogdanović, in which forms and figures simultaneously recall different things, the flower can still be seen in a large range of semantic interpretations. However all the visions can generally refers to the symbolic triad of birth, growth and death, where the death is

¹ Bodanović, Bogdan, *Ukleti Neimar*, (Feral Tribune, Split, 2001) p. 162 translated by the author

² Ibid. p. 163



always intended to be a natural passage to renew the life. Bogdanović confirms: *"The monument over there is standing on the place of horror and every attempt to reproduce the cruelty in the form of a memorial would have been ridiculous, miserable and void. It was necessary to get into the metaphysic and my approach was the following: it has to be a monument for life and it has to show that the crime has not won in the end. It was important to commemorate the countless victims in a reverent way, but it was also significant to express that life goes on."*¹

This is possibly the most famous Bogdanović's work, awarded with international award for landscape architecture Carlo Scarpa in 2007 a Treviso. Jasenovac was unveiled on 4th July 1966. The entire site is a vast memorial complex conceived as a park around the monument, with a rather modest memorial museum. The path that leads the visitors to the entrance of the memorial complex stands over the track of the old railway which originally reached the brickyard and after the concentration camp. At the end of this road start a pedestrian path leading to the flower that is paved using recycled railway sleepers. It passes between two artificial ponds that make part of the project of landscape. These ponds take the place of a natural lake close to the original brickyard. The rest of the area is occupied by grass covered and cone shaped tumuli erected exactly in the same location of the warehouses of the concentration camp. This reveals his intention to reinvent, in a modern language, an archaic funerary typology as element of land art composition. The reference to death is forgiven by the extreme harmony of a modern peaceful park, ready to embrace the life of numerous visitors.

What is remarkably coherent with this vision of renewal is for sure the use of the railway sleepers as recycled material. The choice to give a third life to an original element involved at first in the working reality of the brickyard and then in the deadly reality of concentration camp, strengthen Bogdanović's belief that existence is subjected to a cyclic rule of birth, growth, death and rebirth. Bogdanović's work is related to the eternal issue of the essence and the meaning of death. His monuments are an answer that consists in conquering death with memorials that aim to be a comforting message for future generations. Flower form memorial is a dignified call for forgiveness and a promise for the better future. As he states himself: *"I never wanted to rule human feelings. I just willfully looked for dignity of sacred forms in their own areas and general anthropological subconscious."*²

¹ Bogdanović, Bogdan, Interview with Reinhard Seiss, "A time traveller trough dream worlds", translated and published in SAJ (Serbian Architectural Journal), n.3, 2011, p.88

² Bogdan Bogdanović, "Tri Mauzoleja", letters between prof. Vlado Buzancic and Bogdan Bogdanovic in Arhitektura Urbanizam n.90/91 str 19. translated by the author



Memorials of forgiveness – Memorials to Life

Bogdanović's memorial architecture represents the self-conscious attempt to mediate between past, present and future; and in many ways it was anticipated with the rising post-modernism. But his work should not be labeled post-modern at all. It was a strain of post-modernism on its own: *"populist, but not commercial, in search of archetypes, but not typology; embracing ornament, but not favoring any particular language; and ultimately based on avant-garde methods, those of surrealism, a movement that otherwise had limited impact on architecture."*¹ Bogdanović gave a present meaning to the historical facts. Merging multiple, heterogeneous local traditions in one unique Yugoslav cultural identity was the way in which his monuments were used in public political life, transforming society and its individuals and trying to encourage the coexistence of numerous identities of Yugoslav citizens.

Bogdanović's memorials represent the exact opposite to the aesthetics of war, starvation, and rift; they represent a positive memory, forgiveness for the future. There is no place for exaggerated monumentalism, screams, pain; there are no indications of death, suffering or violence. Not even one recalls the battle, revenge; they all have a cathartic essence. These memorials terminate former connection with the symbolism of emerging ideology; symbols of suffering, partisan and civilian starvation, heroic victory and the National Liberation, represented through obligatory red star or realistic formal representation of the soldiers or civilians. Bogdanović stated himself: *"My monuments never had any of this action, agitating, victorious and triumphal, which was greatly present in the memorial art, even when it was not realistic."*² They are turning to a deeper and hidden symbolism; symbolism of freedom and life. He explains it, *"I had carried within a sense that in what was then Yugoslavia, after so many wars, the most important thing was the catharsis, so we all calm down, make peace."*³

To understand Bogdanović's attitude towards the symbolic presentations, reference should be made to Carl Gustav Jung and Ernst Cassirer. Bogdanović studied them both and they visibly influenced his understanding of symbols. Jung places the symbols as universal archetypes in the collective human unconscious. *"The archetype is like a vase that you can never completely empty or fill. In itself, there is only power, and when it takes shape in a given matter, is no longer the same as before. It persists through millennia and yet demands always new interpretations. Archetypes are unshakable elements of the unconscious, but continually change shape"*⁴ Bogdanović himself created new symbols in his heuristic exploration game: as a means of communication in which he connects otherwise incompatible concepts, or taking them out of their usual environment and placed them in a completely new context, and so they evolve,

¹ Kulić, Vladimir, Mrduljaš, Maroje and Thaler, Wolfgang, *Modernism In-Between, The mediatory architectures of Socialist Yugoslavia*, (Jovis, Berlin, 2012) p.225

² Bogdanovic, Bogdan, *Ukleti Neimar* (Feral tribune, Split, 2001) p.93 translated by the author

³ Ibid. p.160

⁴ Jung, Carl Gustav, *Archetype and Collective Unconscious* (Princeton University Press, 1981) p.34



graphically and semantically, creating hybrid symbols that speak something new. He had never explicitly explained any symbol presented in his monuments. Openness of symbols and architectural forms for interpretation, polisemiosis of forms is an important characteristic of Bogdanović's works. As he states, *"I have always been suspicious of pundits who, without hesitation, and with lexicographical precision, explicitly interpret the symbols."*¹ Using intentional and always returning to a historical complexity troubled Balkan countries, where in a small area in a relatively short time period the most diverse cultures, civilizations deeply engraved their seals, undermining the roots of the collective memory, reading symbols was always alive, new and rich. *"The symbols are in principle something very open, something which is very lively, never fixed. When somebody asks what a symbol is meaning, what it is trying to say, that is always the wrong question to ask. It is always about what you are seeing in it. Therefore I believe that my monuments are still interesting – also to people who don't even know for which historical reasons those monuments were built."*² In these memorials we meet a wide and rich world of symbols, myths and archetypes which Bogdanović governs and revives through his memorials. Maybe right for the reason because they originate in the deep Balkan mythical historiography, they are so charged with associations and emotions. As he spoke symbols *"are a sign of the other man's reality in which is possible to penetrate only by feelings, intuition, miracles of personal imagination. Standardization, narrowing, closing their meanings violently separates a sign from its hidden spiritual content and often converts it into an empty insignia of physical aggregation, and in the case of its totalitarian versions into the magical sign of drastic self-submitting."*³ It is precisely this bounding with the cultural, historical, traditional and natural framework that gives memorials authentic identity and coherence that transcends all timeframes. Finding himself in the time in which modernism was preserved and in the most diverse didactic levels promoted into academic canons, we could state that in the long run Bogdanović will not betray this *"prophecy"*: *"the one who was not outrun by the fashionable trends, has the prospects to be pronounced truly modern one day"*.⁴

¹ Bogdanović, Bogdan, *Ukleti Neimar* (Feral Tribune, Split, 2001) p.165, translated by the author

² Bogdan Bogdanović, Interview with Reinhard Seiss, *"A time traveller through dream worlds"*, translated and published in SAJ (Serbian Architectural Journal), n.3, 2011, p.89

³ Bogdanović, Bogdan, *Ukleti Neimar* (Feral Tribune, Split, 2001) p.166. translated by the author

⁴ Ristic, Ivan, *"Sketch it's me, On (agreeable) impossibility of classification"*, in SAJ (Serbian Architectural Journal), n.3, 2011, p.18



Figure 1 Competition proposals for New Belgrade

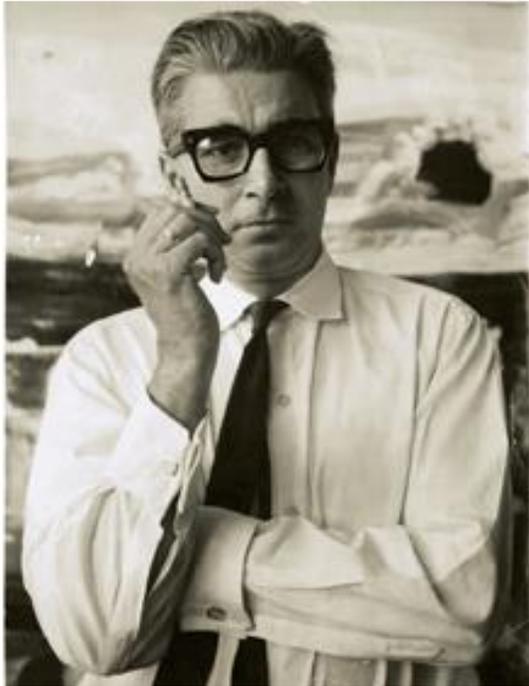


Figure 2 Bogdan Bogdanovic



Figure 3 Map of memorials of Bogdan Bogdanovic



Figure 4 Jewish victims memorial in Belgrade

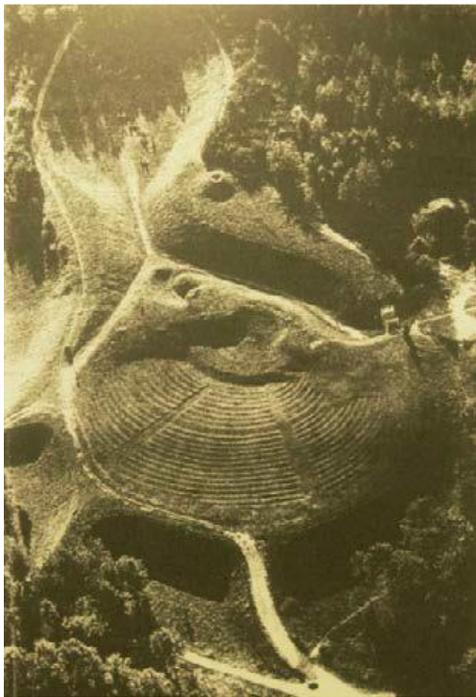


Figure 5 Slobodiste memorial



Figure 6 Gate of the sun



Figure 7 Valley of memories, Slobodiste memorial

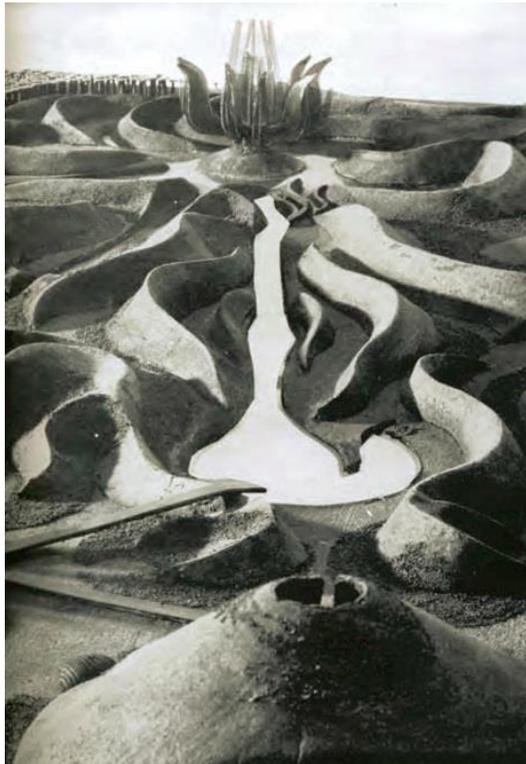


Figure 8 Preliminary model for Jasenovac memorial



Figure 9 Sketch for Jasenovac memorial

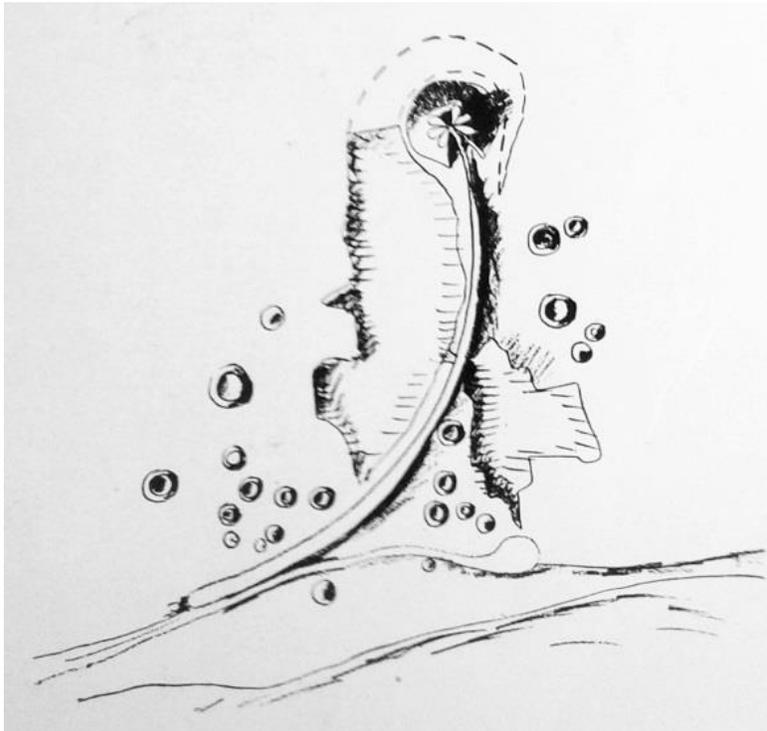


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Figure 11 Jasenovac memorial site

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Figure 11 Jasenovac memorial site, taken from the catalogue *Bogdan Bogdanović, the doomed architect*



Moving in Place: Dance & Architecture

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Abstract

*How does one conduct design research in the field of architecture? One method is to build temporary works in which one can bracket particular aspects of the built environment. I have researched and written about such works in my book, *Installations by Architects: Experiments in Building and Design*. As both a practitioner and educator, I have employed this method to explore elements of place such as color, light, space and movement, as well as larger themes in the built environment such as memory and public space. The term “Moving in Place” exemplifies the intersection of human behavior and environment. It can be approached with two lenses: the physical push and pull of gesture and motion, when choreography is integrated with environment; and the movement of perception, when, together, the disciplines tell a story, bring the unknown to life and open the realm of possibility. Moving “Place,” also shifts perspective as the two case studies, the first, located in a bracketed studio environment, and the second, a work performed *in situ* demonstrate.*

As an architect and artist, I have developed ephemeral works both on my own, and with my students and colleagues. It is particularly rewarding to collaborate with choreographers, who think deeply about relationships between the body and its environment, but from a different perspective than I do as an architect. Consequently, I have worked with choreographers, dance and architecture students to investigate relationships between space and gesture, image and memory, narrative and meaning. With many architectural projects, there is little opportunity to study the construction of space from a movement point of view. Since dance, unlike sculpture or the visual arts, is a time-based, embodied medium, responding to and shaping space, collaborations with dancers afford architects new ways to examine how we perceive, shape, imagine and inhabit our world. These inter-disciplinary, hybrid efforts involved the design and construction of temporary environments and pedagogical scaffolding, which were deployed to gain insight into the shared territory and friction between our disciplines and concepts of space, place, dimension and dwelling.



This paper will present case studies of two kinds of collaborative research between architects and choreographers that I have engaged in, and the shifts in thinking that occurred through our shared work. The first, set in a constructed bracketed studio environment, explores how dance and architecture can influence, integrate and shape each other in experiential, sometimes whimsical ways. The second effort places dance in the “theatre of reality,”¹ integrating “architecture in situ” with human movement to ignite discussion, advocacy and new perceptions of place. Using these examples, I will discuss how these two different opportunities to attend to place challenged my *a priori* understandings of how a space or design could be developed, used and interpreted.

The Intersection of Choreography and Design

For over fifteen years, I have collaborated with choreographers, live artists and dancers. Through this interdisciplinary and engaged research practice, I have explored different aspects of the two disciplines’ understandings of the built environment and our place within it. My partners and I have sought to use the different strengths, perspectives, and analytical methods of choreographers and architects to:

- 1) develop methods to describe the interrelationship of people, space, motion and time;
- 2) explore how movement and environment relate and respond to each other in a live context;
- 3) test, gather material and analyze artistic intervention strategies explored *in situ*;
- 4) develop a process for utilizing dance and temporary architecture interventions to engage others with the built environment, and to inform and expand the visions for sites-in-flux;
- 5) and employ artistic interventions to engage stakeholders—such as community members, designers, and developers—in dialogue about the meaning and potential of that particular place.

Over the years, I have explored a range of topics with my partners in dance, both in the studio and in situ on the streets. The manipulable *Placing Space*² lab I created with Dana Reiss allowed us to explore dimension, gesture, inhabitation and presence directly. Through my collaborations with Peter Sparling and Terri Sarris (*Fast Forward, Play Back*³ at the Detroit Institute of Arts) and with Bebe Miller (*Placing Space*⁴), we explored the ways that story and narrative are embedded

¹ For this potent phrase, I am indebted to the AR(t)CHITECTURE Scientific Committee, Call for Proposals, The Technion, I.I.T, The Faculty of Architecture & Town Planning, Haifa, Israel, April 19-26, 2016.

² See Ronit Eisenbach, “Placing Space: Architecture, Action, Dimension”, JAE 61/4, May 2008, pp.76-83.

³ See Ronit Eisenbach, “Fast Forward, Play Back: Encouraging Dialogue and Reflection on Detroit,” JAE 62/1, September 2008, pp. 56-63.

⁴ “Placing Space: Architecture, Action, Dimension,” pp. 76-83.



in body, place and image, and can be transported like seeds carried by pollinators to other moments and places. With the 2012 Reston, Virginia exhibition, *Out of Place*, and the 2014 Long Branch, Maryland exhibition, *Placeholders*¹, Sharon Mansur and I worked *in situ*: playing with relationships between action and agency, pedestrian and expressive movement. This work challenged convention by humorously contrasting expectations and everyday use of existing public neighborhood space. In 2015, working *in situ* in Chestertown, Maryland with Cassie Meador on, *WaterLines: RiverBank*,² we expanded boundaries between dancers, participants and audience, blurring the lines between the town's communities and generations, and inviting locals to work with us in the co-creation of shared meaning. The long term goal was a call to action; to build and articulate shared values that could ultimately spark public dialogue and local agency in light of impending choices faced by the community. These works, whether in the studio or *in situ*, allowed for deeper exploration of kinesthetic, haptic or emotional conditions of embodiment and presence. While both architecture and dance choreograph "space, material, time and energy,"³ it is in this shared territory of inter-disciplinary collaboration between movement makers and space makers that can lead us to challenge our *a priori* understandings, ways of working, and the meanings underscored by our particular disciplinary lenses.

Case Study 1: Placing Space

Reciprocal Explorations: Placing Movement in Space

"Placing Space,"⁴ was an educational experience and spatial workshop that I developed with choreographers Dana Reitz and Bebe Miller at the University of Maryland in 2007. Using a fabricated, "in studio" context, we sought to explore the integration and embodied understanding of architectural space and human movement at full-scale and in real-time. In this example, there were only student participants and no outside audience; participants and audience were one and the same.

¹See Eisenbach, Ronit and Mansur, Sharon. "Placeholders in situ: exploring sites-in-transition" *Anywhere*. 1. (Project Anywhere, Parsons The New School for Design, and The University of Newcastle, July 2016.

Also *Project Anywhere: Art at the Outermost Limits of Location Specificity*. Accessed May 4, 2016.

<http://www.projectanywhere.net/ronit-eisenbach-sharon-mansur-in-situ-exploring-sites-in-transition/>

Also Sean Lowry, 'Paratext and the world of a work in public space: Eisenbach and Mansur's Placeholders,' *Unlikely: Journal for Creative Arts*, Issue 2: Fieldwork (forthcoming 2016).

² Ronit Eisenbach, "Creative Placemaking on Sites-in-Flux: *WaterLines: RiverBank*, a Case Study," *AR(t)CHITECTURE Proceedings*, The Technion, I.I.T, The Faculty of Architecture & Town Planning, Haifa, Israel, April 19-26, 2016.

³ Choreographer Allison Orr in "Trash Dance," documentary film directed by Andrew Garrison, released April 26, 2013.

⁴ Choreographers Dana Reitz and Bebe Miller are Center for Creative Research Founding Fellows. CCR and University of Maryland formed a partnership. UMD student participants: Mercedes Afshar, Swetha Akasapu, Deborah Bauer, Suzanne Braman, Anita Chen, Cynthia S. Cheung-Wong, Jackie Crousillat, Yoko Feinman, Franklin Grace, III, Tzveta Kassabova, Beck Krefting, Mauria Peckham, Amelia Wong.



To focus on an embodied experience of “place” in an inter-disciplinary context of shared inquiry and serious play, I designed a set of props and a flexible spatial laboratory whose shape and dimension could be modified by people’s actions. This setup allowed participants to change the environment’s size, shape, volume, and image in response to and in anticipation of human desire, gesture, and motion in real time. This opportunity opened up the possibility to engage a relatively unexplored territory in a studio situation – architecture and its spatial experience as an embodied, shifting, dimensional condition.

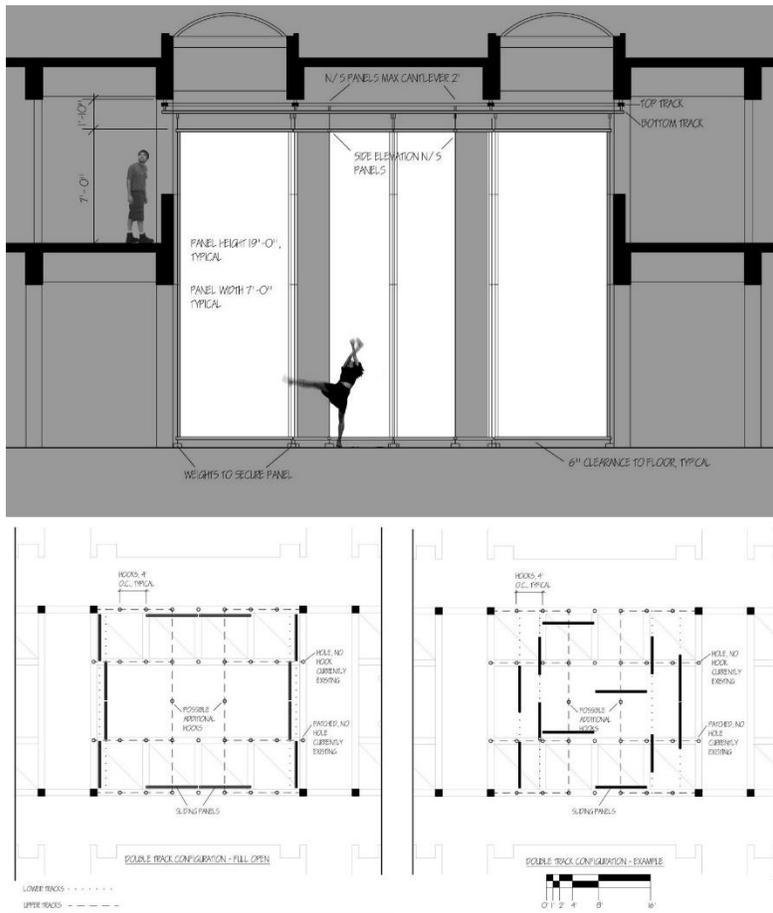


Fig 1: (Top) Cross-Section of UMD School of Architecture, Planning and Preservation’s Great Space with the Placing Space Environment inserted into it. Existing architecture allows observers to gaze at the action from the balcony above, from within the “set”, or from outside it. (Bottom) Two plan layouts among an infinite set of variations. (Drawings: courtesy R. Eisenbach).



Fig 2: The Placing Space “set”. An adjustable grid of Unistrut tracks carried fabric panels that could move laterally and pivot. Participants could manipulate these using black guide ropes attached to both the top of the panels and the tracks. A dance floor defined the area of spatial engagement. (Photo: J. Crousillat.)¹

¹ Unless otherwise noted, all *Placing Space* photos by Jackie Crousillat.



Fig. 3: Adjusting panels, shaping space. (Photo: Y. Feinman)

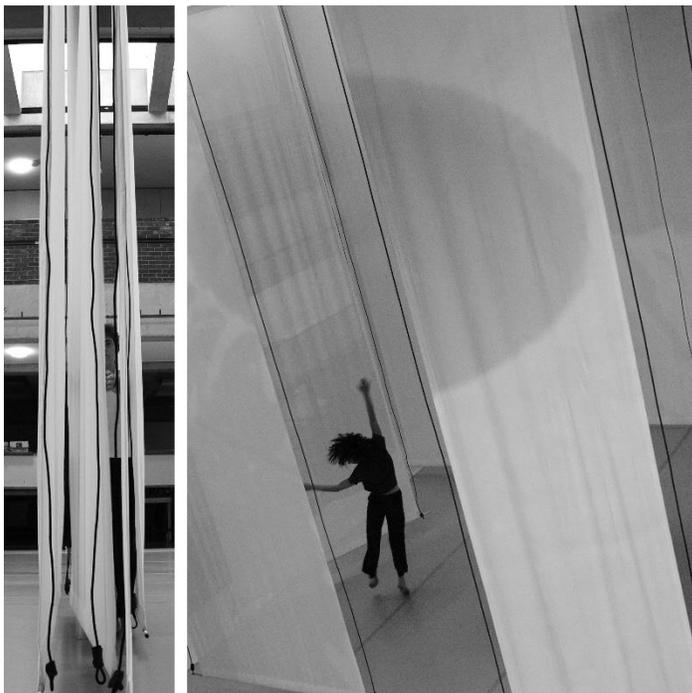


Fig. 4: Altering enclosure and introducing scale and reference to the vocabulary of movement, dimension and space via image projection. High-powered theatre projectors enabled projection of imagery during daylight.



In imagining the environment's use, I expected people to first shape and define the space and then develop a movement for that space, or vice versa. At first, students did work this way, but we soon discovered that the most powerful engagements occurred when they altered the space directly as part of their movement work. And it made sense—movement involves transformation in time. The dancers among us were used to thinking about compositions and environments that evolved, the architects less so.¹ When the long black ropes attached at the panel's top were pulled taut to move the fabric panels, people saw that the fabric's response was delayed. The panel's top portion slid along the tracks first, the middle and bottom followed in a full sailed arch. This simultaneous shaping of movement and gesture and the conditions of variable resistance—friction, weight, effort—were linked through action to touch and vision. As an outcome of this kind of play, instead of setting up the space prior to an exercise, we set up "situations" or instructions, in which the architecture joined the choreography and became fluid, pulled and turned by people who shaped both space and human gesture in concert.² The opportunity to work in a controlled studio environment in real time and space enabled serious open-ended play and thus discovery. Not surprisingly, the situation yielded unexpected outcomes and a rich, pedagogical experience for participants, modeling a way to structure a future practice informed by design research and inquiry.

¹ "Placing Space: Architecture, Action, Dimension," p. 81.

² *ibid.*



Fig. 5: Assumptions about the functional use of the *Placing Space* elements and the creation of only orthogonal space were transformed. Ropes are tied to the bars at the bottom of the panels to create an energetic environment of draping fabric crisscrossing through the spatial volume.



Fig. 6: Looking up: “walls” in motion.

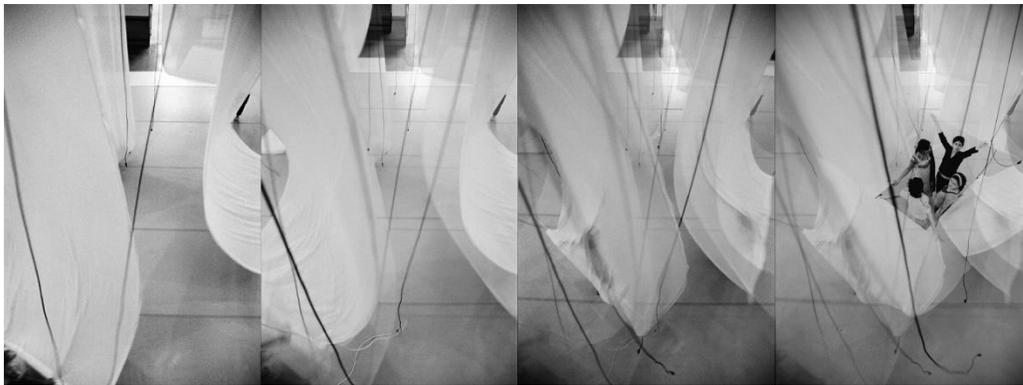


Fig. 7: Reciprocity of movement and space.

Action & Place: The Built Environment

There is an essential exchange between action, dwelling and place; a hidden dimension of actions over time are embedded in every inhabited site. In architecture, the term “built environment” describes the totality of places that result from human conception, action and effort. Yet while this underlying condition is so obvious, once a place is built, the effort behind such actions is generally invisible to many; while the constructed environment is designed by and for people, we often move through the environment without being attentive. As Walter Benjamin suggests, the



art of architecture is experienced through the senses of sight and touch, but not in the way an art lover would appreciate a great work of art. On the contrary, he says, people generally experience buildings without really paying them attention.¹

It is this invisibility of effort that Dan Hoffman's 1992 installation, *Recording Wall*,² underscores. In this rhetorical work, the viewer is made aware that a concrete masonry unit (CMU) wall results from the repetitive effort of picking up a module, buttering it, and laying it on top of another; Hoffman applies a photograph of his own body placing each individual CMU block into the wall. One can look at this completed wall and see the posture and gesture of the builder as stooping when the wall is low and stretching when it is high. Similarly, the construct of "the built environment" emphasizes that, at a very different scale, any place—even a city—can be understood as the result of an accumulated uncountable number of actions. These actions, both large and small, represent the embodied creatures making and remaking the urban realm.

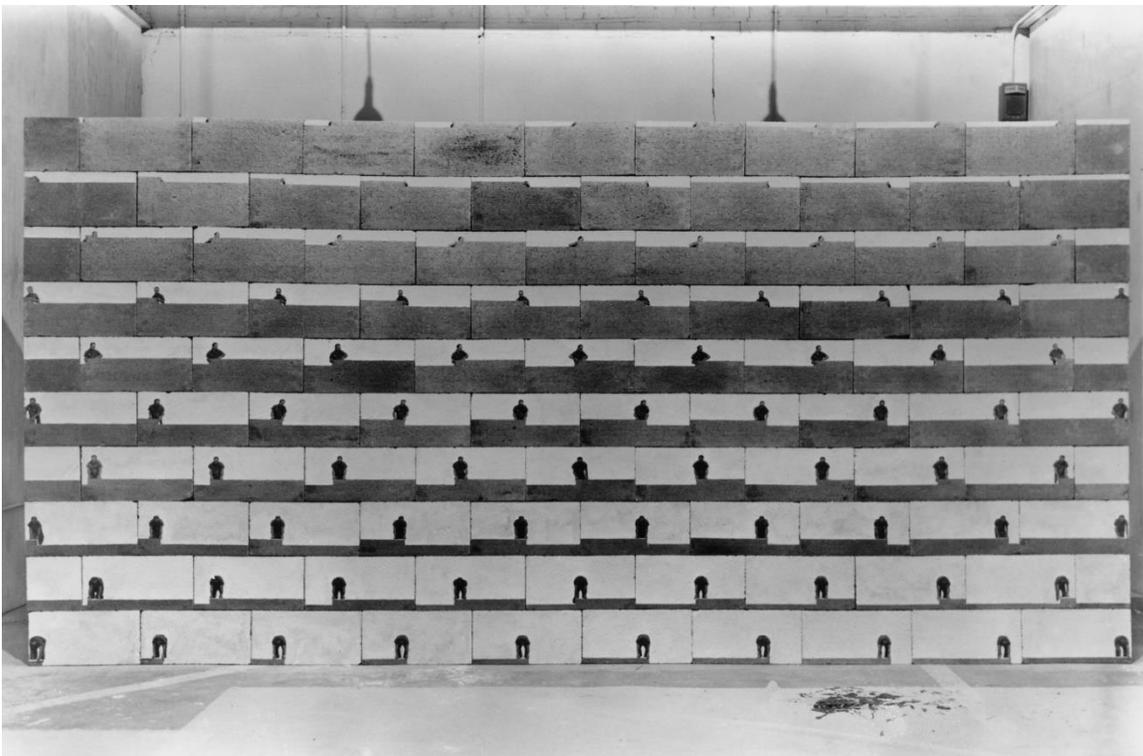


Fig. 8: *Recording Wall*, Dan Hoffman, 1992.

¹ Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1968), pp. 217–252.

² Bonnemaison, Sarah and Ronit Eisenbach, *Installations by Architects: Explorations in Building and Design*, (Princeton Architectural Press, 2009).



Fig. 9: Detail *Recording Wall*, Dan Hoffman, 1992.

Case Study 2: Placeholders

From 2012 to 2014, I led a Creative Placemaking effort in the Long Branch neighborhood of Silver Spring, Maryland, a first-ring suburb of Washington, D.C. Plans for a new transit stop for the Purple Line light-rail, slated to break ground in 2017, are creating new tensions; although investment in the area is both desirable and necessary, there is nonetheless concern amongst the immigrant-heavy population of the neighborhood that any new development will replace them.



Fig. 10: Central Long Branch showing new light-rail line route and parking lots area slated for development. (Diagram by R. Eisenbach and K. Donahue)¹

Our work employed ephemeral art, dance and design to celebrate Long Branch today and influence its future. We developed working methods for joining temporary architecture installations and exploratory performances as a means to understand a site-in-flux, stimulate public dialogue, and build community. It began with a UMD art and architecture Public Art and Design course taught with Sculpture professor John Ruppert,² and culminated with *Placeholders*, a Live Art Performance conceived and developed with choreographer Sharon Mansur.

*Placeholders*³ is the result of two years of research and relationship-building in the community. This site-specific performance/installation explored what it means to seek, shape and

¹ All *Placeholder* Diagrams by Ronit Eisenbach and Kathryn Donahue.

² For info on additional Long Branch projects by Eisenbach and other partners, as well as more *Placeholders* images, see <http://artinplace.wix.com/long-branch>.

³ *Placeholders* was performed by Meredith Bove, Jessie Laurita-Spanglet, Sarah Oppenheim, Lynne Price. The work was generously supported by a University of Maryland Advance Institute Interdisciplinary and Engaged Research SEED Grant; the UMD School of Architecture, Planning and Preservation; and the UMD School of Theatre, Dance, and Performance Studies as well as many other local organizations and individuals. For a complete list of partners go to: <http://artinplace.wix.com/long-branch>



preserve “place” in the face of transition through a public, participatory event. This event aimed to illuminate and celebrate Long Branch as it is today, on the cusp of change and growth. *Placeholders* embraced this spirit of flux through its movement, sound and architectural layers. The performance affirmed what is essential to one’s sense of place in the face of transformation and reflected upon what it means to “hold one’s place” in anticipation of the future.

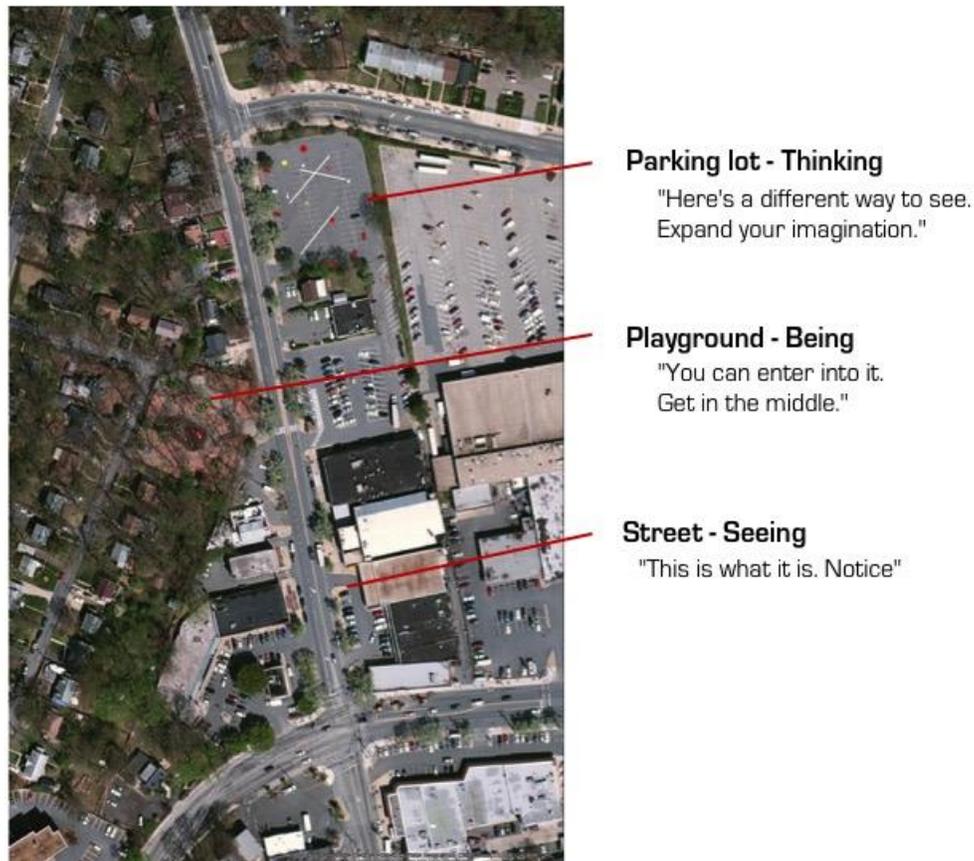


Fig. 11: Map showing *Placeholders*' interventions and conceptual structure.¹

On a rainy day in September, a quartet of performers invited the audience on a stroll to three separate spaces within one block—the stores along Long Branch’s main thoroughfare, Flower Avenue, a prominent parking lot at the corner of Arliss Street and Flower Avenue, and the Flower

¹ These conceptual structures were articulated post-facto, by Esther Geiger a Certified Laban Movement Analyst who observed and analyzed the work through the lens of LMA. We are grateful for her reflection and insights. See <http://www.limsonline.org/> for more info on LMA.



Avenue Park. As artists, we altered these everyday environments through movement choices and objects that reframed and refocused perception: yellow bamboo ladders leaned against light posts equipped with newly installed flower boxes; domestic red chairs and folding tables were misplaced and misused; musical layers and audio material from other moments and places were added via sound boxes and parked cars; a horizontal mural on the parking lot offered alternative directions for motion; and wooden staffs shifted meaning with their placement and use. After weeks of rehearsing and careful observations, our choices were made in response to the structure of each space and conversations with residents and shop owners. We reflected both concerns and visions; the lack of a crosswalk, impeding pedestrians path to local stores, an empty parking lot with a sign promising development, a centrifugal playground.

I. STREET: "SEEING"



Fig. 12: Street: diagramming movement of dancers, audience, and props.



Fig. 13: Along the street, yellow bamboo ladders leaning against light posts invited an upward gaze towards newly installed flower boxes; performers reflected quotidian gestures observed in the local barber shop, laundromats, beauty parlor, and restaurants; kitchen chairs and folding tables were utilized in surprising ways, their typical uses shifted and their forms abstracted in this public arena; and sidewalks, traffic meridians and cross-walks were animated and occupied with a sense of play and whimsy. (Photo: Zachary Z. Handler)¹

¹ All Placeholder photos by Zachary Z. Handler



II. PARKING LOT: "THINKING"

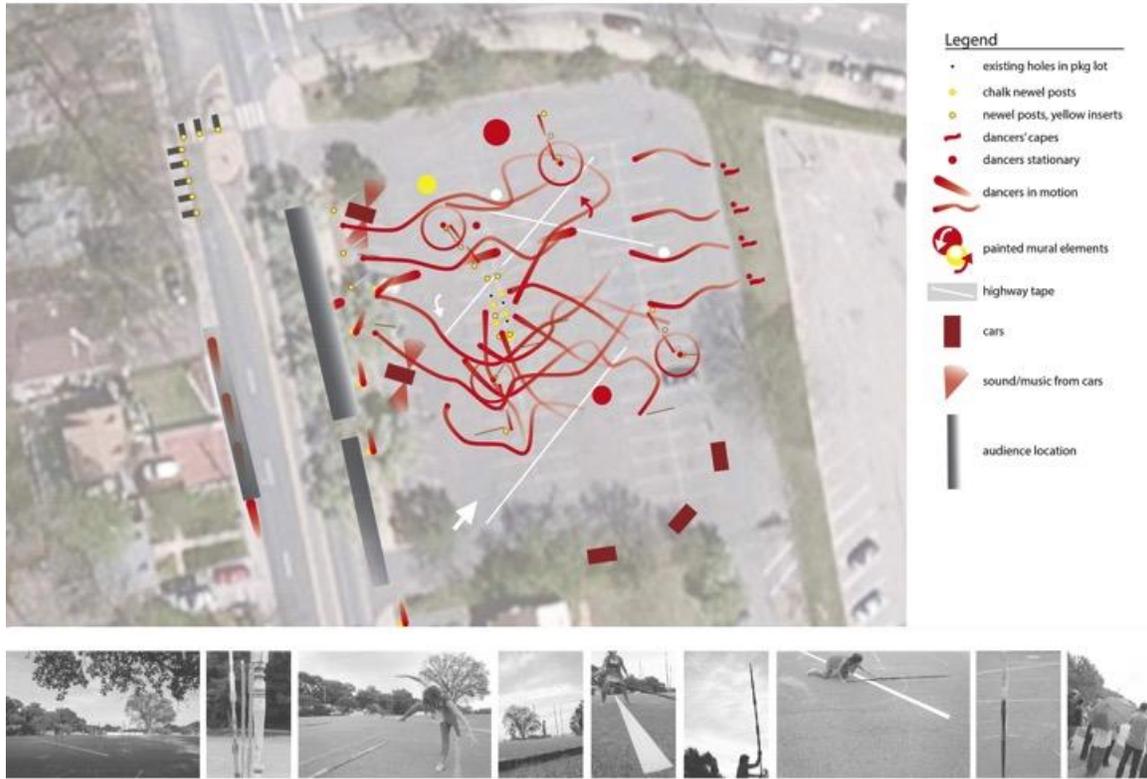


Fig. 14: Parking Lot: diagramming movement of dancers, audience, and props.



Fig 15: The addition of white lines, extra arrows, painted shapes and a "grove" of vertical staffs, transforms the parking lot from a space of normative function to one with expressive potential providing alternative directives for movement. The excess marks repurpose the parking lot suggesting new relationships between the activity and the place. The space supports large, quick movement and the dancers respond to these new inscriptions. The installation of paintings, staffs and dancers in the lot asks viewers to see what isn't there -- to re-look and re-imagine the expressive potential of a space whose function is presumed to be pretty uninteresting.



III. PLAYGROUND: "BEING"



Fig.16: Playground: diagramming movement of dancers, audience, and props.



Fig. 17: The dancers physically and symbolically transform the off-the-shelf folding tables placed in the playground. Thru play and situation each table's possibilities and associations multiply-



suitcase, toy, shelter, domestic object, abstract volume and table surface. As each dancer defines her own place in the playground with table, chair and staff, the mobile audience gathers and joins the work.

Live Art Installations like *Placeholders* that **take place in situ, in the “thick reality of experience”**¹ as installation/performance projects, can be part of creative placemaking efforts for sites-in-flux.² Rather than only educating architects and dancers, the horizon for this type of *in situ* work is responsive, active and catalytic, and engages the makers and the public with places (rather than spaces) and everyday activity that could continue or change. This type of intervention can shift perception, and in some cases, encourage local advocacy and engagement in neighborhood transformation. It also deeply affects the makers who have to adjust their work to engage and respond to the world as is.

Conclusion

Ephemeral works of all kinds can underscore the fluidity of meaning as actions large and small impact a place’s nature and character. These works initiate reflection on the potential of transitional conditions, and the role of human presence and agency in affecting or being affected by place. For an architect, dance has the potential to play a special role in such work. Perhaps it is because we are embodied and empathetic beings. Dance can shift our perceptions and understanding of the physical body in relation to the built environment, as well as underscore the rich, sensorial experience and continual change inherent in place. A visible and embodied partner can also remind us of individual and collective acts of building and un-building, measuring and marking space, highlighting the ways that our actions alter the places we inhabit. By observing and transforming pedestrian and functional movements found on site, as well as building on, contrasting with or responding to existing spatial use, one can create new perceptions and a renewed sense of connection in others and in ourselves.

¹ AR(t)CHITECTURE Call for Proposals

² In practice, when developing a devised *in situ* work, there is often a third mode which involves a give and take between studio and locale -- ideas may be tested in studio and in situ using prototype props and provisional movement sequences.



Fig. 18: Placeholders.



Creative Placemaking on Sites-in-Flux:

WaterLines: RiverBank, a Case Study

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Abstract

Sites-in-flux are complex moments in the life of a community. While change is constant, there are situations when uncertainty and possibility loom large and transformation is often anticipated, but not yet fully envisioned. The ecological, social and economic pressures that spur transition within communities and places can create tensions, fear and division, but also immense opportunity. This paper describes the case study, *WaterLines: RiverBank*,¹ an ephemeral installation and performance, designed for and located in Chestertown, Maryland, a community in transition. Through this work, critical exchange and complex relationships between river and town were underscored through the spatialization of content *in situ*. By linking and transforming key familiar locations in the historic town—a former bank, a main street, and the river’s edge—and inviting the public’s participation, *WaterLines* created an aesthetic public experience that stimulated reflection about deeply shared values, while also surfacing, as one resident put it, “anxiety as the ecological challenges to our beloved home become more obvious.”²

The applications of the arts—through performance, installation, and shared exploration—especially where communities are invested and involved, has the power to shepherd transition and expand possibility through a shift in perception of familiar places. Collective participation and co-creation can crosslink communities through shared experience, fostering connections, building memories, uncovering stories and re-envisioning place. Artistic encounters *in situ* have the power to reach people whose voices may not initially be at the decision-making table and spark public dialogue among a wider group. One of the most powerful applications of artistic engagement *in situ* is what is now referred to as “creative placemaking.” Creative placemaking includes artists, designers and other “creatives” as part of transformative planning processes, and can generate unexpected results. Creative placemaking can integrate silenced or new voices, attend to issues of social justice, incorporate art and culture, and create an elevated level of design for long-term solutions.

¹ *WaterLines* was commissioned by SandBox, Washington College. I am extremely grateful to Washington College, administrators, faculty and students and to SandBox’s Executive Director, Alex Castro and to Sean Meade, Program Director, without their vision, energy and constant support this project would never have been realized. I also wish to thank my home institution, the University of Maryland School of Architecture, Planning and Preservation for ongoing support. Support from the University of Maryland Clarice Smith Performing Arts Center, Theater Dance & Performance Studies, Art Gallery and Design, Culture and Creativity Program were invaluable. *WaterLines* is dedicated to the human and non-human Chestertown and Chester River communities and residents and their future.

² Mary McCoy, (2015, April 23). “Art Review: *WaterLines: RiverBank*” at the Chestertown Bank Building”, The Chestertown Spy, Retrieved from <http://chestertownspy.org/?s=waterlines>, August 8, 2016.



Creative placemaking advocates argue that art and artists can be active change agents who can contribute to the creation of meaningful, lively places, alter long held negative narratives, and engage residents in envisioning their community's future. It has also become a powerful strategy for integrating the arts into the design of "livable" places. In this article, I will present an example of placemaking within a community in flux, developed by an interdisciplinary creative team that included myself as architect,¹ choreographer Cassie Meador,² videographer Shane Meador,³ composer Aleksandra Vrebalov,⁴ and visual artist/biologist, Jenifer Wightman.⁵ Joined by local knowledge keepers, residents, students and stakeholders,⁶ together we created an ephemeral work entitled *WaterLines: RiverBank*. *WaterLines* provides the experiential basis for two claims: First, it illustrates how the intersection of community members and artists in a Creative placemaking venture promoted opportunities for a cross-fertilization of knowledge and expertise that enriches place, as well as our understandings of place. Second, this example illustrates the potential value of doing such creative placemaking in the context of sites in transition, where there are pressing opportunities to shape and reflect upon the built environment, build new relationships and restructure existing ones.

II. Considering Creative Placemaking, Ephemeral Art and Transformation

Over the last decade, the National Endowment for the Arts,⁷ ArtPlace America⁸ and the Kresge Foundation⁹ have invested in creative placemaking efforts across the U.S. "In creative placemaking, partners from public, private, nonprofit, and community sectors strategically shape the physical and social character of a neighborhood, town, city or region around arts and design activities."¹⁰ These efforts often engage community challenges in times of transition—what I call, "sites-in-flux"—by bringing people who possess different ways of understanding and seeing the world together through "making." Through the efforts of these practitioners and local stakeholders, new possibilities and partnerships can unfold in place.

¹ See: <http://www.roniteisenbach.com>

² See: <http://danceexchange.org>

³ See: <http://shanemeador.wixsite.com/portfolio>

⁴ See: <http://www.aleksandravrebalov.com>

⁵ See: <http://www.audiblewink.com/>

⁶ A large community of generous and talented individuals supplemented, supported and extended the Creative Team's work. I am grateful for their many contributions. **Design Team:** Austin Raimond, Design Assistant; Shane Meador, Projection Designer; Debra Gilmore, Lighting Design Assistance; Ian McClain, Video and Lighting System Engineer; Margaret Campbell, Stage Manager; Jason Mercado, underwater footage. **Dance Exchange Performers:** Dante Brown, and Matthew Cumbie, Dancer and Education Coordinator. **Vault Interviewees & Community Performers:** Martin Connaughton, Biologist and Washington College Professor, Adam Goodheart, Historian and Director of Starr Center for American Experience, Irene Moore, Gospel Singer, Alan Johnson, Waterman & Artist, Ruby Johnson, longtime resident, Armand Fletcher, longtime resident, Leslie Prince Raimond, Executive Director of Kent Arts Council, Kees de Mooy, Chestertown Planner, Alexandra Liebman, Washington College student and the Henry Highland Garnett Elementary School Third grade Class, and their teacher, Flo Terrill.

⁷ <https://www.arts.gov/grants-organizations/our-town/introduction>

⁸ <http://www.artplaceamerica.org/>

⁹ <http://kresge.org/programs/arts-culture/place-based-initiatives>

¹⁰ Markusen, Ann and Anne Gawadma, "Creative Placemaking White Paper," National Endowment of the Arts, 2010. Retrieved from https://www.arts.gov/publications/c?keys=markusen&field_artistic_fields_tid=All August 8, 2016, p.

3.



Within this larger context, temporary artworks have a unique role to play in pivotal moments of flux. Ephemeral works employed as part of creative placemaking efforts can enhance and catalyze a community at critical junctures to create a sense of possibility, spark imagination and stimulate public discourse. Since their demise is planned from the start, these works share the condition of change with their context. Their impermanence allows for exploration, tackling challenges and opening up possibilities by entering territory where permanent public projects might falter. Additionally, ephemeral works *in situ* can quickly create an “in-between” condition, one that allows participants to simultaneously experience the past, present and what could follow. Thus, ephemeral works on sites-in-flux can produce potent, transitional moments and environments that peel away illusions of permanence – revealing places of potential and friction in which the built environment, and the nature of the community that inhabits it, can be reimagined.

Before we dream and build, architects are trained to observe, describe and analyze visual, spatial, and scalar relationships, as well as patterns of place, motivated by the opportunity to effect change. Architects note materiality, connections, color, texture and atmosphere. We observe and imagine how people engage and move through an area, and note prevailing winds, temperature, landmarks, view sheds and solar orientation. Architects consider future plans and our curiosity or sense of responsibility often lead us to unearth the history and stories of a place, perhaps in an interest of “preserving” these stories or erasing them. We try to imagine how our choices and design proposals will alter a place and affect the people who inhabit it.

As architects, we are also trained to bring different (mostly construction related) disciplines together and integrate multiple perspectives and parts to create meaningful places. However, like all disciplines, our discipline’s methods and tools shape and frame what we seek and what we actually “see.” We miss a lot. The French have a term for this, it is called *déformation professionnelle*. Given the complex challenges that communities face, we have learned the value of expanding the team from creative placemaking advocates and practitioners.

I have found that partnering with artists and local stakeholders greatly expands possibilities and opens up new ways of thinking and making. One strategy that we have co-opted from artists is to create temporary environments to shape spatial understanding. While architects adopted installation practices several decades ago from artists, we are now partnering with artists or advancing creative placemaking proposals themselves that blur boundaries between the disciplines of art, architecture and planning. Installations by artists are usually the end product; in contrast, for architects, such works can also be a preliminary step in an ongoing design process. In particular, some of the architect’s installations I researched with Sarah Bonnemaïson for our book, *Installations by Architects: Experiments in Building and Design*,¹ began to anticipate current “creative placemaking” initiatives situated in communities and sites-in-flux.

III. *WaterLines* of Chestertown, Maryland: Employing Placemaking on a Site-in-Flux

WaterLines: Riverbank was a participatory, collaborative ephemeral public installation and performance that I directed in Chestertown, Maryland. It is an example of a multidisciplinary creative team engaging a community in transition through ephemeral placemaking work.

¹Sarah Bonnemaïson & Eisenbach, Ronit, “Installations by Architects: Experiments in Building and Design,” (New York: Princeton Architectural Press, 2009).



WaterLines was commissioned by SANDBOX, Washington College’s “program for creativity and the environment ... fostering collaboration between the arts & science to promote dialogue about the environment.”¹ A nine-month process of collaboration and exploration by four artists (myself, Cassie Meador, Aleksandra Vrebalov and Jeni Wightman) culminated in an exhibition, multimedia installation and participatory dance performance. This shared artistic experience was created in and born of the material of Chestertown; Established in 1706, Chestertown’s once thriving agriculture and fishing industry, coupled with its position on the Chester River, made it a trade anchor on the Chesapeake Bay. A century later, Chestertown is now concurrently the richest and poorest county in Maryland. It is full of culture and pride of place, yet still struggling with a legacy of slavery. Economic and social pressures, ecological degradation, land subsidence and rising sea levels are contemporary threats to this lovely, historic town and its stunning natural environment



Fig. 1: Chestertown’s “façade” upon crossing Chester River. (Photo: Eisenbach)

¹ <https://www.washcoll.edu/departments/sandbox/>



Fig. 2: SandBox storefront gallery. (Photo: Anastasia Laurenzo)

Over the last five years, the town's various stakeholders and cultural institutions have aggressively pursued a multi-prong strategy to protect and build upon its unique cultural and natural heritage, and to proactively address existing and anticipated environmental, economic, social and cultural challenges. This includes seeking ways to increase tourism by capitalizing on history, culture and natural beauty; navigating the development pressure along its rural and river edges the result of an influx of wealthy retirees; elevating and marking the African-American community's history; addressing river pollution from nitrogen and phosphorus runoff; and planning for anticipated effects of climate change—water rising, coupled with land subsidence. The community is striving to adapt and envision their future, in many cases employing art, design and culture as part of their efforts.

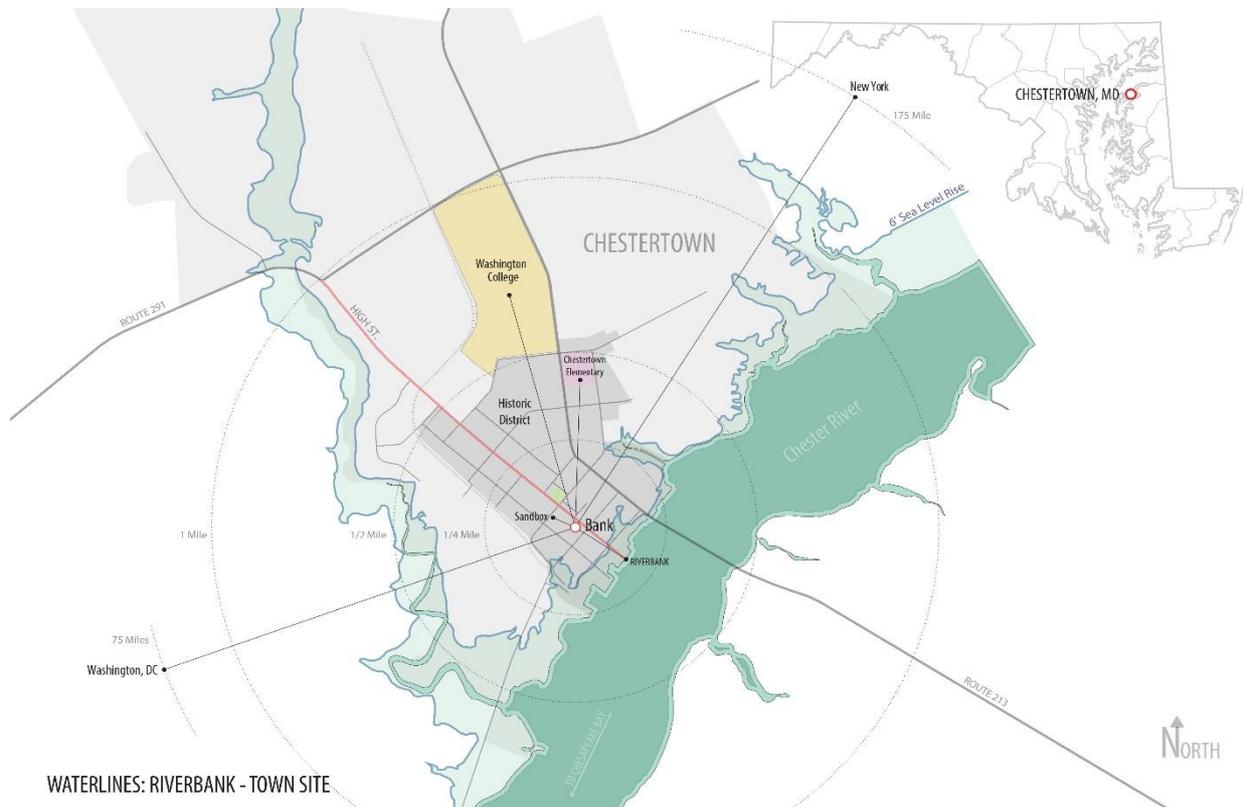


Fig. 3: Map of Chestertown and Chester River, noting locations of key partners. Light green indicates expected flooding due to sea level rise. (Diagram: Austin Raimond)

WaterLines: RiverBank explored the ongoing exchange between the built and natural environment and the meaning/values people deposit and draw from their locale. Seeking to highlight the critical exchange between the town and its river, *WaterLines* underscored this connection by situating the installation in the vacant Chestertown Bank and creating a performance that processed from the bank to the Chester River. Inspired by formal, metaphorical, natural, historical and cultural waterlines, such as the weir posts, boat shadows, and social divisions, *WaterLines* sought to draw out ideas and intersections of cultural, economic, and ecological wealth, especially in relation to Chestertown, the Chester River and the Chesapeake Bay. The bank was a concrete reminder of the town's critical relationship with the river and its natural environment. Chestertown was founded on the wealth of the river and *WaterLines* shed light on how that relationship evolved with time.

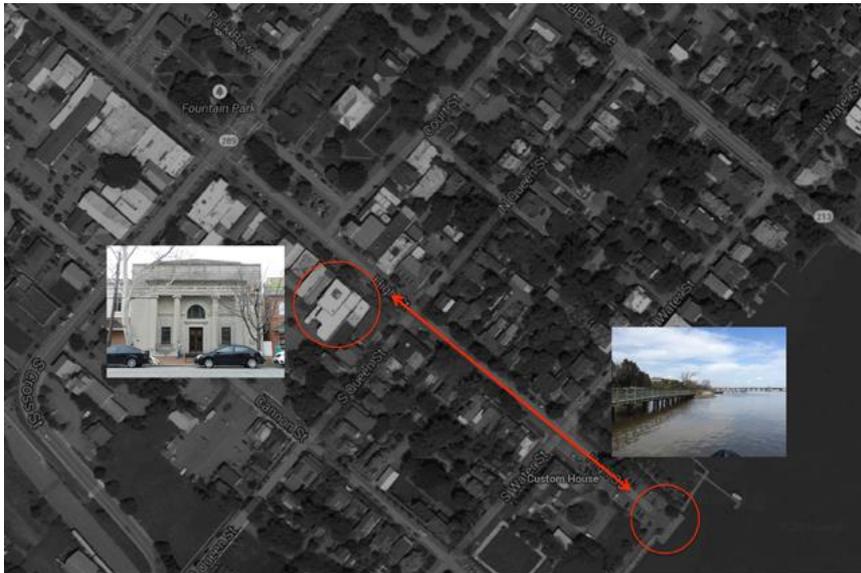


Fig. 4: *WaterLines:RiverBank* explored the ongoing exchange between town and river. *WaterLines* linked the vacant Chestertown Bank, symbol of wealth and culture to the River. Participants walked from the Bank down High Street, past the Custom House to the river's edge. (Concept: Eisenbach Sketch: A. Raimond)

Within the installation, the expansive volume of the banking hall contrasts with the emptied vault, whose space and contents are intimate, detailed and compressed. Withdrawn from the vault are the objects, mementos, photos and mediums of exchange, such as stocks, mortgages, birth certificates, and jewels— condensed, abstracted and extracted placeholders held separate from the lived world and the passage of time. The vault is reconceived as a place of close observation, possibility and reflection upon the river and what is truly valued. The immersive, atmospheric experience celebrates the architecture of the bank and the life of the river. It encourages reflection upon the rich and complex relationships between human action, culture and the built and natural environments, and the need to take action collectively to address the changing relationships sparked by climate change and ecological degradation.



Fig. 5: Chestertown Bank façade. (Photo: Zachary Z. Handler)

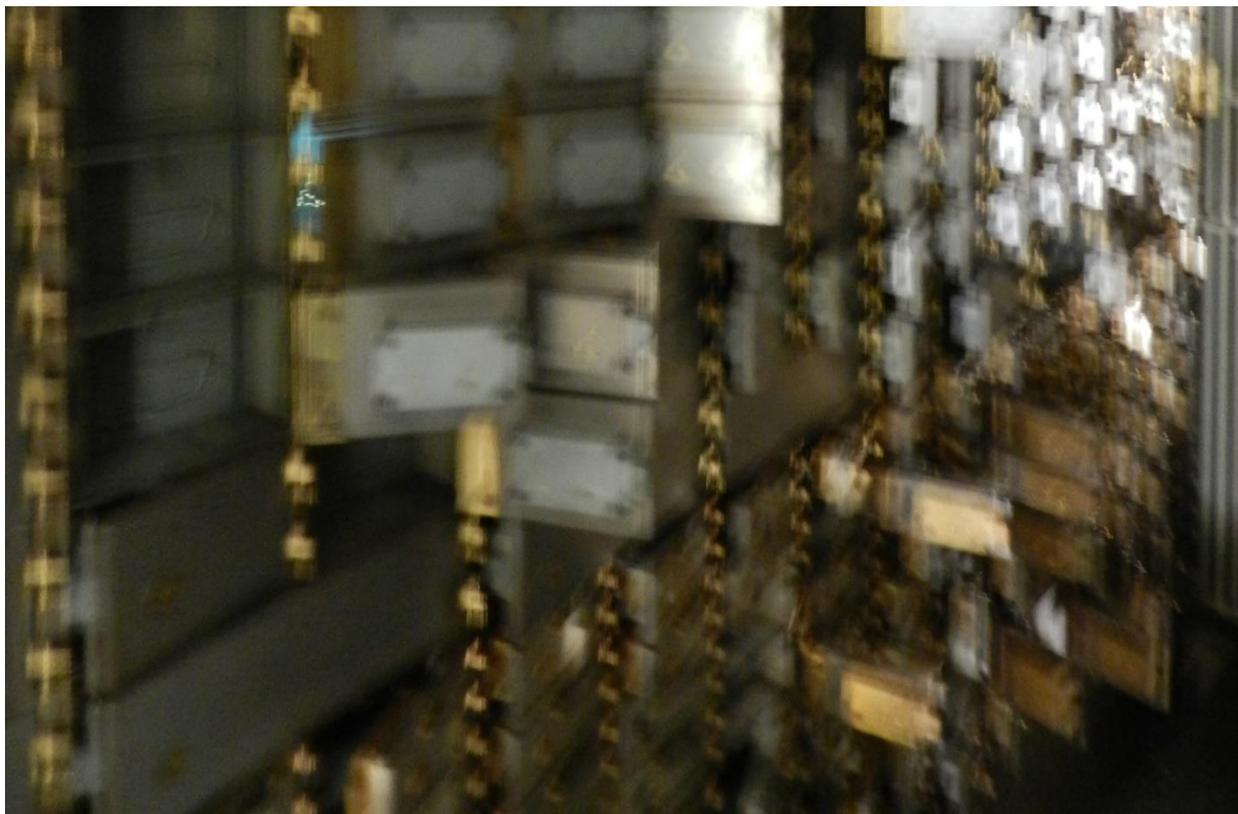


Fig. 6: Unlocked Safety Deposit Boxes in emptied vault. (Photo: Eisenbach)



V. Actors at Waters' Edge: Waterlines' Contributors

Each participant, whether local stakeholders, residents or visiting artists, brought deep knowledge and differing perspectives that contributed to the joint effort to understand and represent Chestertown as a place. This section will emphasize the unique contributions of each participant and in doing so, illustrate the claim that artistic and community voices expand what we as architects, and others, “see.” These collaborations enrich our efforts to envision the challenges, the potential and the creation of meaningful places.¹

The Community

Chestertown has pursued grants and designations that reflect the value it places on its heritage, and to chart a positive future for its residents. This includes a National Endowment for the Arts funded public arts master plan, an Arts & Entertainment District designation for the historic downtown and a Maryland Sustainable Community certification. For the *WaterLines* project, local third graders and their teachers, elders and college students participated in the events. This immersive experience created opportunities for participants to activate their senses and observation skills, to test spatial ideas, and gather verbal, visual and gestural stories. *WaterLines* facilitated emerging relationships by creating its own “community”—young and old from different walks of life and voices who participated in its making.

Biologist and visual artist Jenifer Wightman expanded the temporal and physical scale of our focus beyond human dimensions of time, space and perception by enabling us to envision microbial life at the water's edge. Wightman creates Mud Paintings from local material. After hearing from community researchers, she collected mud from “freshwater, brackish, and saltwater mud sites along the Chester River to show the range of microbes that make their livelihood along the changing salt conditions of the same river.”² Jeni placed this material that naturally included bacteria, food and water, into four rectangular acrylic vessels, one for each site. As the microbes metabolized their environment and synthesized pigments, these living paintings slowly changed. On view in the Sandbox storefront gallery from January thru June, the Mud Painting's transformations indexed the ongoing microbial lifecycle, making their presence and their interplay with the environment visible.³

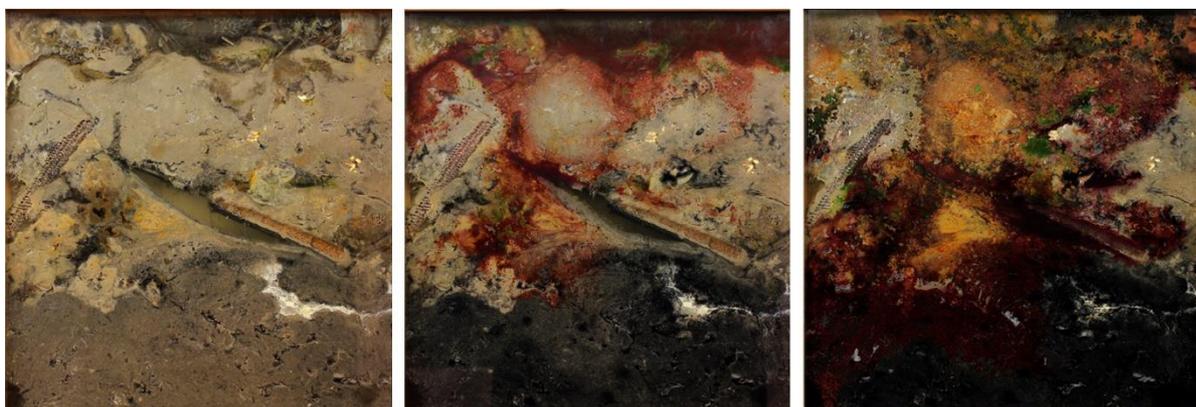


Fig. 7: Chestertown. Image dates left to right: January 30, 2015, February 19, 2015, April 25, 2015. (Copyright Jenifer Wightman.)

¹ See Eisenbach's blog for info on design process: <https://waterlinesjournal.wordpress.com/>

² Jenifer Wightman, as quoted in Case, Andrew N, (2015, November 10). “*One Community and its River: An Artist Roundtable*,” [Digital article]. Retrieved from <http://edgeeffects.net/river-art/>, August 8, 2016.

³ See: <https://www.washcoll.edu/departments/sandbox/distinguished-visitors/WaterLines/mud-paintings/>



Over the course of the year, several Washington College faculty joined the core team, including Washington College Biologist Martin Connaughton.¹ Martin has been studying the Chester River fish population and their habitat for over 17 years. One of many wondrous things we learned from him was that fish vocalize. Fish make and hear sounds through three methods: bone rubbing of the pharyngeal jaws, vibrating the bladder wall muscles, and amplification of sound using air in the swim bladder. Martin's recordings and mimicry of the fish sounds were incorporated into the audio environment produced by composer Aleksandra Vrebalov and the [UnderWater](#)² vault video created by Shane Meador.

Aleksandra Vrebalov collected natural and man-made sounds over the yearlong residency. Attentive to everyday sounds, Aleksandra was able to uncover the sonic character of Chestertown on long walks through the city, through interactions with members of the Washington College community and by attending Sunday services at several houses of worship. She took note of the aural environment—water, birds, boats, the air—capturing them and using them in her [sonic work](#)³ to replace the traditional soundscape of registers and business transactions one would expect to find in the bank. These indigenous sounds, which Aleksandra refers to as “subliminal sounds,” anchored the participants, invigorating and reconnecting them to their environment. Reflecting upon the work, Vrebalov offered, “I thought that bringing the sounds of the river and the natural environment of Chestertown into a performance space would help show how we relate to everyday sonic experiences around us. They connect us to our environment, but often pass unnoticed because of their regularity and commonness. Sounds are identity and memory markers, aural signatures of a place. By inducing a different aural experience, we hoped to symbolically show the transition that the town has been going through. By playing with these two aural worlds, my hope was to affirm a sense of belonging and stability amidst the change.”⁴

Dance Exchange Artists Cassie Meador and Matthew Cumbie led several *Moving Field Guide*⁵ workshops with local “knowledge keepers”⁶—individuals who hold the history and stories of a place. Other members of the creative team, local children and their teachers, elders, and Washington College students and faculty participated as well. Combining an artistic and ecological approach to learning, *Moving Field Guides* provide people across generations an opportunity to gain a deeper understanding of and connection to their local environment and community. Launched in 2010, *Moving Field Guides* (MFG) created opportunities for participants to activate their senses and observation skills, to test spatial ideas, gather verbal, visual and gestural stories, and build relationships. In Chestertown, MFG workshops were held at two sites at the water's edge—a remediated toxic site and the High Street landing—underscoring both embodied experience and the presence of nature and culture.

¹ “Underwater” Video, in which Prof. Connaughton imitates the fish of the Chester River.

<https://umd.box.com/shared/static/wa1qgd44umdhfhun4btj1cfw9gcrdr9.mov>

² *UnderWater* Video: <https://umd.box.com/s/wa1qgd44umdhfhun4btj1cfw9gcrdr9>

³ Listen to Vrebalov's piece: <https://m.soundcloud.com/aleksandravrebalov/waterlines>

<http://www.aleksandravrebalov.com/Aleksandra/WaterLines.html>

⁴ Aleksandra Vrebalov as quoted in Case, Andrew N, (2015, November 10). “*One Community and its River: An Artist Roundtable*,” [Digital article]. Retrieved from <http://edgeeffects.net/river-art/>, August 8, 2016.

⁵ <http://danceexchange.org/projects/moving-field-guide/>

⁶ I am grateful to Cassie Meador for her introduction of the honorific, “Knowledge Keeper.” This title beautifully captures the wisdom and insights held and generously shared with us by the people of Chestertown.



Fig. 8: Moving Field Guide on remediated waterfront site (Photos: Sean Meade)

Collaboration on the River: Co-creating and Diversifying the Voice

As the Artistic Director and installation designer of *WaterLines*, my role was to spatialize the content and spark critical exchange between the river and the town, which for centuries, has lived at the heart of its ongoing metamorphosis. I strived to weave together Chestertown’s histories with the everyday in order to transport people into each other’s experiences, and leverage familiar places to convey unfamiliar ideas. Engaging multiple contributors from the community allowed the process to be creative, participatory and empowering; this was a new experience for many people, acting as contributors or “makers.” The integration was also achieved through the careful orchestration of the ideas and contributions of the creative team and the creation of a temporal, spatial and conceptual scaffolding that became the installation and performance. Our work in Chestertown grew both sequentially and simultaneously with each other’s ideas and influence. Through an ongoing dialogue with the creative team and our sponsor, SandBox Executive Director Alex Castro, I sought to conceive and choreograph a cohesive vision built from each person’s contributions, one that underscored the richness, complexities and challenges that Chestertown’s location on the Chester River presented and offered a powerful aesthetic experience to participants.

Prior to the performance and installation, with the help of videographer Shane Meador, Cassie and I conducted interviews in the bank’s abandoned vault, asking local knowledge keepers to describe their connections to their river and what they would place in the vault today for safekeeping. During these interviews residents provided stories and songs¹—what they valued most about the past, present, and future of the Chester River and the communities that surround it. We heard tales of fish calls, of water rising, of flooding, of rugs jumping from water coming from under the houses, of floating popsicle sticks down the river, and of a desire for the African American and Caucasian communities to live together. After they spoke, Cassie “taught” each individual the way their hands told their stories. Close-ups of the community members’ gesturing hands were recorded during their interviews; the resulting video² was screened in the vault during the final installation.

¹ Audio recording of Miss Irene Moore singing in the vault: <https://umd.box.com/s/joxmcirvtnw2fnwiycagksj35up6kknt>

² Video of interviewees hands “retelling” their stories: <https://umd.box.com/v/WaterRising>



Fig 9: Interviewees included: Biologist Martin Connaughton, Gospel Singer Irene Moore, Waterman Alan Johnson, long-time residents Ruby Johnson and Armand Fletcher, Arts Activist Leslie Prince Raimond, Planner Kees de Mooy, and Historian Adam Goodheart. (Video Stills: Shane Meador)

What are the most compelling questions to ask considering the nature of the bank and the safety deposit boxes? We tried to hold space for the small, personal story as well as the big, shared story within these questions:

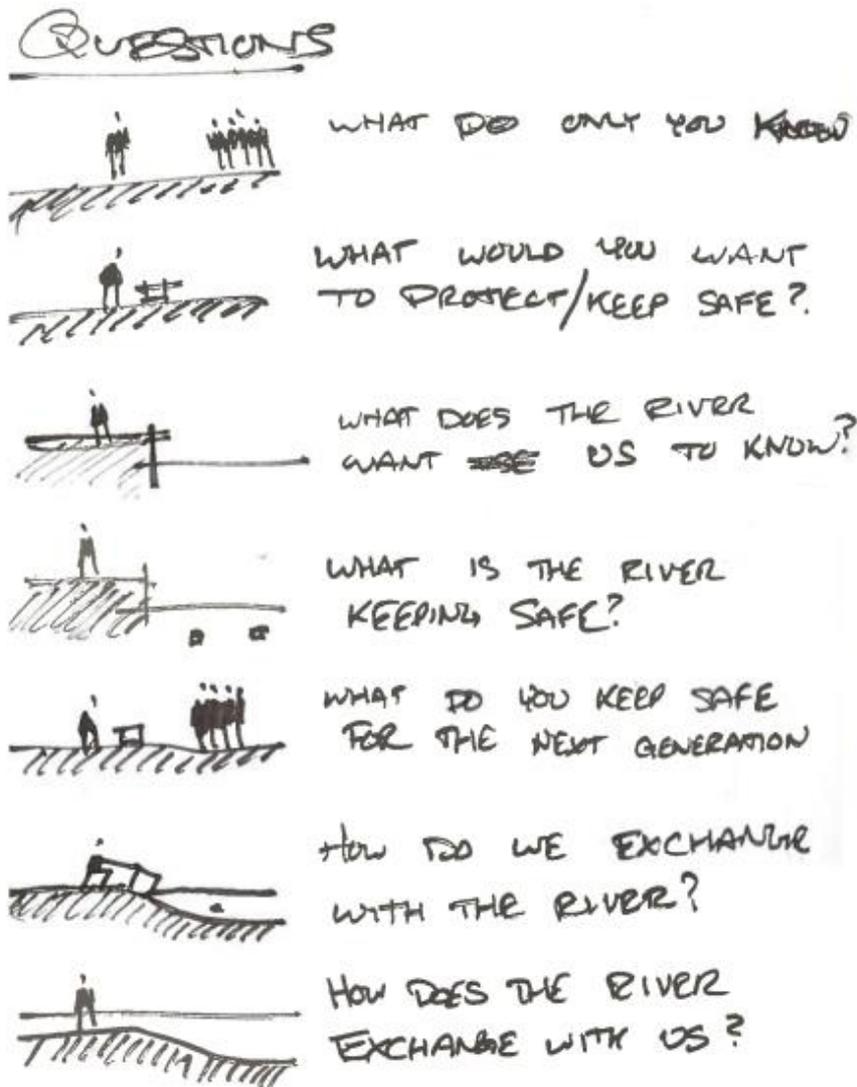


Fig 10: Questions for stakeholders developed with Cassie Meador and Matthew Cumbie. (Diagram: A. Raimond)

V. Waterlines Realized

The *WaterLines* Installation and Performance linked the former Chestertown Bank and the Chester River, underscoring the ongoing exchange between nature, culture, and labor.



Fig 11: *WaterLines* Cycle. River Water collected and placed in the Bank Vault in the morning was later returned to the River in the evening by performance participants. (Diagram: Eisenbach & Russell Holstine)

Morning: Collecting & Depositing Water

At the intersection of High Street and the River's edge, third graders from Henry Highland Garnett Elementary School learned about the river from biologist Connaughton, historian Goodheart, and waterman Johnson. Led by Dance Exchange artists, Matthew Cumbie, Dante Brown and Cassie Meador, students had an opportunity to create a dance from the shared stories and carry water from the river to help build the installation in the bank. For many children, this was their first time at the river and their first time in a bank vault. At the end of the field guide, the children carried small bowls of river water and carefully placed them in the vault's empty shelves for safekeeping and sharing.

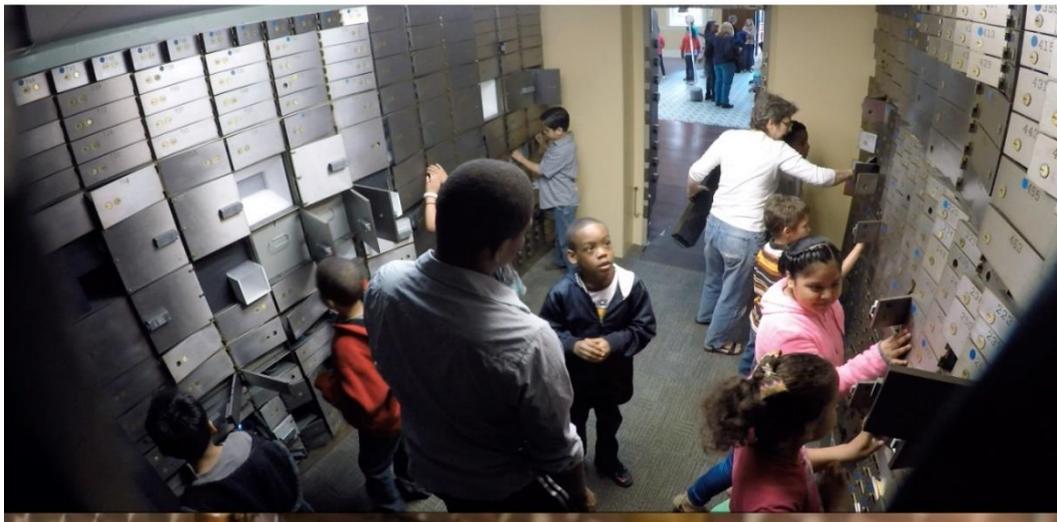


Fig 12: Children deposit bowls of water into the vault. (Photos: Eisenbach)



WaterLines Installation

The sonic, environment of *WaterLines: Riverbank*¹ transformed the vacant, neo-classical building of the Chestertown Bank into an immersive, meditative experience that reflected the town's river setting and cultural history, and the potential impact of the erasure of the existing boundary between water and land.

The former safe deposit boxes were removed from the vault and converted into lanterns; placed on the street, they signaled the *WaterLines* event occurring. Upon crossing the bank's threshold into the lobby, one felt as if one was wading through another medium. The cavernous echo that once filled the spacious bank were replaced by softly layered sounds—fish calls, cicada chirps, Morse code, wordless human song—inviting the visitor to turn inward and consider another reality, one in which seasons, people and nature merge, joining past and future with the present. Emitted from luminous watery acrylic totems, this evocative sonic material was compiled by composer Aleksandra Vrebalov, made from recordings of people and nature she captured during visits to Chestertown.

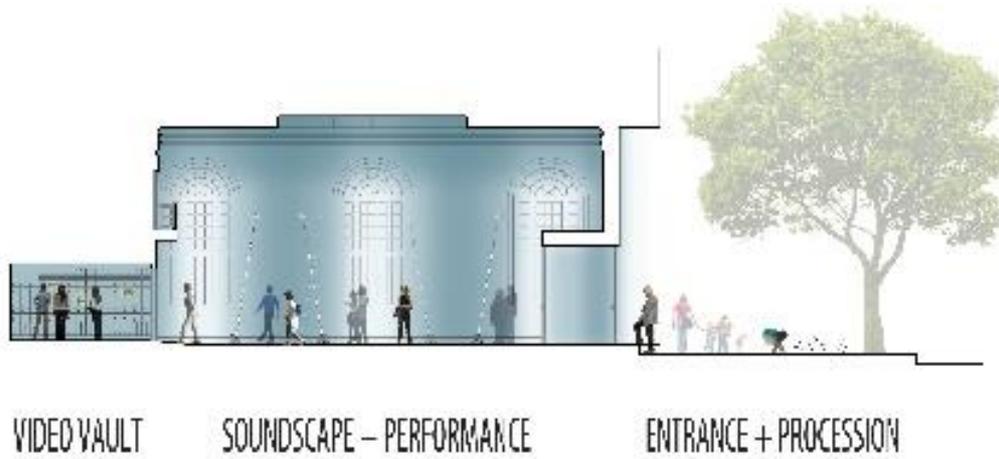
Flickering images of water entered the hall through portals mediated between inside and outside. These images landed upon the banking hall floor, the walls, and were projected through the bank president's offices curtains. *WaterLines* began as dusk turned to dark, daylight followed by illuminated images entered through the buildings' neo-classical windowpanes. It was a light of slowly moving, slowly shifting images of the Chester River water and time lapse of Jeni's Chester River Mud Paintings changing over time. Locally shot videos by Shane Meador presented scenes of Chestertown's waterfront, drainage pipes and marshes, the banding and release of birds at Washington College's Bird Observatory, underwater sights and sounds.

In the lobby, the intimate experience of the water is writ large, a reminder of the water's edge, and the unseen, ever-changing infinite life in a finite world. Here one walked among and within these images. Depending where one stood, the images fall upon us and our shadows block them from reaching the bank's surfaces.

Within the vault were hundreds of illuminated bowls containing the river water collected and deposited earlier that day by the children, the five intimate video portraits that capture traces of shared stories, memorable images and ways of knowing the river as material, environment and source of sustenance and wealth.

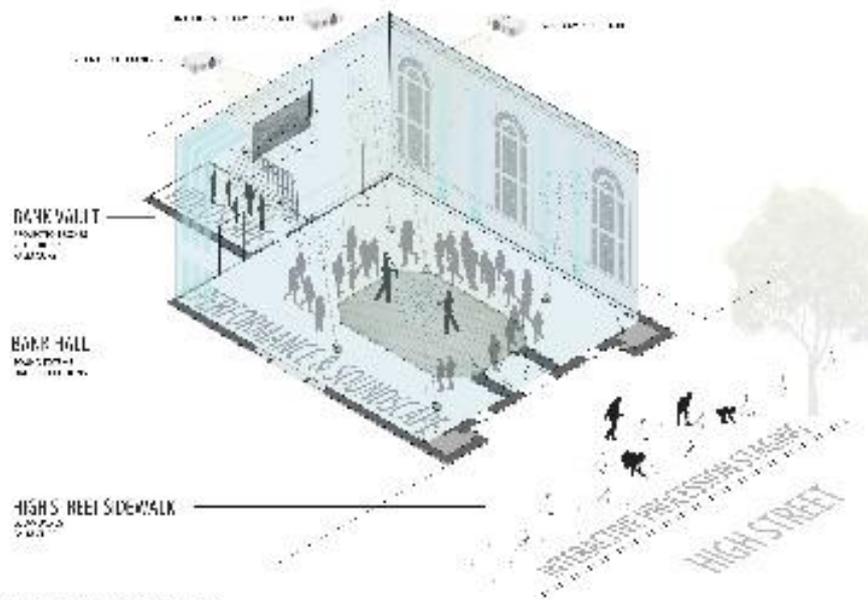
What does it mean for us to bring the river into the bank now? Are we underscoring its value? Are we raising the question of stewardship? or the fear of the water rising and taking over the "cultivated" landscape?

¹ Video of WaterLines installation/performance: <https://youtu.be/OAaBZydTudw>



VIEWER: EAST - BANK - SECTIONAL - 00000000

Fig 13: Bank cross-section. (Drawing: A. Raimond)



VIEWER: EAST - BANK - 00000000

Fig 14: Installation Elements: Video Projections & Sonic Totems (Drawing: A. Raimond)



Fig 15: Safety Deposit Boxes *cum* lanterns and small bowls of river water lined High Street to mark the occasion. (Photo: Zachary Z. Handler)

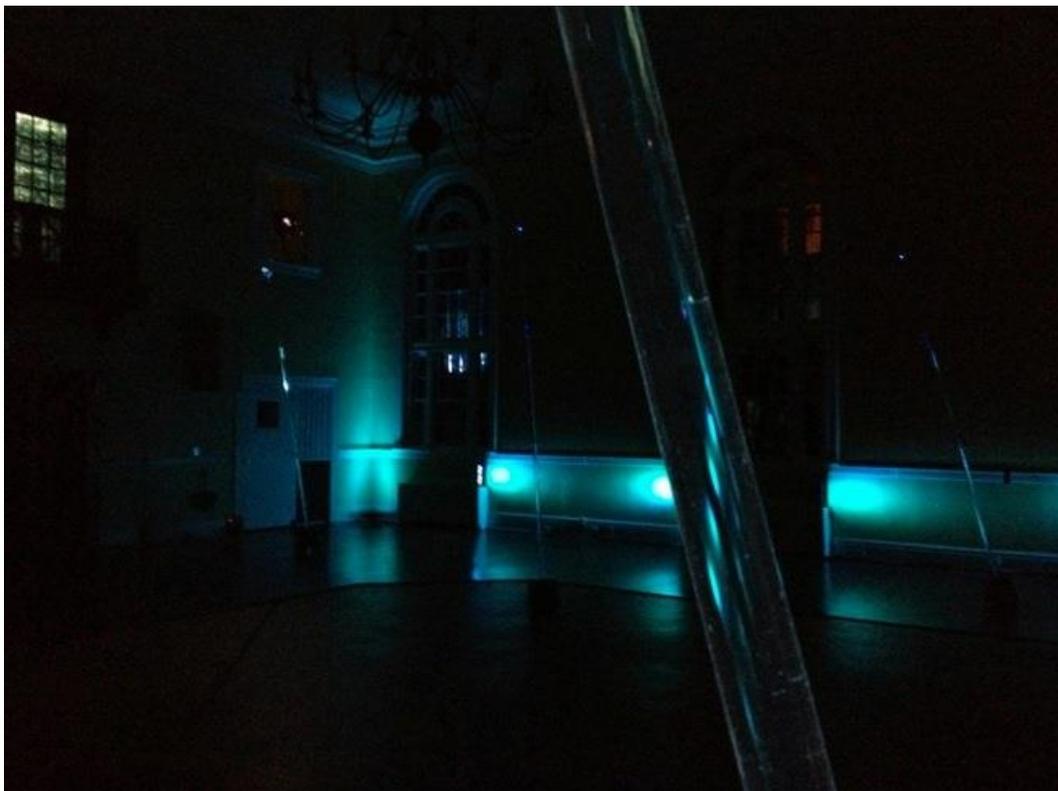


Fig 16: “Upon crossing the bank threshold and entering the banking hall, you step into a non-verbal “ur” space, one that heightens sensations and is simultaneously disorienting and reorienting. The luminous mercurial poles (Eisenbach) and the sonic installation (Vrebalov) with its soft multiple layers surround and invite you to turn inwards and consider a reality in which the seasons, the people and nature, the



coded calls of fish, cicadas, Morse code, the past and the future merge into the present..." WaterLines Handout. (Photo: Aleksandra Vrebalov)



Fig 17: Bank Lobby: Video Projections & Sonic Totems (Photo: Zachary Z. Handler)

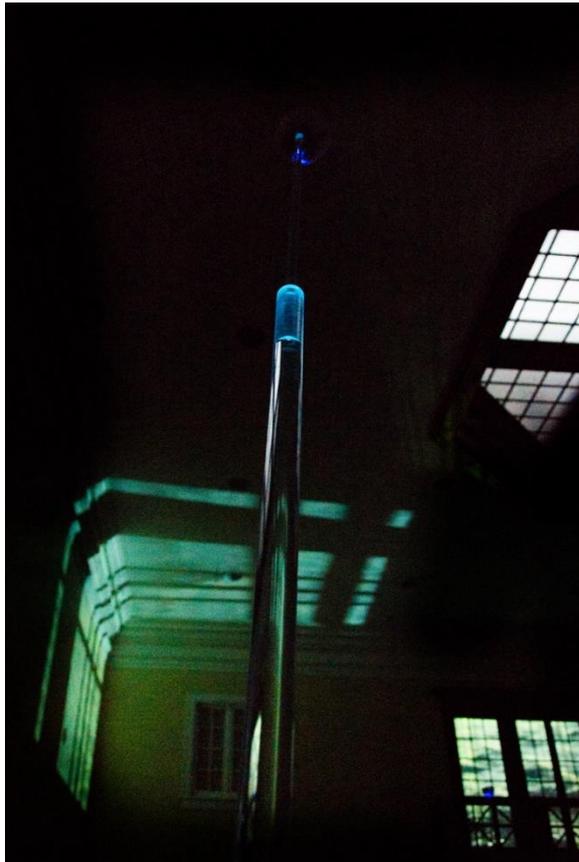


Fig 18: Lobby Detail Eisenbach's totems cupped tiny speakers that lofted Vrebalov's soundscape into the atmosphere. (Photo: Zachary Z. Handler)



Fig 19: Vault: Bowls of river water, intimate videos, and lanterns replaced the safety deposit boxes. (Photo: Brian Palmer)

WaterLines Performance: Return

On the second night of the installation, a dance performance concluded with a public procession from the bank to the river's edge. The dance began in the vault with the removal of a projection lantern by Dante and Matthew and moved into the bank's lobby where the community watched. As the dance ended, a procession out of the bank was led by the same community members who provided stories about life along and within the river. Water collected earlier in the day by the children was carried by the audience and returned to the river, reinforcing the town's deep connection to the river, and encouraging a greater understanding and sense of responsibility for this important natural resource.



Fig 20: Performance from above. (Photo: Brian Palmer)



Fig 21: Chestertown residents surround Dancers, Matthew Cumbie and Dante Brown as they move enveloped by the water/mud video projection. (Photo: Zachary Z. Handler)



Fig 22: Dancers framed by a sound totem. (Photo: Zachary Z. Handler)



Fig 23: As the dance performance began, people were invited to join, leaving the bank holding lanterns and cups of river water, as Gospel Singer Irene Moore led the way singing. (Photo: Zachary Z. Handler)



Fig 24: Audience and performers mediated land and water, returning the river water collected earlier in the day to its source. (Photo: Zachary Z. Handler)

VI. Immediate and Lasting Effects of Waterlines

My initial understanding of a waterline was an edge between land and water that one viewed on a map. As each artist and knowledge keeper contributed their voice, my two-dimensional image of the waterline gained dimension and complexity. I began to understand the richness of this condition; that the land did not, in fact, stop at the waterline, but continued under the water, and that there were worlds and ways of life that we could not perceive on our own (microbes, fish) that were ever-present. The waterline could also be seen as a line literally and symbolically connecting the life and culture on land with that in and above the water, connecting water/ecology to land/economy and labor/culture. By weaving these different waterline meanings, our work deepened dialogue about the river and land, increasing awareness of their interdependence.

Bringing different community groups together through the creative process provided a new pathway for surfacing and addressing the challenges Chestertown faces, allowing the project to be more supportive and responsive. Our work across the different human and non-human communities deepened awareness of one another's knowledge and viewpoints. Townspeople were observed interacting and engaging during the final installation, and post-project interviews demonstrated a significant impact. Washington College lecturer Andrew Case noted that *WaterLines*, "brought people together who, although they live and work in very close proximity, rarely share cultural events... like many places with a history of segregation, most of the town's events are divided, but this one decidedly was not."¹

¹ Andrew N. Case, Washington College Postdoctoral Teaching Fellow, post-event questionnaire.



Our primary goal, to ‘strengthen connection between people and place,’ was successfully demonstrated through participants’ comments in process and during the final installation/performance. Mary McCoy, a local artist and writer who **reviewed** the project wrote, “For those of us who have lived in this area for many years, “*WaterLines*” was saturated with memory and love—memory of the buildings, businesses, people and seasons that have come and gone, and love for the river and its marshes, shorebirds, shifting tides, and halcyon days of sunlight on the water. Such feelings are warm and joyful but also fraught with anxiety as the ecological challenges to our beloved home become more obvious.”¹

WaterLines also improved the community’s connection to and knowledge of the river and its non-human life. This success was demonstrated through a survey and post-project interviews with participants. Third grade teacher, Flo Terrill, remarked that the experience “brought a deeper understanding of the importance of the river to our students/community of Chestertown.”² Sean Meade, Eastern Shore Native and SandBox Assistant stated, “I believe that I gained a greater understanding of the local communities, and the investments that previous generations made in the River, and its economy and culture. Which are now sadly absent.”³

As visiting artists and designers, our roles were multi-focal. By playing the part of storyteller, organizer, visionary and weaver, we created a shared experience that drew new waterlines and underscored old ones. We shaped perceptions and heightened sensitivity to existing relationships of the river and the town, through a spatial architecture that choreographed energy, material, space and time (gesture, image, sound, and story). Sometimes, the transformation of a place by altering its purpose, character and thus our experience through art is, in essence, an act of renewal and possibility. In Chestertown, fresh relationships, potential dialogue and shared memory endure as the ephemeral installation fades from memory and the work continues to shape this place.

Despite these immediate impacts, *WaterLines* has yet to realize its full value. *WaterLines* offered an opportunity for individual participation and shared reflection about, “place as a work in progress,”⁴ and Chestertown and the Chester River in particular. This may yet happen. Time will tell. Perhaps, it is only possible to gauge such work from some future vantage point.



Fig. 25: Biologist Martin Connaughton and Gospel Singer Irene Moore. (Photo: Zachary Z. Handler)

¹ Mary McCoy, “Art Review: “*WaterLines: RiverBank*” at the Chestertown Bank Building,” *The Chestertown Spy*, August 2, 2016. <http://chestertownspy.org/?s=waterlines>

² Flo Terrill, Henry Highland Garnett Elementary School Third-Grade Teacher, post-event questionnaire.

³ Sean Meade, SANDBOX Program Assistant, post-event questionnaire.

⁴ I am grateful to Cassie Meador’s for sharing her concept of “place as a work in progress.” Her thinking complemented and extended the notion of a “community and site-in-flux” that I have been developing and helped me conceptualize a place for our work in this particular moment in Chestertown’s time.

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Barbican on Solitude: (a) Walk(ing) Through

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“You and one companion are
audience enough for each other,
so are you for yourself.
For you, let the crowd be one,
and one be a crowd.”¹

Abstract

To walk is a verb – the body’s movement. *To walk* is to traverse a specific surface. It is a link between two points, a path generally related to a beginning and to an end. The process of being actively present, attentive and open to the potentialities catalysed by the act of walking is the starting point of the present essay. *Can walking be integrated as an artistic tool to see through contemporary urban environments? Can walking be investigated as a methodology to discover specific and potential elements present in our everyday life routines? Can walking be conceived as a critical and artistic practice?*

In order to unfold these questions, the present article correlates walking practices developed by artists and architects (from the Situationist International to Contemporaneity), with a personal *lived time experience* [Jeremy Till, 2009] generated by the act of walking through the Barbican Estate in London.

Keywords: *W(a)nder; Gleaning; Mapping; Solitude; Ar(t)chitectural Practice.*

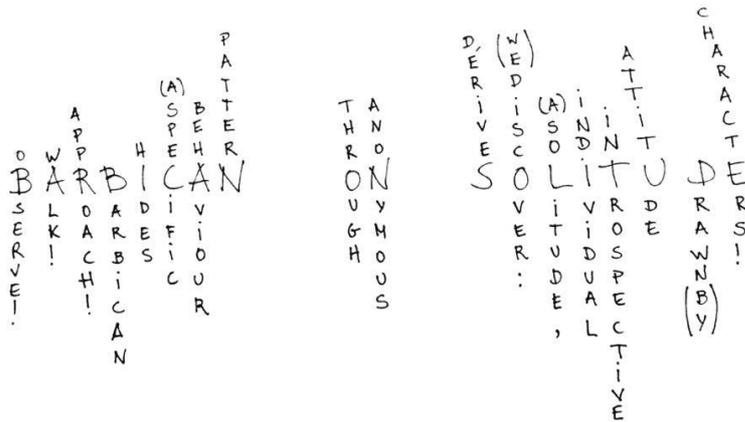


Fig. 1: *Barbican on Solitude* - Concept Mesostic.

Introduction:

The Barbican is a Modernist Estate developed and designed during the 1960s by Architects Chamberlin, Powell and Bon as part of a utopian brutalism vision in London, with the main goal to transform an area devastated by bombings during World War II into a high-density mixed residential complex. The Barbican’s design concept emerged from the intention to create a *city inside the city*, a permeable *mega block* that it would be simultaneously distant and close to its context: London. Distant in the sense that this *mega block* is generated from a modernist idea of creating a car-free public podium elevated above the city’s street to detach the Barbican from London’s ground dynamics. And close in the sense that this same podium invites residents and visitors to walk through the place and traverse it in several ways. Thus, the Barbican’s public space is recognized as highly related to the concepts of passage, permeability, transition and fluidity — concepts which prevail and invite its users to walk, as Louise Lemoine observed when filming *On Barbicania* documentary: “I think if I visualize the Barbican, if I try to visualize it...as connections and connections of dynamics, of fluxes and dynamics of people walking...and it’s true that we kept walking for the whole month.”²

Barbican on Solitude: (a) Walk(ing) through uses the Barbican as a case study to develop a practical and theoretical research where the act of walking is explored and structured based on four main concepts: *Walking as a Process of Solitary W(a)nder*; *Walking as a Tool*; *Walking as an Ar(t)chitectural Catalyst* and *Walking as a Practice of Interconnection*.

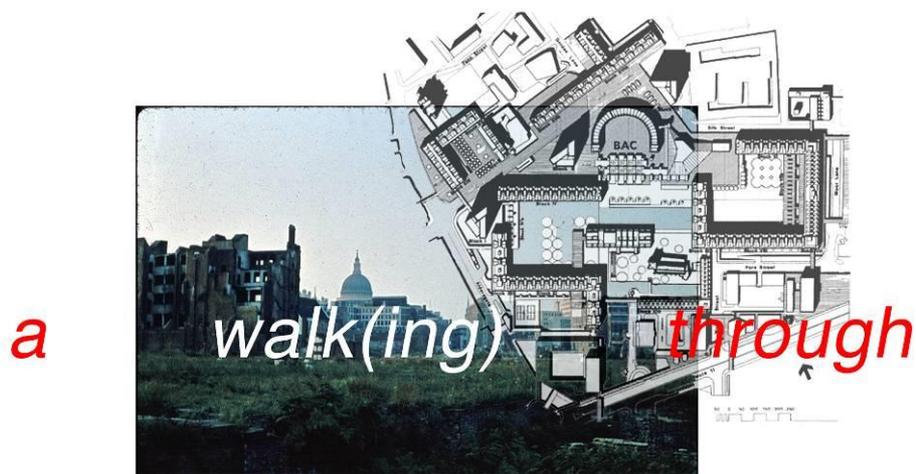


Fig. 2: *Time in the Barbican* – collage (overlap between an old photo from the site devastated by World War II bombings awaiting construction and the 1960 Barbican's design scheme).

1. Walking as a Process of Solitary W(a)(o)nder

Walking as a Process of Solitary W(a)(o)nder proposes to explore the act of walking as a solitary way of engaging with dialectical images and allegorical compositions that coexist in the Barbican. Nonetheless, to accomplish this proposal it is crucial to understand what is behind hundreds of walks I made through the Barbican Estate between July 2014 and October 2015. Moreover, it is necessary to grasp the meaning of these walks as the starting point of my own research on the Barbican. *How did I start the process of walking through the Barbican?*

This process started as a lunchtime journey, a gap between my own working hours as an architect in London. For more than a year, almost everyday, I walked, explored and crossed alone the Barbican's labyrinthine public space, formed by several passages, pavements, bridges, gardens, artificial lakes and plazas, located at different levels. Walking through the Barbican happened not only due to the closeness between the architectural practice where I was working (Old Street, London) and the Barbican itself, but also because of my personal curiosity about the potentiality inherent to this place.

Following this contextualization, this section discloses the act of Walk(ing) in two main complementary aspects: (1) *as a process of w(a)(o)nder*³ that is both *indeterminate and specific*; and (2) *as a solitude journey*.



“wander: (verb)
to walk slowly around or to a place,
often without any particular sense of purpose or direction.

wonder: (verb)
to experience a feeling of amazement and admiration caused
by something, a desire to know something;
to feel curious, to feel doubt.”⁴

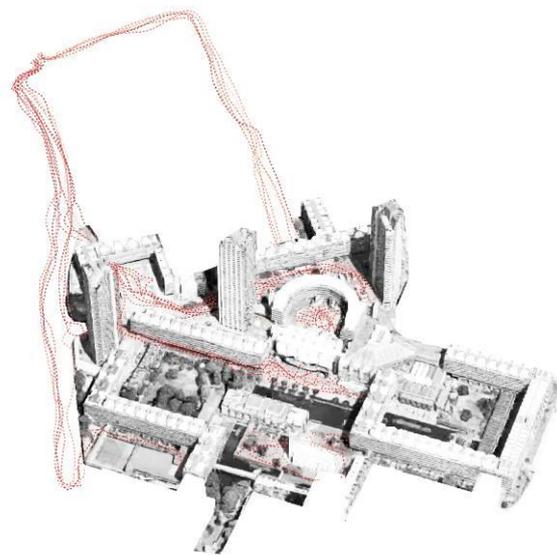


Fig. 3: *The Barbican's w(a)(o)nder.*

(1) ***Walking as a process of w(a)(o)nder***, investigates a walking methodology that accepts the coexistence of both wondering and wandering through a specific place. *Wondering*, as the stimulus that incited the act of walking through the Barbican, driven by a personal curiosity and fascination. *Wandering* as a walking method that uses the Barbican as a free canvas in order to experiment a more flexible and fluid walk.

Wandering has been a concept rooted in theories since the beginning of the 20th century: from Walter Benjamin who explored the *Flâneur* drawn from the poetry of Charles Baudelaire, to the Surrealist *deambulation*, and the Situationist *dérive* founded by Guy Debord: “The *dérive* entails playful-constructive behavior and an awareness of psychogeographical effects; which completely distinguishes it from the classical notions of the journey and the stroll.”⁵



If Debord experimented the concept of *dérive* as an operation that accepts chance in order to analyse urban environments, relying on the observation and creation of psychogeographic maps, my own understanding of *dérive* investigated through the Barbican is defined as being open to understanding the possibilities and discoveries, an acceptance of an uncommitted walk/observation through the surroundings offered by the Barbican's complexity. In doing so, it was possible to integrate *dérive* as a catalyst that recreates a "spatial story" (or "walk story" as I prefer to name it) between my body and the Barbican, thus allowing a better understanding of this specific context. As Jane Rendell (2006) explains: "The spatial story acts as a theoretical device that allows us to understand the urban fabric in terms of narrative relationships between spaces, time and subjects."⁶

Moreover, *W(a)(o)nder* is also acknowledged as an ambivalent process of walking: it is *indeterminate* because it acts as a free *dérive*, an uncommitted open journey; and also *specific* because it focuses on, approaches and observes a specific canvas, the public space of the Barbican: "The rational and the irrational, conscious and unconscious meet in the term *dérive*. Constructed wandering produces new territories to be explored, new spaces to be in-habited, new routes to be run."⁷

(2) ***Walking as a solitude journey***, investigates the sensations created between my body and the Barbican's morphology toward a solitary *dérive*.

Assuming the Barbican as a free canvas, it was experimented an uncommitted journey of discovery, which was focused in understanding and engaging with the sensations created between my body, the Barbican's very complex pedestrian system and its diverse transitions of spaces and ambiances. As a consequence of this *lived time experience*⁸, feelings of refuge, protection, loneliness, anonymity and introspection created my own "walk story" about the Barbican.

However, it is essential to remember that the creation of these personal sensations produced in the act of walking through the Barbican is highly related to its morphology and public space composition. The Barbican's pedestrian public space was designed as a podium elevated above London's noisy ground, producing a feeling of immersing oneself into another layer the city, a more protected one. Furthermore, this feeling of protection is also emphasized not only by the Barbican's site memories, as this residential complex coexists today with the ruins of London's medieval wall; but also because of the particularity inherent in the definition of the word *Barbican*, which directly relates to a defensive system: "the outer defence of a castle or walled city."⁹ This relationship between the current Barbican's morphology and the sensations of protection experienced in the act of walking alone opens up a wider debate that questions: *Is this a common feeling toward this space? Or is merely a personal one?*

Walking as a Process of Solitary W(a)(o)nder recognizes the openness of walking as a *dérive* process that anticipates unknown prospects. Nevertheless, *how do we explore the possibilities offered by the process of walking? How do we explore walking as a tool?*

2. Walking as a Tool

Walking as a Tool discloses three walk operations developed over time in the Barbican: *observing*, *gleaning* and *mapping*. *Observing* encompasses a method using the body as a tool, where the



eye is trained to become attentive to the ordinary elements that coexist in the Barbican; *gleaning* translates a process of discovery and selection of the “as found” element, an existing specificity found among the multiple compositions inherent to the Barbican’s public space; and *mapping* reveals a social media survey that represents and makes public the “as found” element, through a process of stalking/voyeurism. All three operations are grounded in the “As Found”¹⁰ attitude explored by the British Independent Group during the 1950s, connecting the architects Alison and Peter Smithson, artist Eduardo Paolozzi and photographer Nigel Henderson, who explored a new way of thinking. These designers and artists were invited to value the culture of everyday life to see its potentiality as catalysts in creative practices: “As Found has to do with attentiveness, with concern for that which exists, with passion for the task of making something from something.”¹¹

Nonetheless, to better understand the relationship between the walk operations, my own “walk story” and its correlation with contemporary artistic practices, the walk operations are explained in three subsections: (1) **Observing**; (2) **Gleaning** and (3) **Mapping**.

(1) **Observing** is a walk operation that uses the body as a tool, where the eye is trained to be open and attentive to situations normally ignored by most people in contemporary cities. According to Michel de Certeau: “They are walkers, *Wandersmanner*, whose bodies follow the thicks and thins of an urban ‘text’ they write without being able to read it. These practitioners make use of spaces that cannot be seen; their knowledge of them is as blind as that of lovers in each other’s arms. (...) It is as though the practices organizing a bustling city were characterized by their blindness.”¹²

Following Certeau’s reflection about people’s blindness in the act of walking through a city, it is recognized that to walk is to use the body/eye as a device to learn *how to see* and *how to observe* the different elements that compose a specific reality: The Barbican. Yet, it is important to retain that the use of the body as a tool of perception is not new: it is a method that artists Richard Long and Hamish Fulton have been experimenting with since the 1960s. These artists have been using the act of walking as a representation approach to places, landscapes, and territories: “The body is a tool for measuring space and time. Through the body Long measures his own perceptions...”¹³. Although Long and Fulton employ the act of walking as a tool for perceiving and drawing specific realities, in my own “walk story” the act of *observing* is just the first step of a broader strategy, one that uses the act of walking not only as a tool to perceive *what-is-already-there*, but also to prepare for unexpected discoveries.

(2) **Gleaning** is a walk operation translated into a process of discovery among the multiple compositions inherent in the Barbican’s public space. This process was constructed throughout my walks made over its grounds between July 2014 and July 2015 and developed by attentively observing; in other words, by focusing on the ordinary elements found in the place. Throughout this yearlong period, I accumulated an archive of “as found” photographs, similar to what Robert Smithson practiced in his photo-essay entitled “A Tour of the Monuments of Passaic, New Jersey”¹⁴ developed in 1967.

In this project, Smithson gleaned/photographed several abandoned industrial relics (pipes, sandboxes...) found along the Passaic River in New Jersey, re-imagining them as “monuments” from a distant time. Although his gleaning of elements through a drifting process is similar to the creation of my own “walk story”, Smithson was attempting to both represent the ordinary/repressed traces of



human work and recognize it as part of Passaic's landscape. In contrast, in my research, the development of the "as found" archive around the Barbican was still waiting for a meaningful discovery.

It was only after one year of *dérives* around the Barbican (on the 7th of July 2015), that a specific "as found" photograph (see Figure 4) was *gleaned* and became the catalyst for a specific and meaningful way of perceiving the ordinary in the Barbican. Architects Alison and Peter Smithson refer to this in their "As Found" attitude: "'As Found' is a perceptive recognition of reality, (...) a new seeing of the ordinary, an openness as to how prosaic 'things' could re-energise our inventive activity."¹⁵

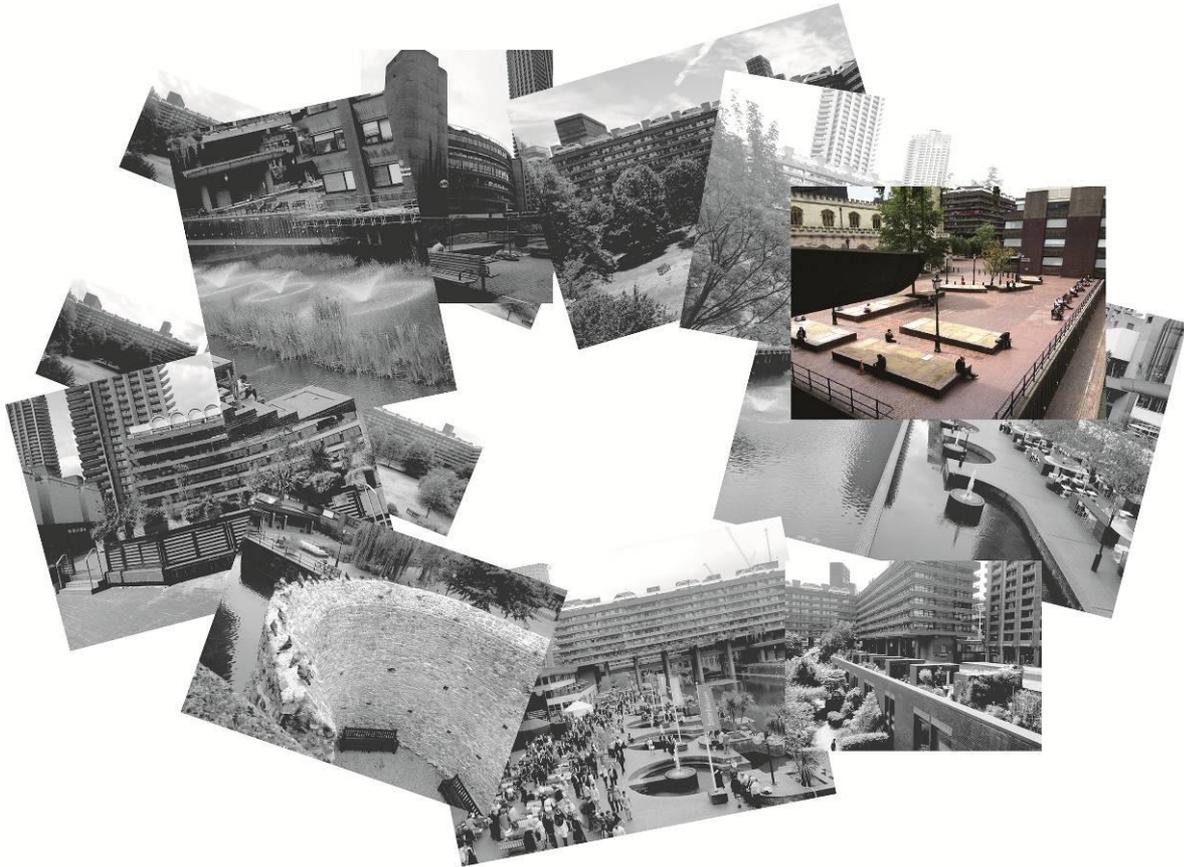


Fig. 4: *As Found* photograph in the process of *Gleaning*. This picture reveals an existing social attitude in the Barbican's public space.

Through this encounter by chance and attraction, I discovered an existing pattern of social behaviour among the users of the Barbican's public space. It was evident that these users, or *Solitary Characters*, were using the Barbican as a free canvas to feed their own solitary and introspective attitude. After periods of observation, I also recognized that most of these Solitary Characters were using the Barbican's public open space during lunchtime — to eat, to read, to stare, to enjoy their own solitude, unknowingly creating a routine which was and continues to generate a specific social dynamic that appropriates a protected complex system. As Michel de Montaigne suggests, when he analysed the cycles of human social behaviors: "There is nothing more unsociable than Man, and nothing more sociable: unsociable by his vice, sociable by his nature."¹⁶



Following the discovery of the “as found” existing pattern – the Solitary Characters – questions arose: *how can we make visible something that remains invisible? How can we represent the solitary characters in the Barbican Estate? Could these solitary characters be considered “monuments” of the Barbican, a result of some larger scale in the social and spatial process?*

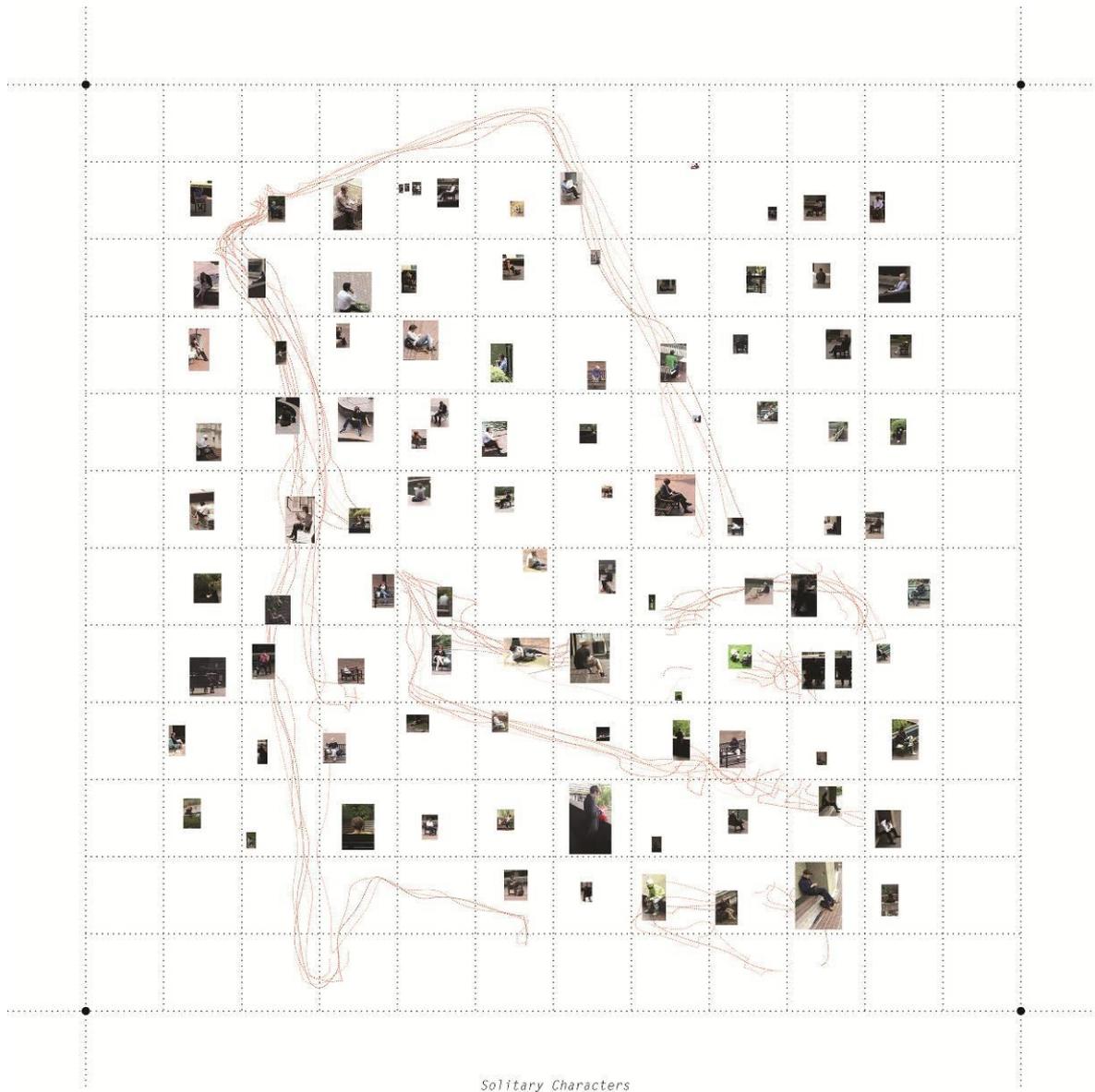
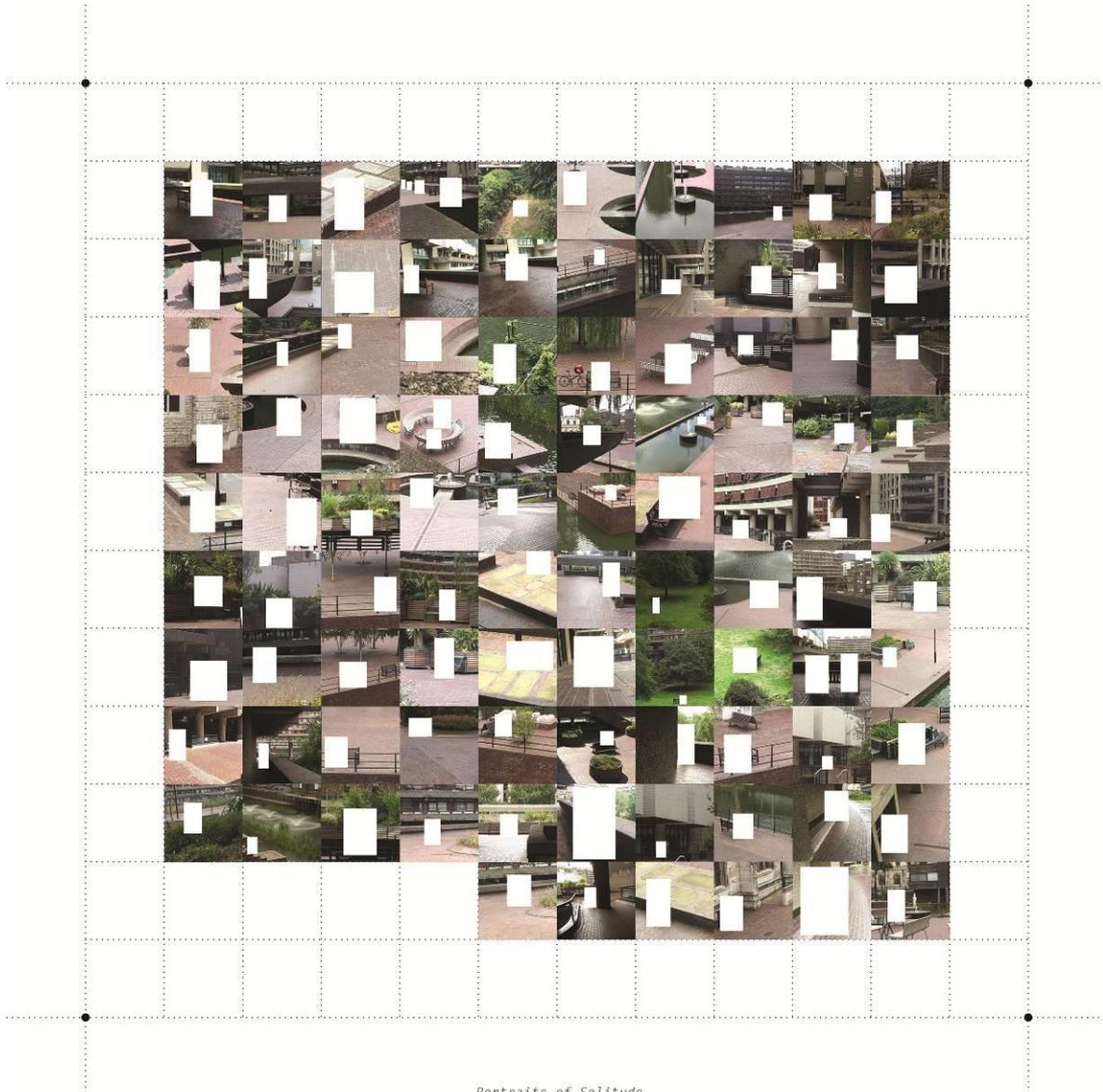


Fig. 5: *Solitary Characters.*



Portraits of Solitude

Fig. 6: *Portraits of Solitude*.

(3) **Mapping** is a walk operation that represents and makes public the “as found” element in the Barbican. As previously explained, this walk operation was a process developed at lunchtime, one that was focused on representing what had been gleaned in-between my own “walk story.”

To explain the act of mapping the *Solitary Characters*, it is necessary to integrate two practices that were the essential tools of this walk operation: *Stalking* and *Voyeurism*. These tools emerged from two references of artistic practices – Walker Evans’s “Subway Portraits” (1938) and Vito Acconci’s “Following Piece” (1969) – which directly correlate to my own experimental practice that was focused in capturing a social pattern in the process of stalking all the *Solitary Characters* who intersected my paths around the Barbican. Whereas Evans’s “Subway Portraits” explore an undercover method of taking photographs (voyeurism) to capture the subway riders in New York City (between 1938 and 1941), Acconci’s “Following Piece” describes a performance in which he was daily stalking (for over a



month) a randomly chosen stranger through the streets of New York until he or she entered a private location. Both of these artistic practices used the processes of voyeurism and stalking in an attempt to make visible inaccessible realities and everyday life routines and thus these processes directly related to my goal: to create a data survey to map the *Solitary Characters*.

The survey was translated into the creation of an Instagram's account¹⁷ (@barbican_on_solitude¹⁸) that archived all the photos found during the entire voyeurism/stalking process, allowing me to make it visible, to make it public, and to allow it to be remembered. As Certeau (1988) argues: "Surveys of routes miss what was: the act itself of passing by. The operation of walking, wandering, or 'window shopping', that is, the activity of passers-by, is transformed into points that draw a totalizing and reversible line on the map. They allow us to grasp only a relic set in the nowhere of a surface of projection. Itself visible, it has the effect of making invisible the operation that made it possible. These fixations constitute procedures for forgetting."¹⁹

It was a risk to assume that *walking as a tool* would integrate *observing, gleaning* and *mapping*, but in practice, it acknowledged that my personal walks were not an isolated process of solitude. It soon became apparent that I was just one more Solitary Character establishing the same behavioural pattern in the Barbican's public space – that is, I was just another person among others and was reminded that: "At every moment of our daily lives, we come into contact with things and situations, occasionally even with the contents of our own consciousness. We can be more or less aware of all these forms - whether they are an animal, plant, person, memory or social system."²⁰

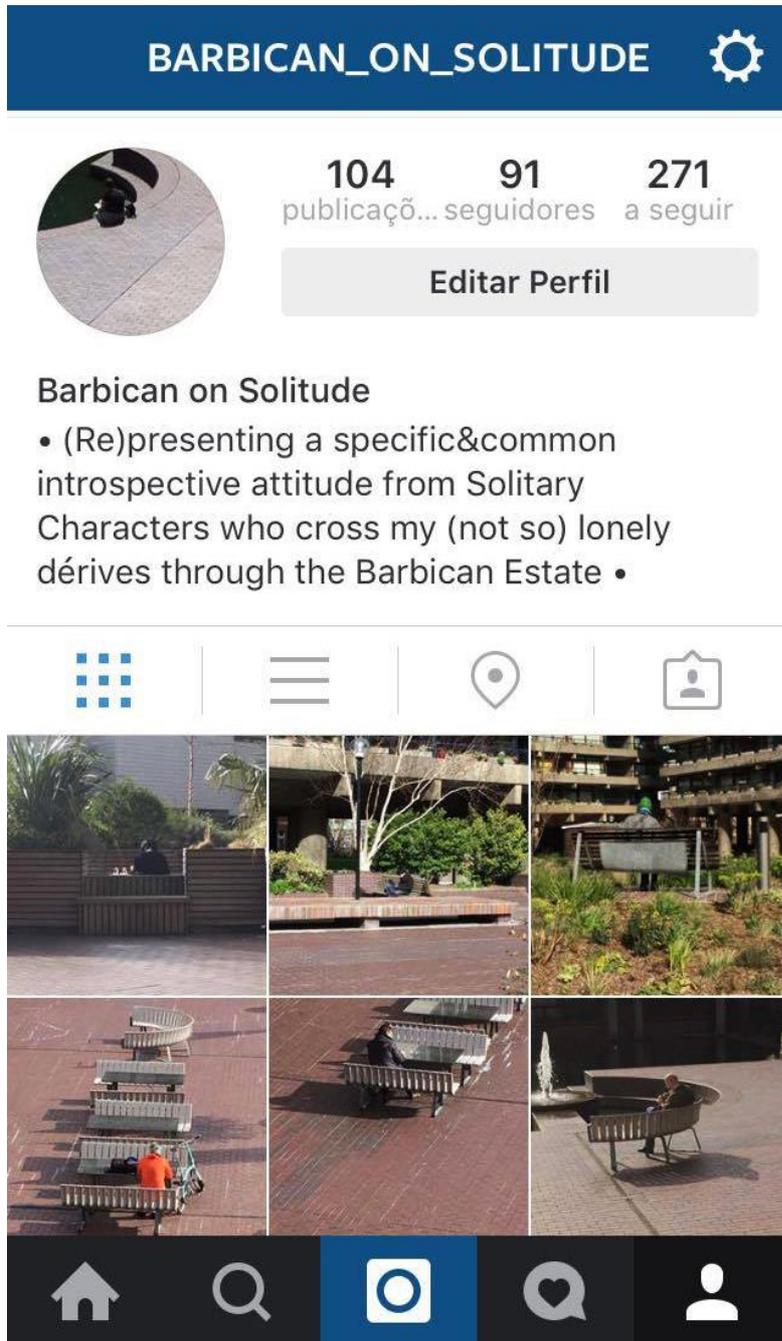


Fig. 7: @barbican_on_solitude: Instagram account.

3. Walking as an Ar(t)chitectural Catalyst

Walking as an Ar(t)chitectural Catalyst investigates the integration of the walking tools developed in the Barbican – *observing, gleaning, mapping* – in the analysis of urban environments and in the architectural design process. As explained in the previous section, I found that walking was the catalyst to develop a contemporary set of social media research and documentation crucial in critically



interpreting the existing urban social pattern in the Barbican's public space: the *Solitary Characters*.

However, if walking is a practice commonly related to contemporary artistic practices (explored by Richard Long, Hamish Fulton, etc.), *how do we integrate walking in the architectural/urban design process? How do we incorporate walking as an ar(t)chitectural catalyst to research contemporary urban issues?*

To do so, I correlated my own experience in the Barbican with the practice developed by an Italian collective of Architects named Stalker²¹ that explores walking as a catalyst to construct an interdisciplinary and collective imaginary for places that are marginal, abandoned and discarded from the city and society. Stalker has been developing a specific methodology of urban research in several cities around Europe, integrating walking into a diachronic process: first, the collection of data related to the marginal/abandoned site that is going to be walked; second, the act of walking/gleaning toward the selected site, and third, the production of an exhibition, reflecting the information found during the walk (photos; video; writing...), which generates a debate around the strategies focused upon to create reuse solutions for the investigated site. Stalker explores walking not only as a tool for mapping the places and its transformations, but also as a method of social engagement for collecting stories, sharing memories and connecting experiences. Architect Francesco Careri (one of the Stalker's members) explains that "the aim is to indicate walking as an aesthetic tool capable of describing and modifying those metropolitan spaces that often have a nature still demanding comprehension, to be filled with meanings rather than designed and filled with things."²²

Similarly to Stalker's approach to contemporary urban environments, the present research seeks to integrate walking as part of an urban analysis methodology that is necessary in the urban/architectural design process. This method uses the walking tools as an approach that is attentive and sensitive to an urban problematic found and discovered in the Barbican and which can be applied as a first step to learn how to read, select and interpret distinct problematic areas found in other places. Therefore, it is accepted that walking can be read as part of the design process in a way that helps us to prepare not only the site, but also the possible project or the future urban/architectural intervention. In this sense, the architects and the social/creative agents can use walking as a sensitive and specific device to open new possibilities for architecture and social engagement. Additionally, to integrate walking into the conventional design process, it is possible to create strategies that are focused in rethinking place as unfixed and space as performed in order to create more open and flexible design possibilities. As Jane Rendell suggests: "...walking proposes a design method that enables one to imagine beyond the present condition without freezing possibility into form."²³

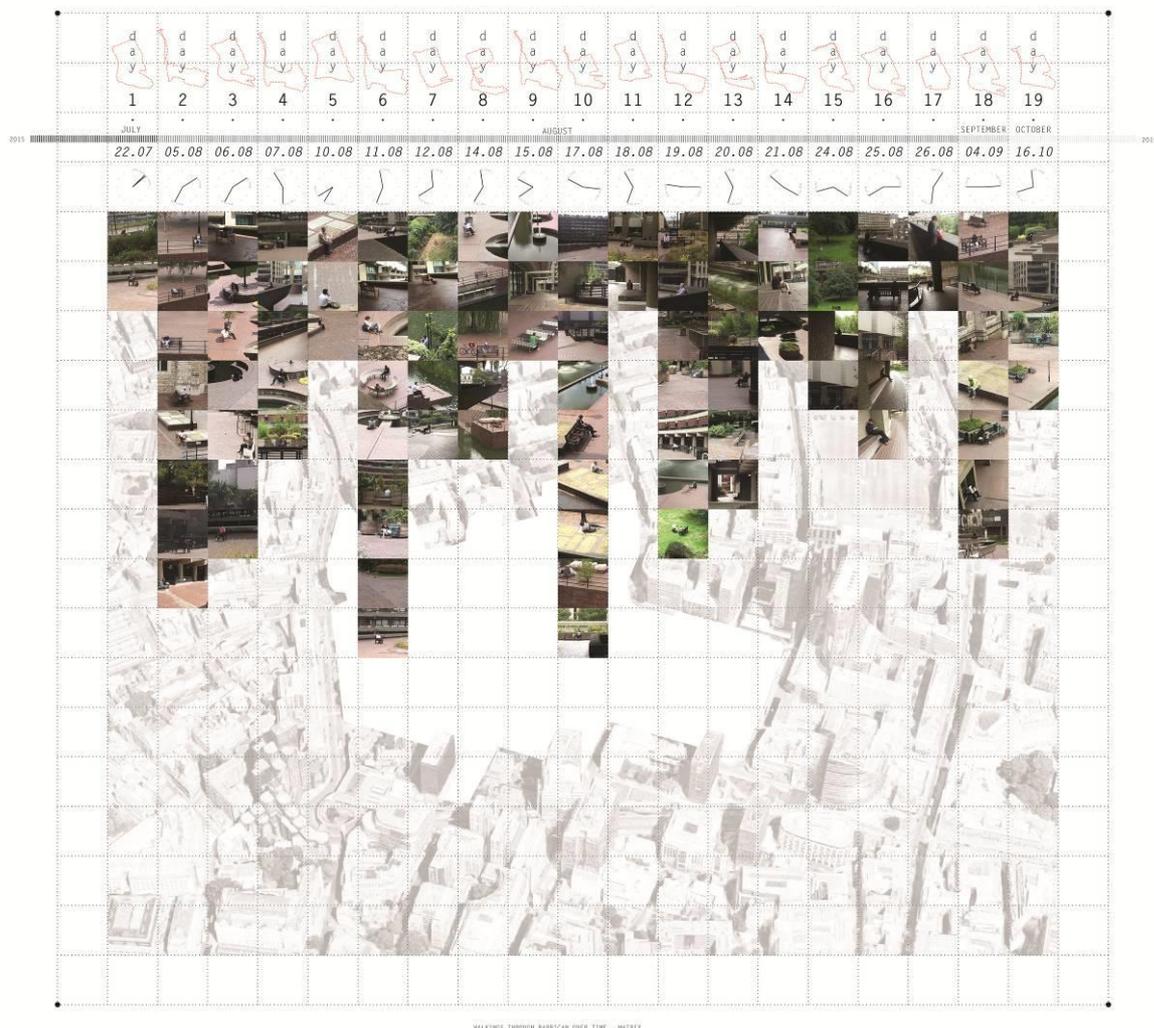


Fig. 8: (a) *Walk(ing) through the Barbican Matrix*. This matrix is the representation of the stalker/voyeurism process experimented in the Barbican’s public space from July 22, 2015 and October 16, 2015. This matrix is organized in a chronological process by months, days, hours, itineraries and represents all the Solitary Characters photos captured in the Barbican.

4. Walking as a Practice of Interconnection

Until this point, we have argued that *Walking through the Barbican* is:

- (1) A *process of wonder*, driven by attraction and curiosity about a specific place – The Barbican Estate.
- (2) A *process of wander* that accepts openness and the chance to observe the possibilities offered by a drift, an indeterminate journey.
- (3) A *process of solitude* in which the body is used as a tool: an instrument that observes with attentiveness what is beyond the path itself to learn *how to see* in the Barbican.



- (4) *A process of mapping* a social pattern found in the Barbican's public space (the *Solitary Characters*) through the creation of an accessible public survey on Instagram (@barbican_on_solitude).
- (5) *An urban research methodology* that can be integrated as part of an urban/architectural design process.

In light of these arguments, *Walk(ing) through the Barbican* should be considered an on-going practice. Taking Jane Rendell's notion of "practising specific places certain artworks produce critical spaces"²⁴, I argue that walking through the Barbican is 'practising' the place both poetically and critically. By practising the place poetically, we acknowledge the use of walk operations as mechanisms that unveil its existing architectural and social aspects. By practising the place critically, we are able to reflect and ponder over the existence of a collective cultural topic: solitude or lack of connection found in a shared context and opening a debate around the relationships in-between elements that are apparently disconnected. Thus, *walk(ing) through the Barbican* is a **Practice of Interconnection** between:

- **Body and Space/Place/City.** This interconnection occurs when we *learn how to see*. By accepting openness, attraction and intuition, we acknowledge how to be attentive/aware of what is beyond our own perceptions. Through walking in the Barbican, the body/eye opened to its existing multiplicity.
- **Thinking and Doing.** This interconnection happens when we *glean*. By digging in a place without overthinking and by seeing beauty in the ordinary, the possibilities of finding specificities and new discoveries in that place increase: "Gleaning catalyses to do more and think less before you do. Thinking and doing becomes one coexistent practice. You do with what you have at your hand, not waiting to have the perfect thing, the perfect idea, the perfect data...just do and by doing you disclose important things."²⁵ Through walking in the Barbican, I gleaned by chance an "as found" photo, which was the catalyst to reveal an existing social pattern in its public space: the *Solitary Characters*.
- **Visible and Invisible.** This interconnection arises when we *represent*. By making visible what is apparently invisible, we value and acknowledge things. Mapping is a method to register something that shouldn't be forgotten. Through walking in the Barbican, a social and urban pattern that was/is apparently hidden was mapped. By doing so, I learned about a subtle social appropriation between the users and Barbican's public space.
- **You and me.** This interconnection happens when we assume walking as a *critical act*. Specifically, an act that is not passive to the social pattern found through my walks in the Barbican. Instead, it critiques and questions the way in which Barbican's users appropriate its public space: *What are the causes behind this social dynamic? Why is this happening? Is it related to the Barbican's design? Is it because of the Barbican's location, an introspective refuge in the middle of a busy London's office area? Or is this social pattern just a reflection of our own contemporary society dynamics? Are the Solitary Characters the new monuments of the Barbican?* More than answering these questions, *walking through Barbican* unfolds an open discussion over the existing absence of connection: in-between the *Solitary Characters*; in-between the *passing-by(s)*; in-between *You and Me*.



- **Here/Now and There/Then.** This interconnection takes place when we assume walking as a practice that crosses several *scales and places over time*. Walking is an everyday life practice that can be applied *here* (in the Barbican), but also *there* (in other places or cities throughout the world). Simultaneously, It can be applied *now* (in the Barbican), but also *then* (in other future situations).



Fig.

9: *Barbican on Solitude.*

“Through the act of walking new connections are made and remade, physically and conceptually, over time and through space. Public concerns and private fantasies, past events and future imaginings, are brought into the here and now, into a relationship that is both sequential and simultaneous. Walking is a way of at once discovering and transforming the city; it is an activity that takes place through the heart and mind as much as through the feet.”²⁶

Following Jane Rendell’s words, *Barbican on Solitude: (a) Walk(ing) through* can be considered as an open attitude that does not end in this specific case study. Its conclusions and found methodologies can be seen in other cases throughout the world. It is a common practice for every human being that crosses shared contexts and several disciplines. It is a process that fills the gap between what is missing in the Barbican and beyond — to *Interconnect* with each other.



Endnotes:

- ¹ Michel de Montaigne, *On Solitude*, (London: Penguin Books, 2009), p. 3.
- ² Louise Lemoine's interview about Documentary "On Barbicania", available at: <http://blog.barbican.org.uk/2014/10/on-barbicania-ila-beka-and-louise-lemoine/> [Accessed in January 3, 2016].
- ³ Cidália Silva, *See(d)(k)ing time: an approach to how to design as research*, Ph.D. Thesis, (Escola de Arquitectura da Universidade do Minho: Braga, 2014), p. 315.
- ⁴ Oxford Dictionary of English, Apple Dictionary, Version 2.2.1 (143.1), 2005-2011.
- ⁵ Guy Debord, "Théorie de la dérive", in Libero Andreotti & Xavier Cost, ed., "Theory of the Dérive and Other Situationist Writings on the City", (Barcelona: Museu d'Art Contemporani de Barcelona/Actar, 1996).
- ⁶ Jane Rendell, *Art and Architecture A Place Between*, (New York: I.B.Tauris & Co Ltd, 2006), p. 188.
- ⁷ Francesco Careri, *Walkscapes: Walking as an Aesthetic Practice*, (Barcelona: Gustavo Gili, SA, 2002), p. 104.
- ⁸ Jeremy Till, *Architecture Depends*, (Cambridge: The MIT Press, 2009), p. 96.
- ⁹ Definition available at: <http://www.oxforddictionaries.com/definition/english/barbican> [Accessed January 9, 2016].
- ¹⁰ "As Found" is related to a way of thinking that values everyday culture and interconnects architecture with the visual arts. This movement emerged from the exhibition "Parallel of Life and Art" realized in 1953 by the architects Alison and Peter Smithson, artist Eduardo Paolozzi and photographer Nigel Henderson. During the 1950s "As Found" was an attitude embraced by the British Independent Group, which was composed of theorists, architects and artists. To explore more around this subject, please consult: Claude Lichtenstein and Thomas Schreggenberger, *As found: the discovery of the ordinary*, (Zurich: Lars Müller Publishers, 2001).
- ¹¹ Claude Lichtenstein and Thomas Schreggenberger, *As found: the discovery of the ordinary*, (Zurich: Lars Müller Publishers, 2001), p.10.
- ¹² Michel de Certeau, *The practice of Everydaylife*, (London: University of California Press, LTD, 1988), p.93.
- ¹³ Francesco Careri, *Walkscapes: Walking as an Aesthetic Practice*, (Barcelona: Gustavo Gili, SA, 2002), p.148.
- ¹⁴ Robert Smithson's work available at: http://www.robertsmithson.com/photoworks/monument-passaic_300.htm [Accessed January 27, 2016].
- ¹⁵ Claude Lichtenstein and Thomas Schreggenberger, *As found: the discovery of the ordinary*, (Zurich: Lars Müller Publishers, 2001), p.9.
- ¹⁶ Michel de Montaigne, *On Solitude*, (London: Penguin Books, 2009), p.3.
- ¹⁷ Instagram is a social network and application for smartphones. The selection of this application to archive the "as found" photos was mainly due to Instagram's pragmatic technology that is open to the public in general, thus allowing the present research project to become visible because it reaches a wider audience.
- ¹⁸ To see the archive of the "as found" photos in the Barbican Estate, please visit @barbican_on_solitude on Instagram.



¹⁹ Michel de Certeau, *The practice of Everydaylife*, (London: University of California Press, LTD, 1988), p.97.

²⁰ Shelley Sacks and Zumdick Wolfgang, *Atlas of the Poetic Continent Pathways to Ecological Citizenship*, (Forest Row: Temple Lodge Publishing, 2014), p.5.

²¹ To learn more about the Italian collective Stalker, visit: <http://www.osservatorionomade.net/> [Accessed December 9, 2015].

²² Francesco Careri, *Walkscapes: Walking as an Aesthetic Practice*, (Barcelona: Gustavo Gili, SA, 2002), p.26.

²³ Jane Rendell, *Art and Architecture A Place Between*, (New York: I.B.Tauris & Co Ltd, 2006), p.188.

²⁴ Jane Rendell, *Art and Architecture A Place Between*, (New York: I.B.Tauris & Co Ltd, 2006), p.19.

²⁵ Cidália Silva, *See(d)(k)ing time: an approach to how to design as research*, Ph.D. Thesis, (Escola de Arquitectura da Universidade do Minho: Braga, 2014), p.311.

²⁶ Jane Rendell, *Art and Architecture A Place Between*, (New York: I.B.Tauris & Co Ltd, 2006), p.190.

Illustration notes:

Fig. 1: *Barbican on Solitude* - Concept Mesostic.

Fig. 2: *Time in Barbican* – collage (overlap between an old photo from the site devastated by World War II bombings waiting for construction and the 1960s Barbican’s design scheme).

Fig. 3: *Barbican’s w(a)(o)nder*.

Fig. 4: *As Found* photograph toward the process of *Gleaning*. In this picture it is revealed as an existing social attitude in the Barbican’s public space.

Fig. 5: *Solitary Characters*.

Fig. 6: *Portraits of Solitude*.

Fig. 7: @barbican_on_solitude: Instagram account.

Fig. 8: (a) *Walk(ing) through Barbican Matrix*. A matrix representing the stalker/voyeurism process experimented with in Barbican’s public space between July 22, 2015 and October 16, 2015, organized in a chronological process by months, days, hours and itineraries. The matrix also represents all the Solitary Characters photos captured in the Barbican.

Fig. 9: *Barbican on Solitude*.

Illustration credits:

Figures 1 to 9 © created by the author: Fernando Ferreira.



Citadel Beacon Redux

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Abstract

'Citadel Beacon Redux' revisits an urban art installation by the author in Halifax, Canada. 'Citadel Beacon' was an urban optical device referencing the city of Halifax's View Planes: corridors of air protected from development to preserve views of the city's harbor. During research into the View Planes an article, "Making Meaning of Heritage Landscapes," by Lachlan Barber brought to light the near-simultaneous preservation of views from Citadel Hill and destruction of Africville, a community of approximately 500 African Nova Scotians. This paper describes the shift of project scope in response to this 'heritage dissonance'¹ and the author's ongoing exploration of broader narratives of visibility and invisibility. Definitions of 'device' and 'attention' as argued by Jonathan Crary inform the notion of an 'instrumentalized vision' constructed by a modern subject and its impact on urban politics.

View Planes

On August 4th, 2016 I met with representatives of Nocturne at Night (an arts event held in Halifax, Canada) atop Citadel Hill: Halifax's highest point and a national historic site administered by the national park agency, Parks Canada.



Fig. 1: View from Citadel Hill looking north and east.

Joining us were artists and Parks Canada staff. An architect, academic, and newcomer to Atlantic Canada I was there to coordinate my installation of a competition winning eleven foot tall white foam sculpture, 'Citadel Beacon,' with other installations and Citadel regulations. The sculpture was a didactic optic instrument designed around the Halifax City View Planes.

¹ Lachlan B. Barber, "Making Meaning of Heritage Landscapes," *Canadian Geographer* 57.1 (2013): 95

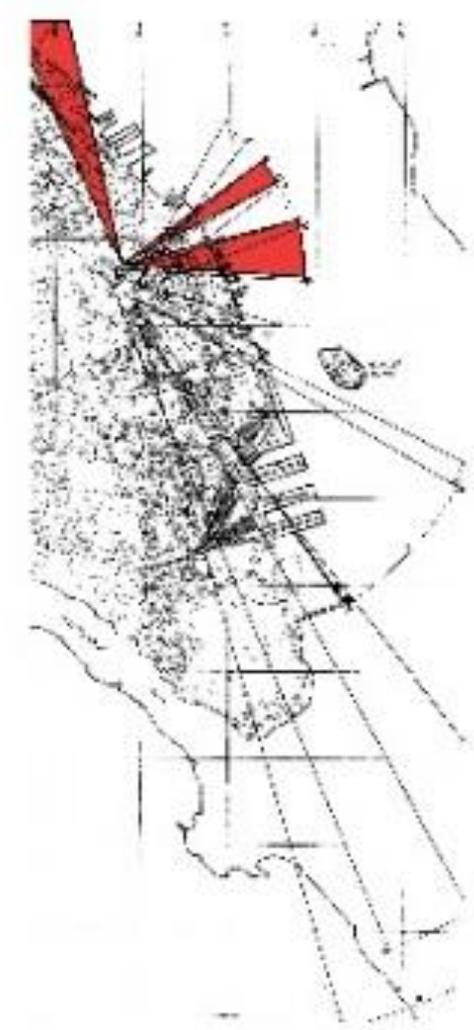


Fig. 2: Ten View Planes for the city of Halifax from four station points on Citadel Hill. 'Citadel Beacon' was designed around View Planes 1, 3, and 5 (highlighted in red).

The View Planes are corridors of protected air space originating from points on Citadel Hill which preserve views of Halifax Harbor against high-rise development. The installation was built around one station point anchoring three View Planes and articulated them through text, image, and light.

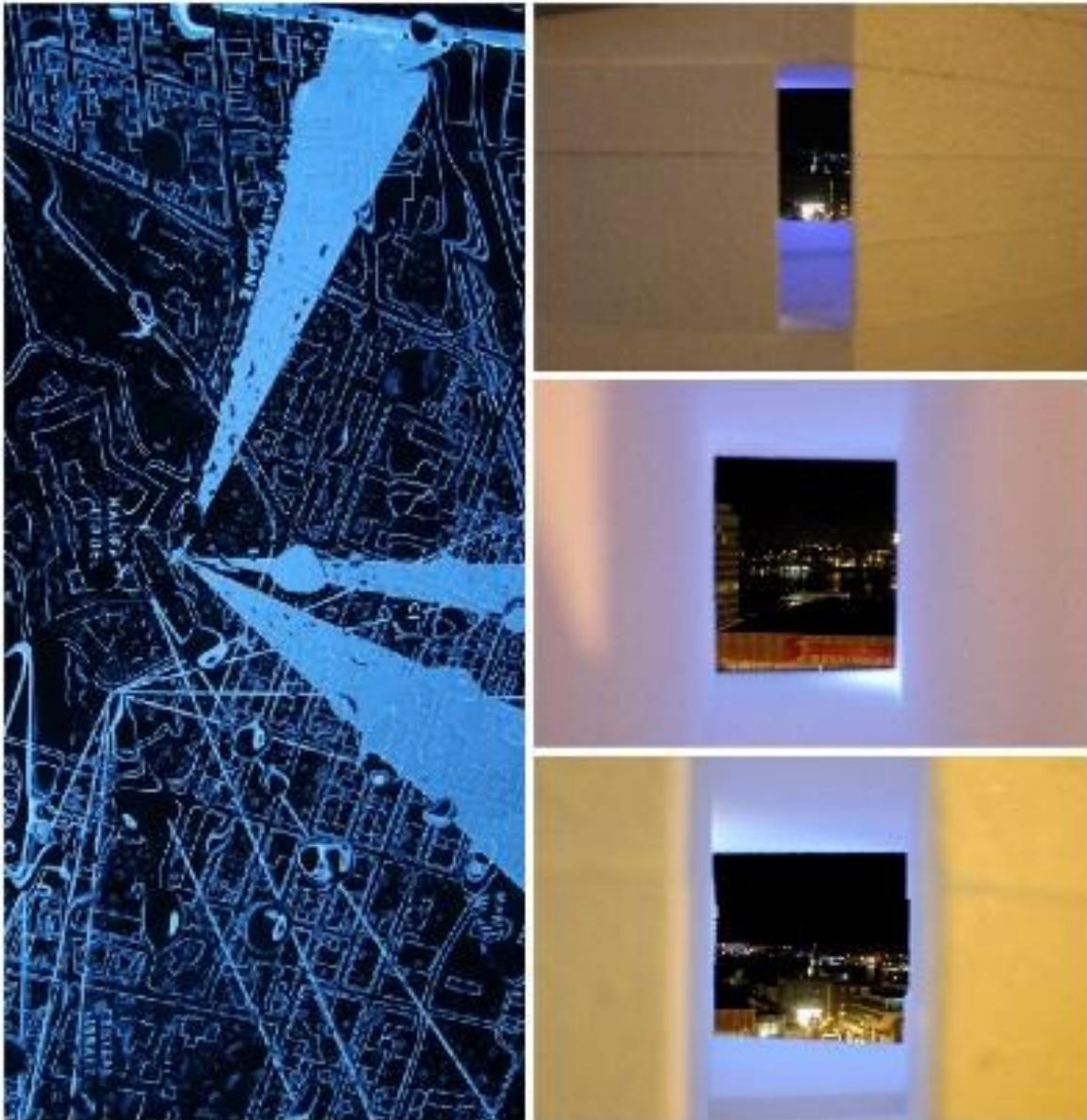


Fig. 3: 'Citadel Beacon' installation photos. An illuminated, laser-etched acrylic plaque (left) mounted to the sculpture shows the View Planes overlaid on the city streets. View Planes 1, 3, and 5 (right, top to bottom) are captured through slots in the sculpture.

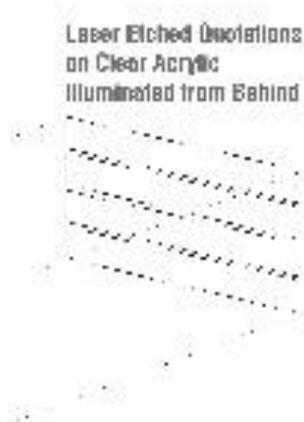
Apertures and spotlights in the sculpture were directed down the length of the View Planes to provide an empirical registration of their otherwise intangible form. "place Illustration 4 here"



Fig. 4: 'Citadel Beacon' installation photos. The audience interacts with the installation during the Nocturne at Night festivities: circling it, reading text and maps, and peering through the apertures (left); the installation photographed against the city skyline (top right); light from the installation is projected down the length of the View Plane corridor (bottom right).

Included in the competition proposal were a set of acrylic plaques etched with quotations representing members of different voices with vested interests in Halifax's heritage landscape.

Sample Quotations:



'The defenders of the Hill were not the British soldiers that had garrisoned the fortress for a century and a half but citizens, young and old, who spoke out for the protection of the City's vantage point and sweeping view of the harbour.'
- Elizabeth Peasey, 1979

'I have always disliked these viewplane bylaws and would like to see them scrapped as well as the overly restrictive height limits in the HSN by Design.'
- fanwick16 (skyscraperpage.com), 2010

'Aricville's absence from discussions concerning heritage in the central city is not due to the two issues being unrelated, but rather speaks to a long history of exclusion and marginalisation upon which the city, as a colonial, military space, depended.'
- Lachlan B. Barber, 2013



Fig. 5: Excerpt from the competition proposal, reviewed by Parks Canada staff, showing proposed etched acrylic panels with quotations representing different positions on preservation strategies in the Halifax heritage landscape.

One was from Elizabeth Pacey, a Heritage Preservationist and member of a group of citizens that lobbied for the View Planes in the early 1970s.¹ The second was from a blogger on a chat room, Skyscraperpage.com, a forum for real estate developers in Halifax who often find the View Planes to be frustrating constraints on the financial goals of their projects.² A third was from an academic, Lachlan Barber, whose critical essay, "Making Meaning of Heritage Landscapes," challenged the commonly held assumption that the View Planes symbolized a democratic preservation of Halifax's civic identity.³ Barber's paper contended that the View Planes preserved a militaristic scenography by the enfranchised political and economic class and perpetuated a historic exclusion of marginalized ethnic, economic, social and political groups within Halifax's heritage landscape.

After the meeting that morning on Citadel Hill a representative from Parks Canada asked how I would feel about removing Barber's quotation from the piece. A two-month long conversation ensued resulting in the removal of all quotations from the sculpture. The explanation I was ultimately given for removal was that, "As federal agency, Parks Canada must be neutral at all times, and especially right now because we are in the middle of a federal election."⁴

Africville

The charged word in that quotation was 'Africville' a small community of African Nova Scotians on the northern tip of the Halifax Peninsula demolished by the city in the late 1960s. In conversation a representative from Parks Canada confirmed that if the word 'Africville' appeared on the sculpture it would not be allowed on Citadel property. The destruction of Africville is a fraught moment in the story of Halifax whose aftershocks are felt to this day.⁵ It was a centuries old community stretching back to the late 1700s and under the power of eminent domain levelled for the purposes of industrial expansion, slum clearance, and racial integration.⁶

¹ Elizabeth Pacey, *The Battle of Citadel Hill* (Hantsport, N.S. : Lancelot Press, 1979), p. 5

² Fenwick16, "Skyscraperpage.com/Forum/ Halifax Viewplanes/Sightlines", May 22, 2010, 12:10 PM, <http://forum.skyscraperpage.com/showthread.php?t=162180>

³ "Making Meaning of Heritage Landscapes," p. 92

⁴ Anonymous, e-mail message to author, August 11, 2015

⁵ Brett Bundale. "Africville Land Settlements Possible," in *Herald News* (16 December 2014)

⁶ Ibid.

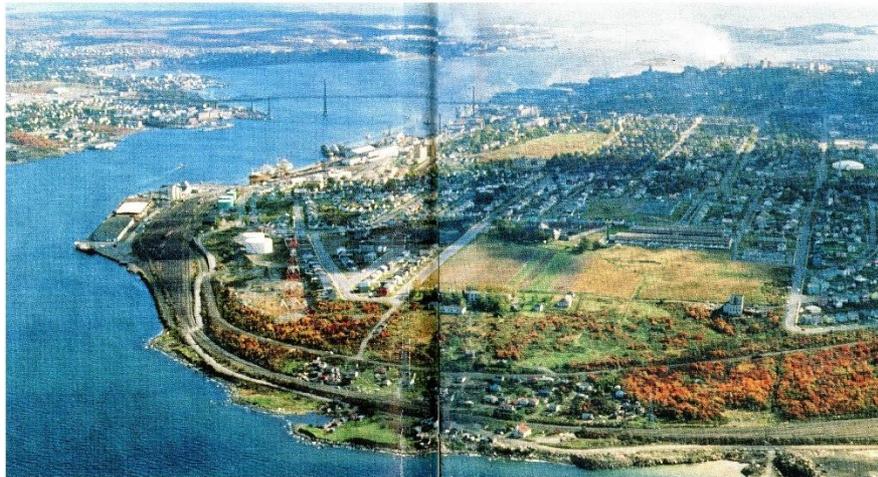


Fig. 6: Photos of the relocation of Africville residents. Possessions were moved using city garbage trucks. (image courtesy of Dr. Ted Grant, O.C.)

The concern of the Citadel, later explained by an associate was that any offense taken by the mention of Africville could make its way back to the conservative federal government and impact the funding stream for the national heritage site.¹ As the entire installation was highly site specific there was no option of moving it elsewhere. And it already had acquired a significant investment of resources. Rather than abandon the project, it was moved forward and initiated a process of intellectual and ethical exploration.

Attention, Exclusion, and the Modern Subject

In seeking to understand the evaluations of modern urban territories which lead to the preservation of one landscape and the destruction of another it is useful to consider the perceptions through which such assessments are made. These are the perceptions of a modern subject. Central to the construction of the modern subject, according to Jonathan Crary in *Suspensions of Perception*, is the notion of 'attention.' His concern with regards to attention is not just what it focuses on, but what it excludes:

"Western modernity since the nineteenth century has demanded that individuals define and shape themselves in terms of a capacity for 'paying attention,' that is, for a disengagement from a broader field of attraction, whether visual or auditory, for the sake of isolating or focusing on a reduced number of stimuli."²

"Attention as a process of selection necessarily meant that perception was an activity of *exclusion*, of rendering parts of a perceptual field unperceived."³

Crary cites instruments of attention such as the stereoscope, kaleidoscope, and panorama as serving to aid in the construction of the modern subject.

¹ Anonymous in discussion with the author, August 2015

² Jonathan Crary, *Suspensions of Perception* (Cambridge, Mass. : MIT Press, 1999), p. 1

³ *ibid.*, p. 24



Fig. 7: A Kaiserpanorama optical control device. Exterior view, section, and plan. (from Jonathan Crary, *Suspensions of Perception*)

The discussion of these instruments, although they are largely for amusement, puts forth the idea of a modern experience which is constructed instrumentally; through codes, rules, and procedures at the exclusion of the larger field of stimuli. Thus, an urban planning concept such as ‘integration’ or a planning tool like the View Plane become instruments forcing a subject’s attention in one area at the exclusion of another. Records of events of the demolition and resettlement of Africville demonstrate how attention on the instrument of ‘integration’ led to only cursory visits to the neighborhood and the exclusion of assessments of kinship ties, ownership, and civic identity.¹ In short, the plight of the residents of Africville was denied the close observation and scrutiny that characterized the defense of the view from Citadel Hill. If one compares the hours of pain-staking construction of surveyed geometries and view mock-ups afforded the View Planes – the employment of rich professionalized instruments of vision

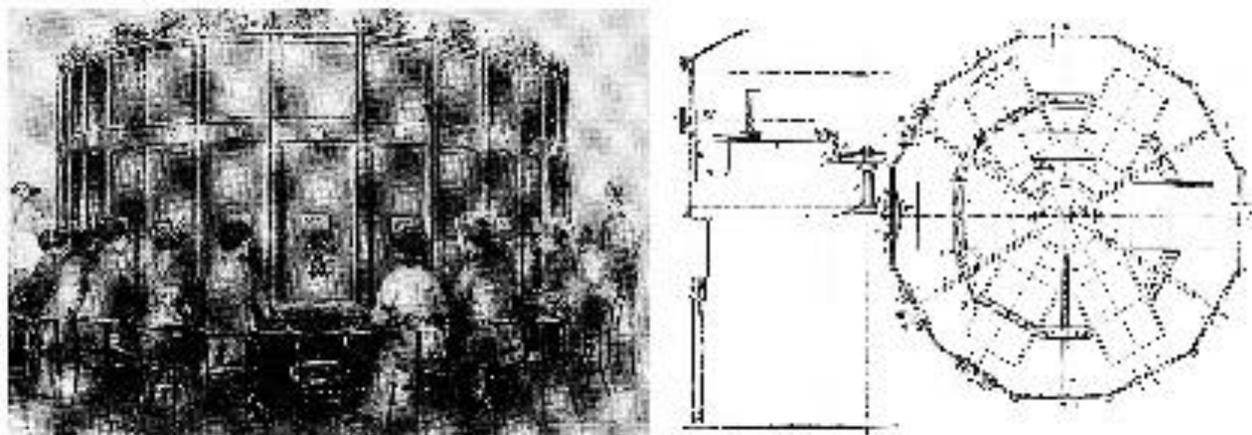


Fig. 8: View mock-up (top left), View Plane mapping (right), and View Plane land area impact assessment (bottom left) are but some of the analysis techniques employed by city officials and civic advocates to justify and assess the View Planes. (from Elizabeth Pacey, *The Battle for Citadel Hill*)

¹ Jennifer Nelson, *Razing Africville* (Toronto: University of Toronto Press, 2008), p. 88



– to the cursory analysis employed by city officials and civic representatives when evaluating the conditions of Africville the disparities are considerable.¹

The Modern Subject and Political Agency

The common thread between the destruction of Africville and the preservation of the view from Citadel Hill was the social and economic class of their respective political agents. These agents were a certain class of modern subject with means and expertise to self-actualize their readings and conceptions of the urban environment.² Crary refers to these realizations and conceptions, this narrowing of attention, as a ‘self-constituting freedom’: attention as an expression of the conscious will of an autonomous subject.³

Elizabeth Pacey’s The Battle for Citadel Hill recounts the events of 1968 to 1972 from the first objections to downtown high-rise development to the inscription of the fixed gaze of the urban subject into the zoning by-laws of the city. In the case of the view from Citadel Hill the notion of freedom was personalized, defended through its subjective significance.⁴ Recorded defenses of ‘the view’ included verbiage of ownership and identity such as “It is the Citadel plus the view that makes this the most attractive site in Halifax and it is a view that really belongs to all Nova Scotians – and Canadians.”⁵ Thus, preservation of the view was understood by this dominant class to be not only the will of their own autonomous individual subjectivity. But by extension it was understood as the will of the collective subject of an entire national citizenry. A citizenry ostensibly including residents of Africville who, although they could be guaranteed the scenic vista from Citadel Hill, were offered no such guarantee on their homes and property.

Instruments

‘Citadel Beacon’ was likewise conceived by a modern subject, the author, hailing from a similar professionalized, enfranchised class as the View Plane advocates and sharing the same appreciation for preserved vistas and their inscription on urban form. As an architect and member of the professionalized class of architects and planners who demarcated the views⁶ my initial response to the View Planes was to reinforce the instruments of practice which established them, such as surveyed geometries, measured drawings, models, etc..

¹ *ibid.*, p. 87

² Pacey, *Battle*, p. 10 and Nelson, *Razing Africville*, p. 87. Pacey’s reference is to the emergence of a new “visual plan,” “artistic city planning,” and the preservation of historic neighborhoods as a corollary to opposition to high-rise development. While Nelson references the inputs to the razing of Africville arriving largely from the professional class. Although advocates for the View Planes may not have been exclusively from a professional planning background they emphasized an aesthetically-based urban discourse exclusive of income or social welfare concerns. And while the professional inputs around Africville addressed social welfare concepts such as “integration” these concepts were exclusive of the desires of the Africville residents and the particularities of their community. In both cases the concepts of “artistic planning” and “integration” are concerns articulated by a particular professional class.

³ Crary, *Suspensions*, p. 25

⁴ Pacey, *Citadel Hill*, p. 19

⁵ *ibid.*, p. 42

⁶ *ibid.*, p. 66 Prof. Besim Hakim of the School of Architecture, Nova Scotia Technical College, produced the initial View Plane drawings. NSTC is now Dalhousie University School of Architecture, where the author now teaches.

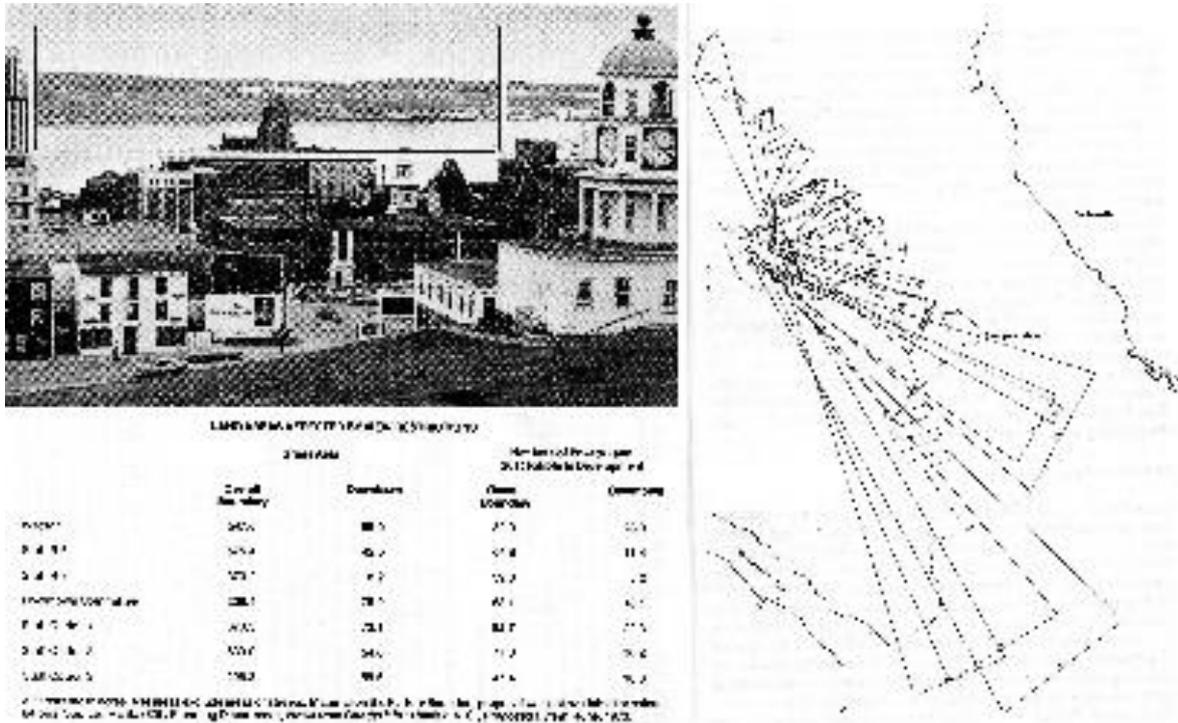


Fig. 9: 'Citadel Beacon' competition proposal drawing demonstrating the construction of the installation around View Planes 1, 3, and 5 as well as the graphic illustration of the View Planes on a map.

In reckoning with these instruments of attention and exclusion it has become important to understand their methodology and mechanism. The sculpture employed an instrumentalized methodology of construction, part and parcel of the surveying and visual simulation of the View Plane design, in developing an object which was experienced in the round. Like the viewing devices of the nineteenth century the architecture of the sculpture was constructed around the mechanics of vision. Surveyor located points, digital modeling, CNC milling fabrication and on-site surveying produced a technically precise optical device whose mechanics of operation ultimately determined the sculpture's massing and geometry.

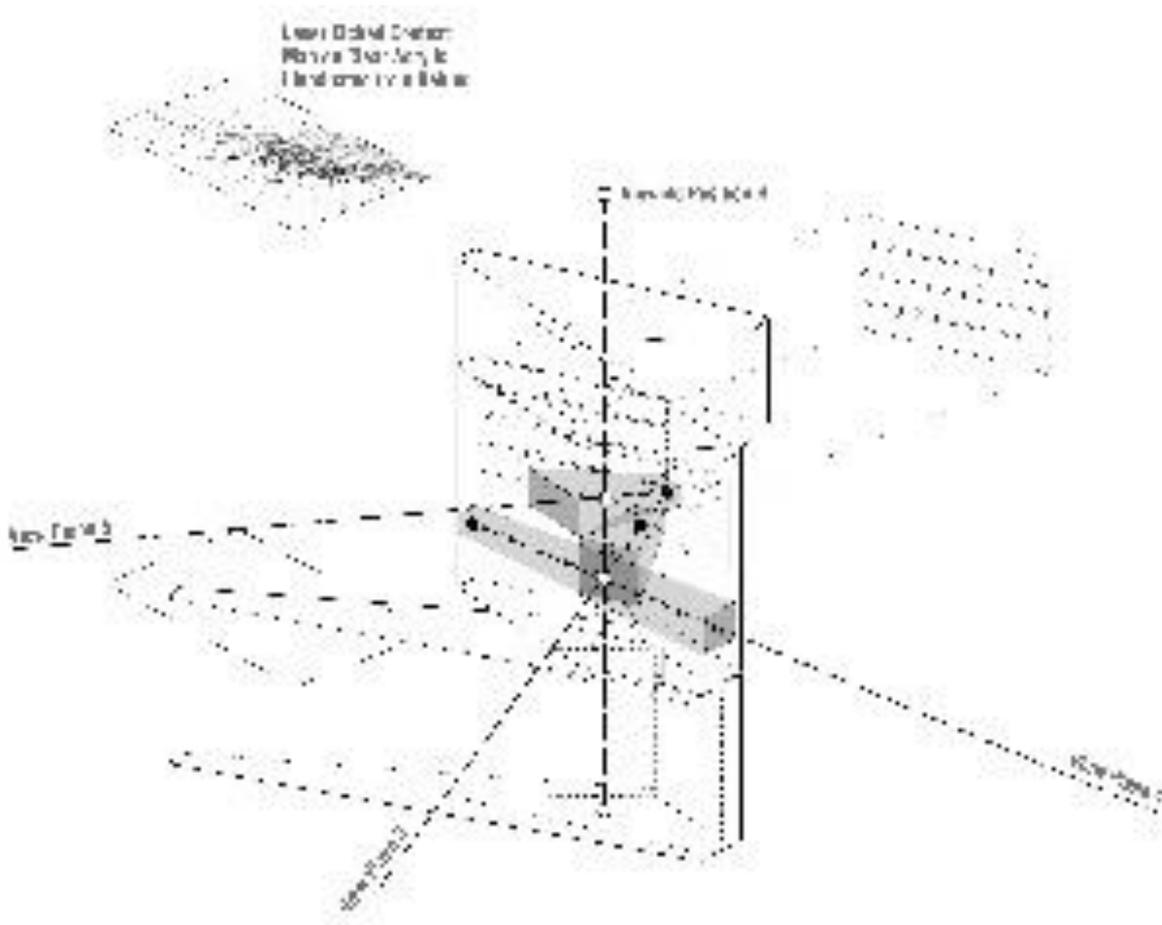


Fig. 10: 'Citadel Beacon' process photos (from left to right): an early on site mock-up of the installation; a slab of EPS foam mounted to a CNC mill for shaping; milled foam slabs and cinder block base during pre-installation mock-up; in-progress installation.

Stripped of textual content linking the instrument of the View Planes to narratives of the city, 'Citadel Beacon' served mainly a didactic function: enriching observers' understanding of an urban massing tool, but neglecting the political and social implications implicit in such a tool.



Fig. 11: 'Citadel Beacon' installation photo.

Political Instruments

If we consider questions of memorial, questions of memory, which haunt sites of commemoration we are confronted not only with remembrance. We are also confronted with amnesia. Like the pairing of Cray's attention and exclusion, the act of remembering entails a corollary of forgetting.



Today Africville's memory is characterized by a small museum – a rebuilt community church - established through a legal settlement with the city.¹ The museum acquires funding independently and is neglected by provincial tourist advertisements. It often has to turn away interested visitors and student groups because of poor pedestrian access and lack of public transportation infrastructure.²



Fig. 12: A reconstruction of the original community church houses the Africville Museum (left). Access to the museum is limited by poor pedestrian infrastructure and no public transit services.

The plight of the Museum reflects a tokenized visibility alongside an ongoing practice of civic forgetting and neglect.

Jennifer Nelson, writing on Africville, looks to other stories of urban trauma, uncovering both remembering and forgetting claiming that "... the recent cultural incitement to remember history is simply the other side of the coin on which historical amnesia is imprinted."³

An example she cites is Lisa Yoneyama's study of urban renewal in modern-day Hiroshima. Yoneyama claims that efforts of renewal in Hiroshima are mixed with the city's desire to present its history and national narrative in a particular light.

"Through attempts to decentre memory of the war and to downplay the nearly axiomatic cognitive conflation of the city with atom bomb ... Hiroshima has engaged in a project of reforming the cityscape

¹ "About the Museum," Africville Museum, accessed August 4, 2016, <http://africvillemuseum.org/the-story/>

² Tracey McCallum (Africville Museum) in discussion with the author, August 2015

³ Nelson, Razing Africville, p. 141

to carve out ‘new knowledge and consciousness, as well as amnesia, about history and society.’ While occupying very different contexts from each other and from Halifax, the [example of Hiroshima asserts] that the regulation and reconstruction of space are inextricably linked to how memory and forgetting can occur.”¹

In the project of ‘reforming the cityscape’ the View Plane is a powerful instrument. It preserves a view – a past – and restricts what you can build – projecting a particular future. Thus certain things are remembered, and privileged, and certain things forgotten, or neglected. It has written into it mechanisms for remembering and forgetting as it simultaneously regulates and reconstructs space.

Counter View-Planes and Productive Exclusion

Considering the total mechanism of the View Plane – both the excluded and included – creates a complex remembrance. Typically, the View Plane is explicitly concerned with what is preserved. What is cropped out is largely an afterthought. But what if the View Plane was focused just as intently on what was forgotten as what was remembered?



Fig. 13: Looking out of Dan Dixon’s back door, 1965 (left) (image courtesy of Dr. Ted Grant, O.C.). The same view, present day. Note the highway in the foreground (right).

The images presented here are mock-ups of what such an experience or artifact could be, a Counter View Plane.

¹ Ibid., p. 117



Fig. 14: Counter View Plane Mock-up. Africville experienced from the same vantage point from two different eras, with conflicting context excluded.

They seek to conjure the potential outcomes of a process of productive exclusion. By editing out the contemporary contexts – evidence of destruction - and capturing the fragments of lingering vistas it is expected that a triggering of memory can occur and a transportation in time.



Fig. 15: A collection of Counter View Plane experiences. (Top and bottom right images courtesy of Dr. Ted Grant, O.C. Middle right reprinted with permission from The Chronicle Herald.)

Someone who experienced such a view fifty years ago may be – through the glimpse of a fragment – temporarily transported back to a place devoid of highways and vanished homes, and filled with the experience of community. Likewise, a visitor, without history or attachment to Africville may understand in the round, in three-dimensional space and time, through a fragment, what the specialness or experience of Africville once was. Whether the view from a favorite window, a stand of flowers, a patch of grass, a favored tree, once formalized it would enter the playing field of heritage politics presently dominated by the British colonial militaristic story of the view from Citadel Hill.

These Counter View Planes would not be initiated as objects, but rather as a process. For such a process to be successful the methodology for identifying the counter View Planes necessitates openness and integration: a non-standard kind of professionalized practice. They need to originate through encounters – in groups and individually – collective wanderings and mappings through which a hierarchy of vistas will evolve. In the case of Africville they require the solicitation of precise and specific memories and sites from members of the Africville community. In this kind of practice architects and planners behave more intimately as agents of the social imagination. Memories and sites are then given the care



and expertise afforded the Citadel View Planes with the specialized instruments and activities of professional practices. However, these tools and instruments of the professional class must be handled transparently, in exchange with community expertise. A redirection and regeneration of these instruments can then be achieved through dialogue and an exchange of expertise, experience, and resources. This inevitably will lead to the generation of new devices, new instruments of attention and, perhaps, a new kind of modern subject.

Conclusion

“Citadel Beacon,” while initially playing into the militarist, exclusionary history of the city of Halifax, evolved in an attempt to address this exclusion. The process of this installation’s censorship inspired an inquiry into the role of instrumentalized vision in the urban realm as a tool of remembering and a tool of forgetting. “Citadel Beacon Redux,” while studying the implications of instrumentalized vision and the political narratives of the city, tries to establish a preliminary methodology for rewriting this instrumentalization without discarding the instruments themselves. These instruments are not neutral. As shown by Crary, they condition and shape the consciousness of the modern subject. Therefore, the hands which form them and the resources and agency afforded those hands become opportunities for political visibility, political exposure and the orchestration of productive exclusions.

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Art is Organization...But Not Only: Hannes Meyer on Art and Architecture

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Abstract

Although Hannes Meyer did not draw or paint much, the evolution of his different artistic expressions, from the puppet theater of his beginnings as part of the cooperative movement, to the graphics of his involvement with the Mexican *Taller de Gráfica Popular*, the Workshop of Popular Graphics, coincide with the development of his architecture. Both were determined by the political atmosphere of the time, and his own reflection on ideology and the role arts and architecture should play in front of society. His approach to art as “organization”, which parallels his understanding of architecture, was brought to the curriculum of the Bauhaus; however, after his Soviet experience he introduced folklore and turned to figurative art while his architecture embraced regionalist features.

The Coop Phase

In 1924 Hannes Meyer was commissioned with the design of the Swiss Pavilion at the World Cooperative Exhibition in Ghent, Belgium. Himself, a member of the Swiss Cooperative Union (VSK), had in 1919 designed the first cooperative estate in the outskirts of Basel. Freidorf was an experiment in collective living, an innovation in the construction of a community with shared values, yet, with a quite traditional appearance. Pitched roofs, equally shaped houses and a unifying color – red, were the dominant elements in the image of the 150-houses, that represented the common spirit of the inhabitants. Standardization, on which Meyer put special emphasis, was only partially achieved; windows, doors and bathtubs were mass-produced but construction still followed traditional techniques mainly due to the incapacity of the Swiss industry to meet the demands of such an enterprise.

Just as in Freidorf, the Swiss Pavilion dealt in different ways with the duality of mechanization and the manmade object. The showcase, for instance, was an arrangement of packages – designed by Meyer as well – that showed not only the actual products of the cooperative, but implied through their display, the systematization of a chain of production in an abstract composition of diagonal, curved, vertical and horizontal lines. However, it was in the Coop theater where he developed these oppositions to the maximum and, as in the vitrine, introduced the conditions of the “New World”, a world of a universal language, of mechanized rhythms and movements.

The pavilion was an elongated hall with the showcase at the entrance and the theater at the very end. Color was again the unifying element: red in the packages and the billboards, in the benches and in the ceiling. The play, written and performed with Jean Bard and his wife, contraposed “the human against



the puppet, [in the] social, the coop against the anti-coop and [in the] artistic, the naturalness versus the truth”.¹ A speechless communication, narrated the dream of a working family benefited by the open hand of the cooperative. The “Esperanto of gesture” as Meyer called it, stressed the inclusiveness of mimics, and the mechanized movements of the puppets matched the rhythms of the phonograph and the organization of the vitrine.

The construction of the pavilion and then, the performances at the theater, required Meyer to stay in Belgium for about half a year until September 1924. During that time, he prepared an exhibition for the *Kunsthalle Basel* on young Belgian artists, having the opportunity not only to get in contact with the Belgian artistic milieu but with the avant-garde in the neighboring Netherlands. Such interaction motivated Meyer to explore his own views on art, to experiment with the mathematics of composition and understand spatial qualities through bi-dimensionality. His approach to abstract art was, nevertheless, more intellectual than merely formal. He questioned it and wished to discuss his concerns with figures he already admired as Piet Mondrian. He wrote to J.J.P. Oud:

The dealing with the so-called absolute art brings me consistently to the consciousness that it is much about the sympathy to the unexplained and that there is nothing infame with the ‘absolute’ or the ‘abstraction’ as an external formal expression. I have just started to clarify and consolidate my own ideas and put them in the form of lino[cuts] and noticed how tempting it is to work consequently. Thus, I have now (under the current state of my work) the necessity to talk about the problems that occupy me with a strong absolute artist and have thought of your friend P. Mondriaan.²

In fact, neo-plasticism became one of the influences present at this stage of his artistic development; nonetheless, his inquiry into abstraction did not stop there. He was interested as well in the qualities of transparency, light and movement which he exploited in tri-dimensional artifacts, as the coop construction he published in the second number of the journal *ABC Beiträge zum Bauen*.

This number of the magazine was the only one Meyer edited and dealt mainly with art. His coop construction became the basis for experimentation in photography and the graphic expression. Layering became a fundamental aspect of his investigation on transparency, both, “literal” and “phenomenal”³, and the research on the effects of light on different surfaces had a definitive connection to his architectural concerns, as developed, with Hans Wittwer, in the 1926 project for the *Petersschule*.

The New World

Meyer’s relationship to the ABC went beyond the edition of the second number of the journal. He identified himself with the values of the organization, founded by Mart Stam and El Lissitzky, to the point of including them in his view of education at the Bauhaus. He even told Willi Baumeister that “the entire architecture guard makes a categorical front against us, the ABC people”⁴. The social content of architecture preached by the ABC was perfectly attuned with Meyer’s sense of duty, and the stress they

¹ Hannes Meyer, *Bauen und Gesellschaft, Schriften, Briefe, Projekte* (Dresden: VEB Verlag der Kunst, 1980), p.25.

² Hannes Meyer to J.J.P. Oud, quoted in *Hannes Meyer 1889-1954 Architekt, Urbanist, Lehrer* (Frankfurt am Main: Wilhelm Ernst & Sohn, 1989), p.74

³ I am borrowing the terms “literal” and “phenomenal” transparency from Colin Rowe and Robert Slutzky. See Rowe, Colin, and Robert Slutzky. “Transparency: Literal and Phenomenal”. *Perspecta* 8 (1963): 45–54. <http://doi.org/10.2307/1566901>

⁴ Hannes Meyer to Willi Baumeister, in *Meyer 1889-1954*, p. 75



put on technology met the requirements of the “New World”. For Meyer’s artistic and architectural development Lissitzky’s influence was as important as Mondrian’s. In his linocuts, Meyer evoked the spatiality of Lissitzky’s Prouns; his works were architectural in essence, just as those from his Russian counterpart. The images of soviet avant-garde architecture published in the journal, especially the restaurant on a cliff produced at the rationalist workshop of the Vkhutemas clearly served as reference to the *Petersschule* project.¹

The *Petersschule* sealed his commitment to the avant-garde. Also in 1926 Meyer published his manifesto-like article “Die Neue Welt”, (“the New World”), in which he took a clear position regarding past and present, localism and universalism and the role of technology in shaping the “New World”. In the New World there was no place for the past, the museum and the theater, he wrote, had grown obsolete, instead, the witnesses of the new age, grain silos, airports and standardized goods, were arising. They were not artworks; they were simply “the product of a formula: function multiplied by economics.”² The new means of transportation merged distances and the boundaries between the local and the international vanished: “Large blocks of flats, sleeping cars, house yachts and transatlantic liners undermine the local concept of the ‘homeland’. The fatherland goes into a decline. We learn Esperanto. We become cosmopolitan”.³

Meyer devoted a large section of the article to his reflections on art and technology. Photography and cinema presented an accurate reproduction of “the real world”, while new forms shaped the landscape: powerhouses and hangars, radio towers and high tension cables, trams and flashlights. Art, he said, had certainly a right to exist, however, done according to the means of the time:

The artist’s studio has become a scientific and technical laboratory, and his works are the fruit of incisive thinking and inventive genius. Like any product of its time, the work of art today is subject to the living conditions of our age, and the result of our speculative dialogue with the world can only be set down in a precise form. The new work of art is a totality, not an excerpt, not an impression.⁴

Meyer’s interest on mathematics, biology, music and philosophy strengthened at that time⁵ and this was also reflected in his understanding of art: “the boundaries between painting, mathematics and music can no longer be defined; and between sound and color there is only the gradual difference of oscillatory frequency”.⁶

This emphasis on the precision of mathematics was also evident not only in his project for the *Petersschule* but in the design of its presentation to the jury. An isometric projection of the building, the plan and its section, were placed on the upper left corner of the board, surrounded by many equations to calculate the amount of light and heat entering the classrooms and thus, the size of windows. Was it

¹ See, Hans Jacob Wittwer, “Überlegungen zur Petersschule in Basel”, in Hannes Meyer 1889-1954, p. 16 and Sima Ingberman, ABC International Constructivist Architecture, 1922-1939 (Cambridge, London: MIT Press, 1994), p.15

² Hannes Meyer, “The New World, 1926” in Claude Schnaidt, *Hannes Meyer: Buildings, Projects and Writings* (NY, London, Taufen: Architectural Books-Tiranti-Niggli, 1956).

³ Meyer, “The New World, 1926”

⁴ Meyer, “The New World, 1926”

⁵ See, Hannes Meyer to Willi Baumeister, December 1, 1926. GTA/ETH

⁶ Meyer, “The New World, 1926”



necessary in a preliminary stage of the competition? Probably not, yet, it was a clear statement of the rigorous scientific approach to architecture.

Art at the Bauhaus

By the end of 1926, Wittwer and Meyer were starting a new project, this time for the competition of the Palace of the League of Nations. The mathematical content was even stronger than in the *Petersschule* since the assembly hall needed strict acoustical calculations. Moreover, the composition, just as the coop construction and the vitrine, played with the geometry of curves and straight lines, of asymmetry and equilibrium, of transparency, movement and a mechanized image of constructive components.

On December 6, Meyer attended the opening of the Bauhaus in Dessau. Soon after Walter Gropius invited him to join the school as head of the architectural workshop to be established. The Swiss architect clearly expressed the guiding principles of his teaching, aligning again with the ABC agenda: “the basic tendency of my teaching will be absolutely functional-collective-constructive in the sense of “ABC” and “the New World”¹. Actually, the “New World” started to look politically too mild for Meyer. Just three days before, he had written to Baumeister about his leaning towards the left and saw himself at a turning point in life where those ideas expressed in his article seemed to be “tame and too little anarchic”.²

Only a year later, having Gropius resigned, Meyer took over the direction of the School. In his address to the representatives of the students, with a conciliatory tone, he admitted it was impossible, under the current political and economic circumstances to transform the school into a scientific institute. At the same time, he highlighted the lack of a clear purpose, the disconnect between the Bauhaus and the exterior, and guessed it was precisely this, one of the sources of discontent. He said: “Will our work be determined by the exterior or the interior? i.e., are we going to act according to the necessities of the external world, are we going to collaborate in shaping these new forms of life, or are we going to stay in an island that cultivates individualism, but that its positive productivity is arguable?”³

The next year, in his article “Bauhaus and Society”, Meyer went further in his criticism of a school in search of a style, of a Bauhaus fashion instead of an institution aimed at serving society through design. He denounced artistic expressions, even those with which he had identified in the past, as neoplasticism, and formulated his view of art:

Art?!

Art is organization. The organization of the dialogue between this world and the other, the organization of the sense impressions of the human eye, an accordingly subjective, bound to the person, and

¹ Hannes Meyer to Walter Gropius, February 16, 1927, The Getty Center for the History of Art and the Humanities, No. 870570

² See Hannes Meyer to Willi Baumeister, February 13, 1927, GTA/ETH

³ Hannes Meyer, “Discurso dirigido a los representantes estudiantiles en ocasión de su nombramiento como director del Bauhaus”, in Francesco Dal Co (ed.), *El Arquitecto en la Lucha de Clases y otros Escritos* (Barcelona: Gustavo Gili, 1972), p.94



accordingly objective, determined by society. Art is not a beauty aid, art is not a discharge of affect, art is only organization.¹

Meyer reorganized the curriculum of the Bauhaus into four main groups aimed primarily to serve society through real-life projects, supplementing the work of the workshops with lectures on different specialties in the arts and science. Painters were marginalized and photography was introduced as part of the advertisement workshop. Threatened by Meyer's programme, Wassily Kandinsky played an important role in his dismissal from the school in August of 1930. The political atmosphere and the inability or unwillingness of Meyer to dissolve the communist cell at the school and his own admittance of Marxist tendencies triggered his departure from the Bauhaus. Together with seven of his students, the Bauhaus Brigade emigrated to the Soviet Union.

The Soviet experience

The Soviet experience changed Meyer in every single sense; he delved into Marxism and engaged wholeheartedly in politics. He entered into a stable personal relationship with Lena Bergner after a tormented one with Lotte Beese; admitted the dictates of Socialist Realism in architecture and turned to figurative art as a personal exploration of form, light and nature.

During the six years he spent in the Soviet Union, Meyer had little time to deeply reflect on the intellectual basis of art as he had previously done. He was completely devoted to his architectural and educational labor and spent much of his time learning Marxism-Leninism. Upon arrival, he joined the Pan Russian Union of Proletarian Architects (VOPRA) and soon Socialist Realism was imposed as the only artistic and literary option. Committed to the political line of the regime, he defended the introduction of "proletarian art" into architecture through murals and sculptures, and looked for the national character of architecture as the outcome of a dialectical process. History was reintroduced in his work, but not as a literal repetition, as he explained when referring to his planning of Birobidzhan: "I would have made a big mistake if, during my current collaboration in the future capital of our Jewish autonomous state, Birobidzhan, I would have had in front of me the plans for the reconstruction of Jerusalem".²

How convinced was he in fact of national traditions expressed in architecture? Perhaps not so much when they were spontaneously produced, or, at least not at that time. In 1933 he was commissioned with the urban planning of the Jewish Autonomous Region of Birobidzhan. His first impressions of the architecture brought by the settlers was not only critical but even prejudicial. He said:

During our daily wandering through the site of Tikhonkaia, we unsuccessfully looked for an impression of a collective building desire among its more or less 350 timber or adobe houses and almost 5000 inhabitants. The preference for individually decorated, detached houses and the petty garden partitions, are worthy of a Jewish theatrical piece with petit bourgeois tendencies! - as a consequence of the diverse catalog of house construction methods, the place can only look like a chaotic display of a housing exhibition of the various peoples on earth. The national basic materials for house construction are timber, reed, straw, adobe, sand, gravel, lime and limestone.

¹ Hannes Meyer, "Bauhaus and Society, 1929", in Schneidt, Hannes Meyer: Building, Projects and Writings.

² Hannes Meyer, "Mi Manera de Trabajar", in Dal Co., El Arquitecto en la Lucha de Clases, p.144



Yet, during the process of individual or collective enterprise of self-construction, they get transformed in the hands of the dweller, depending of his origin, in the block-houses of Latvian or White-Russian Jews, the lime-plastered adobe buildings of Ukrainian Jews or the two-storey adobe structures of German Jews.¹

As for his artistic development, Meyer returned to aquarelle painting, to canvas². Photography became an important means mainly in the private sphere of family and landscape captions. In the series he took of Lena in the beach of Sochi in the Black Sea, he returns to light as a fundamental component of the picture in a play of chiaroscuros, and the figure becomes central piece as opposed to the abstraction of previous times. The rich images of the Birobidzhan landscape accompanied his description of a place of personal enjoyment and relaxation. People of different backgrounds and vernacular settings of natural materials became frequent topics in his pictures, especially those alien to the urban images of Moscow. Wide perspectives replaced the close-ups of the West-European times.

In the homeland

Compelled by the political turn in the Soviet Union towards foreign professionals to leave the country, Hannes and Lena returned to Switzerland where they rented an apartment in Le Corbusier's Maison Clarté in Geneva. His political activities occupied most of his time, and work for a communist was scarce. His self-portrait with Lena and their daughter Lilo dates from that period. The image is placed in an architectural setting with Lena standing at the center of the composition in the background. To equilibrate his own image at the forefront left corner, he draws Lilo sitting on the bed to the back of the canvas where he is painting. Again, different sources of light are important to highlight or blur the figures.

As in his photographs, landscape became equally central to his architecture. The only building he built during his stay in the homeland between 1936 and 1939 was the Children's home in Mümliswil done for his old client and friend Bernhard Jaeggi. It was an innovative program for kids to be introduced to cooperative life, following the educational principles of Johannes Heinrich Pestalozzi. Sport was an integral part of the upbringing and thus, open spaces were compulsory. As opposed to the limitations he once had at the *Petersschule*, in Mümliswil the extraordinary vastness of the Jura landscape conditioned the project. Meyer saw the experience of place, especially in Mümliswil as a musical piece as he described it. He said: "What the musician produces through the tone and silence, the rhythm and volume, that is, the experience of a musical succession of space, the architect achieves it with constructive-plastic means: a spatial experience in landscape consciously expressed".³ The windows were this time conceived not as a response to the mathematical calculation of heat and light, but as frames to the quasi-pictorial views of the landscape.

¹ Meyer, *Bauen und Gesellschaft*, p. 143. Quoted also in Raquel Franklin, "The Jewish Autonomous Region and the Czechoslovakian Jews: Hannes Meyer Writes on Birobidzhan", *Architektúra & Urbanizmus* 48, 1-2 (2013), p. 77

² Hannes Meyer to Lisbeth Oestreicher, September 30, 1934. *Bauhaus Archiv Berlin*.

³ Hannes Meyer, "El Hogar Infantil Cooperativo en Mümliswil (Jura Suizo)", *Arquitectura* 8, (1941), p. 29



Mexico: the last stopover

In 1938 Meyer attended the XVI International Congress on Housing and Planning in Mexico City. A year later he immigrated with his family to establish an Institute for Planning and Urbanism at the National Polytechnic Institute. Meyer immediately bonded to the different exiles, mainly the German and the Italian and the anti-fascist Workshop of Popular Graphics (TGP). As a Stalinist, his work at the Institute encountered strong opposition and was soon canceled. He then worked for several public institutions and held an independent practice. His architecture of that period is somehow a synthesis of all the previous, from the glass box of the Corpus Christi block, to the landscaping of the planning of Agua Hedionda. His graphics, on the contrary, continued on the figurative line of the Soviet epoch. He sustained that for a people with a 50% rate of illiteracy, there was no other option than the use of literal images to convey a message. Folklore was introduced in his work and took central stage in his captions of indigenous people. The wide variety of natural landscapes and pre-Hispanic and colonial sites became typical themes in his pictures and so were political events. For the artist working in the TGP, Meyer was far more than the editor, he was their political guide and teacher.

In 1949, the Meyers returned to Switzerland and established in the mountains of Tessin. In the last years, Hannes looked back into the past, into the history of architecture. His artistic interests not only paralleled his architectural development but his political. He embraced with equal force the technological mandate of the "New World", the construction of socialism and the anti-fascist struggle. For him, the experiments in abstractionism and the mechanized forms of standardization were as important as the literal messages of the anti-fascist propaganda, the regionalism of his late architecture or the beauty of the landscape.



Art and Architecture in Byzantine's Palaestina

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Abstract

The ancient synagogue is a distinctive monument to the Jewish struggle to maintain cultural and religious identity under the Byzantine regime. The Christian Byzantine era was a time of battle for people's minds and hearts. Judaism had to promise religious awareness to its worshipers, a way of "becoming," in order to keep its own identity, since liberation was not an option after its failed rebellions against the Roman and Byzantine empires. Until now, scholars believed that Judaism was oblivious to all art forms, regarding them as mere "decoration." The proposed paper, "Art and Architecture in Byzantine's Palaestina," will examine some of the theoretical and philosophical aspects of art as modes of the poetic embodiment of the surroundings in Byzantine Palaestina and some of the dialogue that took place between Judaism and Christianity. From the conflict we will draw several distinctions that are important to critical regionalism, including the idea of representation of images of resistance to dominant cultures.

Historical-Cultural Introduction

Over thousands of years, the Land of Israel came under the dominion and cultural influence of many great empires: Indo-European Hittites, Philistines, Assyrians, Babylonians, Persians, Macedonians and Romans. All these great empires had a dominant influence over the life and culture of the region's people. The time period covered by this book begins in the third century CE, after the severe consequences of the Jewish-Roman wars during and after 66-135 CE—the beginning of the Byzantine era—and ends in the seventh century, when the area was conquered by the Islamic Empire in 634 CE. The victory of Constantine in Tetrarchy in 324 singled the beginning of the Christianization of the Roman Empire, uniting people in the belief that Jesus had a unique significance. Constantine's mother, Saint Helena, visited Jerusalem in 326 and began construction of churches and shrines, making Palestine a center, attracting numerous monks and religious scholars. It was "a turbulent period which holds the last winter fruits of the Classical world as well as the spring flowers of the new world of Christianity."¹ The reemergence of religious forces that took place is indicated in sculpture and painting by a transformation from representational pagan art to the abstract forms of the Byzantine era. "From

¹ Bernard Goldman, *The Sacred Portal: A Primary Symbol in Ancient Judaic Art* (Detroit: Wayne State University, 1966), 19.



reliance on canons of physical form as media expression of ideals (physioplastic) to emphasis on conceptual forms in order to express the transcendental (ideoplastic).”¹

Like other peoples living under Roman and Byzantine domination, the Jews could not remain impervious to the cultural, social, political, religious and economic forces that held sway. “They reacted to them in various ways: by choosing suitable features for incorporation into their own culture, adopting regnant patterns without giving much thought to selectivity, or simply rejecting elements as foreign and undesirable.”² Their reaction to Hellenism served at the time as a stimulant, and the act of rejection created new and unforeseen consequences. Since in this epoch there were many dramatic changes in political, cultural and religious circumstances, they implied changes in the Jewish tradition, rituals and forms of expression. Those changes in the second and third centuries CE directly influenced Jewish art.

The archaeological evidence shows many dramatic changes in the Jewish tradition, rituals and forms of expression. There is much evidence to suggest that the great mass of Jews accepted the amalgamation of pagan art with typical Jewish art forms. The visual art itself indicates the high level of influence that the Greco-Roman culture and the Christian tradition had. Thus, the observation into popular Judaism at the time of its religious conceptions, if not its rituals, was revealed by these excavations. The common reaction to this was disbelief. Afterward, the majority of the researchers turned to the traditional view, which maintained that Jews disregarded images, and therefore viewed the style as insignificant—hence, the revealed style was “mere decoration.” “Everything specifically forbidden in the Halacha of the rabbis appears in the remains of their religious culture: apart from the fantastic images on the amulets and charms, even the synagogues have yielded images of pagan gods.”³ With elements such as plants, hands, animals, fish, snakes, as well as birds of all kinds, the archaeologists were left to their own devices to decipher these newly exposed visual images.

The theory accepted by most scholars is that from the third century CE onward, the pagan motifs used in Jewish representational art lost their original, symbolic, idolatrous significance and were regarded as merely ornamental motifs.⁴ They assume that the Jews in Palestine during the Byzantine era utilized such threatening images because they were unaware of the implications of those images. They also maintain that in the second and third centuries, paganism was no longer dominant, and therefore the images were largely free of any noisome religious content. On the other hand, Jewish art utilizing both biblical themes and pagan symbols, as sometimes occurs, for instance, on adjacent panels of a mosaic pavement in a synagogue nave, was profoundly meaningful. Some researchers even claimed that the Jews of the Byzantine era had no awareness of the surrounding visual culture. However, though the

¹ Ibid., 19.

² Lee I. Levine, *The Ancient Synagogue: The First Thousand Years* (New Haven, CT: Yale University Press, 2005), 635.

³ Erwin Ramsdell Goodenough, *Jewish Symbols in the Greco-Roman Period*, Bollingen Series 37 (New York: Pantheon Books, 1956), 4:26.

⁴ Nahman Avigad, *Beth She'arim: Report on the Excavations during 1953–1958, Vol. III: Catacombs 12–23* (New Brunswick, NJ: Rutgers University Press, 1976), 282–285; Michael Avi-Yonah, “Ancient Synagogues,” *Ariel* 32 [in Hebrew] (1973): 29–43.



Jews of that time could be seen as motivated by the internal dynamics of rabbinic law, they can also be seen as part of the larger, dominant sociocultural process.

The mosaic inlay in Jewish synagogues was thought by Michael Avi-Yonah and his colleagues to be “mere” decoration. Decoration, as opposed to fine art, carries no meaning. Decorations are arrangements of visual elements according to established compositions whose principles are based on symmetry. Given that meaning can be achieved by allowing the breaking of symmetry that produces difference, by examining mosaics in a synagogue it is possible to observe that there are nonsymmetrical elements that could denote meaning (for example the geometric panels). Art with recognizably Jewish or biblical themes, even when found in the same context as the pagan, for example, on adjacent panels of a mosaic pavement in a synagogue nave, is assumed to have been profoundly meaningful.¹ The problem with the theory of “mere decoration,” as applied to the mosaics in the synagogues, can be summarized in the following way: the Temple shrine and the zodiac panels are symbols of the Jewish and pagan religions, respectively, and therefore cannot exist in adjacent panels within a larger frame.

In this paper we will argue that Jews at the time were aware of the artistic implications and that art had meaning, but due to time and space constraints, we will ignore in this paper the religious aspects of art and concentrate on semiotics. We will start by taking the conference definition² of artistic creation, and apply it to the archeological findings to further understand the artistic process.

The architecture

The synagogue functioned throughout its history as a communal center in which the activities of the local community took place. From the religious point of view, the reading of the Torah and its ancillary activities were central to the liturgy of the Second Temple era. Only after the destruction of the Second Temple did the synagogue in Palaestina undergo major changes, transferring a number of secondary Temple functions to the synagogue. The Mishnah refers to the synagogue as a holy place, but it was Rabbi Isaac who called the synagogue a *mikdash me'at*—a “lesser sanctuary.”^{3 4}

The change in the status of the synagogue by the third century was expressed architecturally, in the building’s orientation toward Jerusalem. This emphasis on the orientation of prayer was adopted in

¹ Ibid. 134.

² “Artistic creation, in its different forms, allows the artist to embody the world poetically. Through drawing, painting, sculpture, film, music, dance, etc., the artist addresses collective cultural topics in a personal manner, questions, criticizes, and illuminates them, and thus actively participates in the shared reality.” AR (t) CHITECTURE An International Conference at The Technion – Israel Institute of Technology
Faculty of Architecture and Town Planning 19-21 April 2016

³ Babylonian Talmud, Megillah, 29.

⁴ Levine, “Synagogues.”



Jewish societies after the destruction of the Second Temple. The basilica is a rectangular building with a central nave and aisles. The synagogue has an apse at the far end of the prayer hall; alternatively, it has a niche or *bima* in the wall facing Jerusalem. The only ones that are different are Susya and Eshtemoa, which have the *bima* on the central wall facing Jerusalem, referred to as "broad house." The permanent presence of the Torah scrolls in the prayer hall significantly influenced the room's interior design. Between the end of the second and the beginning of the third century CE, mosaic was added to the floors; most probably during the first century the wall began to be painted. Jewish symbols, perhaps intended to recall religious ritual in the Temple, sect identity and other cognitive devices, were now introduced into synagogue art. It thus appears that by the end of the third century CE, the synagogue had come into its own, achieving a sacred status and fulfilling—even if only partially—the place of the Temple in Jerusalem in people's minds.

The most influential building type in the construction of the synagogue was the basilica, partly due to its difference in appearance to the pagan temple building. The basilica was a public building, using a construction technique common in the Roman world. The layout of the basilica has a nave flanked by two aisles, one on either side, or in some cases two aisles on either side. The aisle would have been built on one story of a two-story building. The central nave would be taller than the sides so that windows in the top section might let light into the building. The walls were supported by rows of columns onto which the weight of the roof would be borne. The roof would be held by wooden trusses and covered in terra-cotta tiles. The width of the central aisle would therefore be limited by the necessity for building sufficiently wide roof trusses that would not buckle. This overall construction gave the basilica a humble appearance which suited both Christians and Jews, the former for their belief system and the latter for not wanting to stand out.

Mapping one's world

In the Tel es-Sultan (Shalom Al Yisrael) and Huseifa synagogues, there is a shift in the pattern which alters their meaning. North of Tel es-Sultan a synagogue was found, indicating that in the Byzantine period this settlement included a Jewish community; it was revealed in excavations conducted in 1936 by Dr. Baramki when the area was under the British Mandate. The site contains the foundations and floor of a Jewish synagogue and consists of an apse that is orientated approximately towards Jerusalem, a central nave and two lateral aisles. There is only one entrance giving access to the nave on the north-east side. It is approached by a step, to the right of which is a column base, while the area on the left is destroyed. The threshold contains two rectangular sockets for the doors. The nave is separated from the aisles by two parallel rows of piers and responds which probably carried arches; they do not rest on a base. At the north-east end next to the entrance there is an Aramaic inscription in Hebrew characters. It is enclosed in a rectangular panel with a black border, while on each side of it the tesserae form plant designs in white, red, black, brown and blue.

The main panel is a grid made of split hearts: half of the grid aligns with the frame, and the other grid is diagonal. Within the grids are located representations of the Torah Ark and the Menorah. The diagonal grid shift occurs at the Torah Ark's location. Possibly this grid is a map, where the split heart diagonal lines refer to the desert and the grid aligned with the frame refers to the fertile Land of Israel; symbolically the Torah Ark is located at Jerusalem, while the Menorah is located where the synagogue itself is—in Jericho. Nine split hearts are placed in the opposite direction, six at the top right (*Shekhinah*) and three at the bottom left (men). Six is the number of days it took God to create the world, and three is the number of the patriarchs of the Jewish people. Thus this panel is a giant map and compass that doubles up with religious belief.

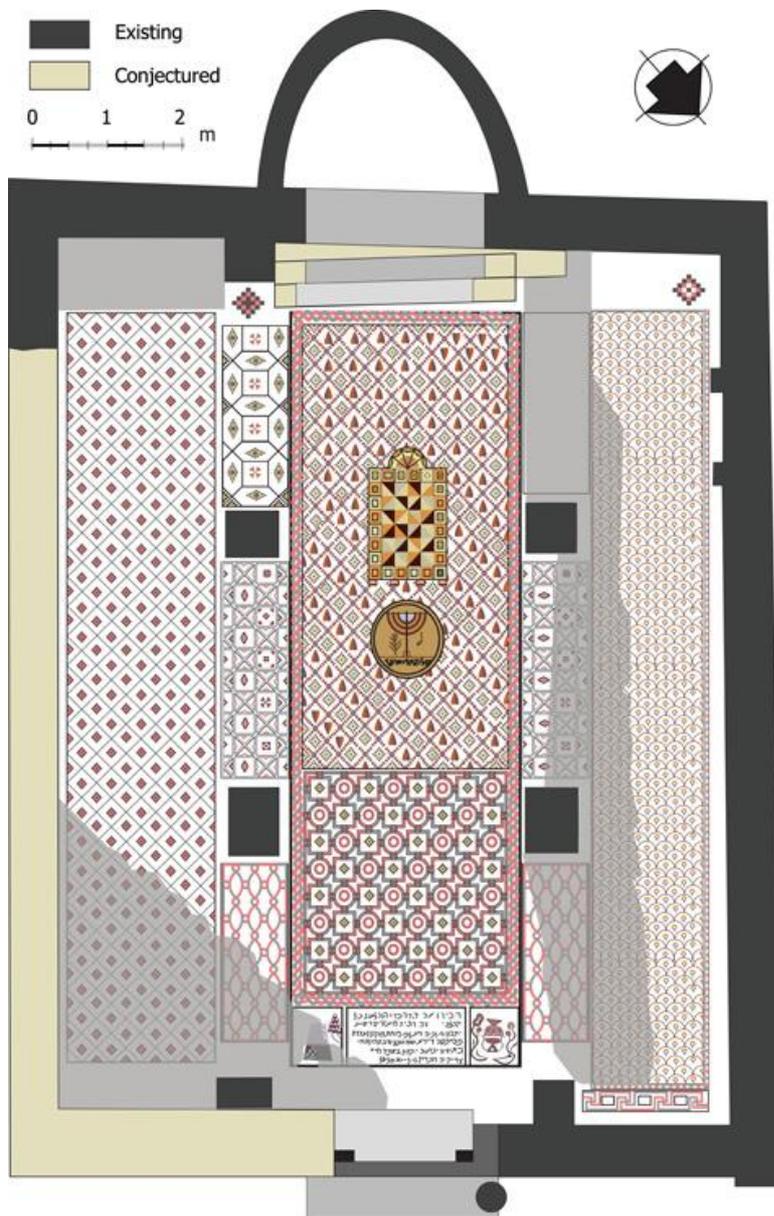


Figure 1. Tel es-Sultan (Shalom Al Yisrael) synagogue main panel

In order to understand the synagogue near Tel es Sultan in Jericho, one has to compare it to the church of Saint George at Madaba where the Madaba Map is located, not far from Mount Nebo. The Madaba Map dates to the 6th century AD and is a map of the Middle East, containing the oldest surviving original cartographic depiction of the Holy Land and especially Jerusalem. The floor mosaic is located in the apse of the church facing east toward the altar. Originally, it measured 21m x 7m; currently it measures 16m x 5m. The mosaic map depicts an area from Lebanon in the north to probably Egypt in the south, and from the Mediterranean Sea in the west to the Moab Desert in the east. The map may partially have assisted pilgrims to orient themselves in the Holy Land and perhaps to give a glimpse of Moses' view from Mount Nebo when he first saw the Holy Land. A combination of a two-dimensional and an aerial view depicts about 150 towns and villages, all of them labelled in Greek. At the center of the map is Jerusalem, the largest and most detailed element.

Thus the synagogue's mosaic marks the location of Jerusalem and Jericho through a disguise that can only be understood by examining the split hearts in relation to the other split hearts in the grid. The Madaba Map is the visible landscape, while the synagogue near Tel es-Sultan in Jericho is the veiled landscape. This veiling of the map through transformation of the particular is very much a Jewish idea—that wisdom can be gained by grasping the whole through the particular and the specific.

Quoting the past



Figure 2. Robert Rauschenberg, *Odalisk*, 1955-58 Museum Ludwig, Köln.



Let us start with a modern art which can help explain the way one might read the old Yafia synagogue image. Between 1955-59 Rauschenberg created '*Combine*' – a series with the idea of combining and of noticing combinations of objects and images. These are neither paintings nor sculptures, but both at once, invading the viewers' space, demanding their attention, like veritable visual puzzles. One of those objects is the *Odalisk* which combines oil paint, watercolor, crayon, pastel, paper, metal, glass, fabric, newspaper, photographs, printed reproductions, miniature blueprint, dried grass, steel wool, a pillow, and a post supporting a wooden crate mounted on four casters and topped by a stuffed rooster. The open wooden crate is covered on all sides with images. Most of the images on these surfaces are of pin-up women, among them photographs of the artist's mother and sister – the entire pictorial tradition of female representation. One might interpret this as messages about gender and roles, and the need for change.

Rauschenberg's approach to art can shed light on religious visual art. Rauschenberg has been quoted as saying that he wanted to work "in the gap between art and life,"¹ thus questioning the role of the observer in creating art's meaning by distinguishing between art objects and everyday objects. Thus religious visual language can also be said to draw from everyday experiences and common images to create a union between art and religion.

The Hebrew name Yafia means a place of magnificence, in the Lower Galilee. This was also the name of the king of Lakhish in Joshua's time (Joshua 10:3). A settlement called Yafu is mentioned in the El Amarna letters (the correspondence between rulers in Canaan and the rulers of Egypt. Canaan was under Egyptian control at that time, 14th century BCE). The letters indicate that Yafu (Yafia) was part of the territory of the kingdom of Meggido. One letter relates that workers were brought from Yafu to the Valley of Jezreel to work the land.

Dr. Eleazar Sukenik excavated the site in July-August 1950 and discovered the remains of the ancient synagogue near the Greek-Orthodox church in Yafia. Sukenik determined that the synagogue was in use during the 3rd-4th centuries CE. Parts of the synagogue's southern wall and mosaic floor survived. In the mosaic Sukenik identified an ox and a ram, symbols of the tribes of Menasseh and Ephraim. Several column-bases were discovered in the prayer hall. Unlike other contemporary synagogues in the Galilee, which were built along a north-south axis, the Yafia synagogue was built on an east-west axis.

In the Rockefeller Museum there is an image, part of the surviving mosaic floor of the synagogue at Yafia. Built in the 4th century CE, it depicts what the museum calls "the Eagle and the Medusa mask, found in the corner of the prayer hall. It depicts a golden eagle with spread wings perched on a Medusa mask. Alternatively, some scholars identify the portrait as that of Helios, the sun god. Helios is connected

¹ Moma exhibition, Robert Rauschenberg: Acting in the Gap between Art and Life 2014
<http://www.moma.org/calendar/events/90?locale=en>



to the synagogues in the Galilee and was featured in some of the mosaics displayed." This is not the face of Medusa, she would never look sideways, and neither would Helios.



Figure 3. An image from the Synagogue at Yafia: "The Eagle and Medusa mask"

An alternative interpretation regards the eagle as a symbol of "Becoming," that reaches enlightenment or heaven. Exodus 19:4 "Ye have seen what I did unto the Egyptians, and how I bore you on eagles' wings, and brought you unto myself." In the lower portion one identifies the face as that of a young Greek, perhaps a typical young Jewish male, who is looking north in anticipation of trouble. The two additional elements are: a) the two spirals which open down or up - revolute and involute leaves. This element is associated with inward introspection and outward scrutiny, leading on the one hand to *Tikkun Olam*—namely, repairing the world through charity—as well as to an act of repentance. Repentance in Judaism is known as *Teshuva* (return); it is the way of atoning for sin in Judaism. b) The second element is the three pillars below the young Jewish male. Traditionally, the number three stands for the patriarchs: Abraham, Isaac and Jacob. Thus, we can interpret the image to say: "Those who are descendants of the three patriarchs and obey the Jewish laws should ascend to Heaven," or as in Isaiah 40:31: "But they that wait upon the LORD shall renew [their] strength; they shall mount up with wings as eagles; they shall run, and not be weary; [and] they shall walk, and not faint."¹

¹ Isaiah 40:31, King James Version.



Conclusion

By the end of the fourth century CE, the richness of figurative and geometric decoration had found its way into the synagogue buildings of Palaestina; it is an art that has been primarily preserved in floor mosaics. In the ancient Palaestina synagogues, the emergence of architecture, internal furnishings, inscriptions, and art cannot be denied. The synagogues in Palaestina developed a visual language adhering to traditional literary sources. However, those who designed the mosaic floor were aware of the difficulty of reading the symbolic figures and forms, and left labels for the figures and clues in the form of directional markers for the geometric forms. We believe that if the mosaics had not been partly destroyed, making it impossible to decipher their forms and figures, it would have been possible to interpret their hidden meanings. The mosaic depiction is naïve, its crudely fashioned figures with stick-like limbs and rigid facial expressions; yet it also has a schematic element, as shown in Na'aran and Beit She'an, and a conceptual element as in Tel es-Sultan. Furthermore, its narrative visual logic flows from left to right and bottom to top. The painting direction suggests that "man" draws in an attempt to understand the *Shechinah* (left to right, or bottom to top), while reading the biblical text originates from the *Shechinah* to humans (right to left).

The visual language that emerges is a trope that utilizes literal and figurative readings to arrive at a curious mixture—a probing language that facilitates learning. It is a visual language of “Becoming,” of inward introspection and outward scrutiny. This visual language analysis goes back to Ernst Gombrich’s, Rudolf Arnheim’s, Gyorgy Kepes’s and *Roland Barthes’s* attempts to synthesize visual rhetoric. Their attempts went beyond the limits of compositional rules to form malleable perception and structure, producing a cultural interpretation that requires a rational, analytical thought process, as well as an emotional one. Abstract art conveys meaning through the qualities of line and shape, proportion and color directly without the use of pictorial representation. Modern Abstract art shows how drawn lines and marks can be expressive without any association with a representational image. From the most ancient cultures and throughout history, visual language has been used to encode meaning.



Architecture into Art: The Ar(t)chitectural Production of Richard Henriquez

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Abstract

The art and architecture of Vancouver architect Richard Henriquez (b. 1941) can be understood as autonomous, yet reciprocal, endeavours; indeed, Henriquez is renowned in both realms. His earliest architectural mentors – family members and professors – tended to reinforce Richard’s natural proclivities toward visual and spatial expression. The creative upheaval that beset modernist architecture in the 1960s and 1970s – including the theories of Kevin Lynch and the so-called post-modernists -- coincided with the period in which Richard formally studied architecture and began his practice. After son (and later partner) Gregory Henriquez enrolled at Carleton School of Architecture, and then McGill University, both successively under the direction of Alberto Pérez-Gómez, the trajectory of Richard’s ar(t)chitectural practice turned toward the critical integration of historical narrative, fiction, ritual, theatre and personal story into the actualization of his built designs.

Richard Henriquez is a rare example of a Canadian architect who is established in both realms as professional architect and established artist.¹ Beyond his considerable success as an architect – he is credited with the invention of an urban development practice known as “Vancouverism”-- Henriquez is an accomplished artist; his solo gallery exhibition entitled *Memory Theatre*, showed at the Vancouver Art Gallery, or VAG (1994), as well as the Canadian Centre for Architecture (CCA) in Montreal and the Venice Biennale (1996). A more recent exhibition entitled *Narrative Fragments*, premiered at Vancouver’s Windsor Gallery (2012).

¹. Richard Henriquez is listed in the Biographical Index of Artists in Canada as a sculptor: “HENRIQUEZ, Richard G., b Jamaica 1941-, sculp CWW93”, in Biographical Index of Artists in Canada, ed. McMann, Evelyn de R. (Toronto: University of Toronto Press, 2003), p.127.

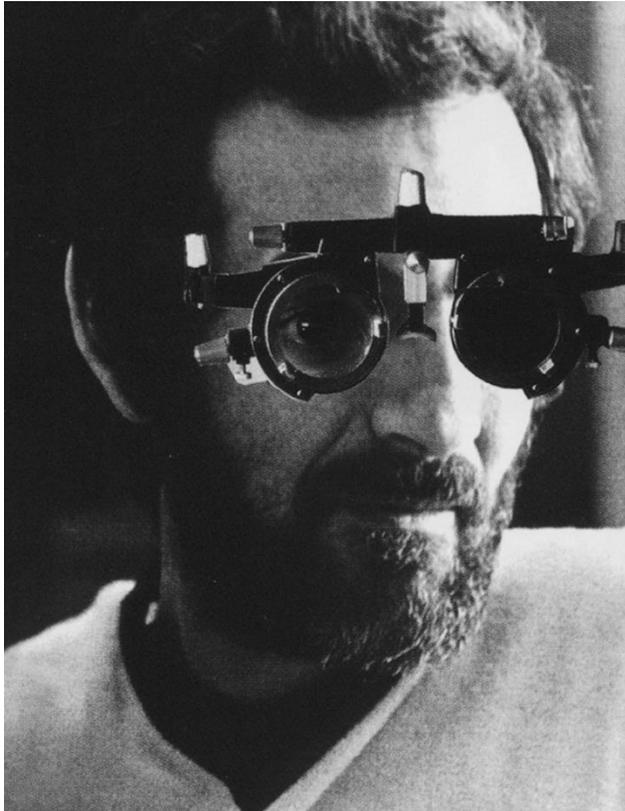


Fig.1 Richard Henriquez, Portrait photo taken in 1977.

Henriquez's account of his own influences makes it abundantly evident that what is known as "fine art" has early on been an almost natural predisposition. In his acknowledgements to the monograph dedicated to his life's work, it is clear that to Richard, art is seamless with, and foundational to, architecture and other human endeavours.¹ When crediting his great uncle Rudolph Daniel Cohen Henriques ("Dossie") Richard describes him as an architect, engineer *and* artist who inspired him "to love the smell of paint."² For almost all of his teachers at University of Manitoba and at MIT that he cites, the role of art in architecture is self-evident: John A Russell, Dean of the School of Architecture at the University of Manitoba actively practiced set design.³ Similarly others at the Manitoba school were steeped in the arts, and György Kepes at MIT was an outstanding visual artist and theorist who taught visual design at the MIT School of Architecture.⁴

¹. Richard Henriquez, "Acknowledgements," in Robert Enright, Howard Shubert and Geoffrey Smedley, eds., *Richard Henriquez: Selected Works 1964 - 2005* (Vancouver: Douglas & McIntyre, 2006): p. vii-ix.

². *Ibid.*, p. vii.

³. Also see: Jeffrey Thorsteinson, "Two Forgotten Fig.s: Arthur A. Stoughton, Milton S. Osborne and the University of Manitoba School of Architecture" in *Network 2014-2015* (Winnipeg: Faculty of Architecture, 2016), p. 70. Thorsteinson writes, "in many respects, John A. Russell's writing and interests represent a continuity with both of the preceding department heads: a focus on the links between architecture and the artistic, theatre, a commitment to public engagement ..."

⁴. Professor John A. Russell is an alumnus of both MIT and the Fontainebleau School of Fine Arts, programs based on the *Ecole des Beaux Arts*. He contributed immensely to the Little Theatre Group and the Winnipeg Ballet in the areas of set and costume design, and later was appointed director and president of the Winnipeg Art Gallery and a board member of the Winnipeg School of Art. He also belonged to the Federation of Canadian Artists. From, "Obituary," *Winnipeg Free Press*, (Winnipeg: 29 December 1966), p. 21.

Professor John Graham, practicing architect, was also involved in the arts: he served as the head of Stagecraft Department at the Banff School of Fine Arts, designed sets for the Royal Winnipeg Ballet, Rainbow Stage and the Playhouse Theatre, wrote as art critic for the Winnipeg Free Press, served as President and board member of the Royal Winnipeg Ballet, and was noted



Fig. 2 György Kepes: *Photogenic Painting* (1942)

for many artworks, including the mural on the north wall of the Winnipeg International Airport. From, "Obituary," *Winnipeg Free Press*, (February 21, 2007) http://passages.winnipegfreepress.com/passage-details/id-117660/name-John_Graham/.

Professor Gustavo da Roza, also a practicing architect and Richard Henriquez's Thesis Advisor at the University of Manitoba was renowned for his exacting instruction in architectural representation: particularly drawing and rendering (based on an interview with Gustavo da Roza by the author).

György Kepes studied painting at the Royal Academy of Fine Arts in Budapest; collaborated with László Moholy-Nagy on filmmaking, exhibitions, stage design at the Dessau Bauhaus (1930-36), and after heading the Colour and Light Department at the Chicago Institute of Design (1937-43), he was invited to teach visual design at the MIT School of Architecture. From György Kepes, ed., *Arts of the Environment* (New York: George Braziller, 1972), p. 242.

Jan Lubicz-Nycz who was Richard Henriquez's Thesis Advisor at MIT, was the inventor of "Urbatecture," a visionary urban design model. See: Ellen Perry, "The Future of the Urban Environment" in *Progressive Architecture* (October issue, 1964), pp. 160-183.



Almost all commentary on Richard Henriquez's work inevitably connects his work to art for whom art is a way of life, a critical framework for living, on a daily, familial basis.¹ Carol Henriquez is a sculptor and co-founder of Vancouver's Arts Umbrella, an arts organization for children; daughter Alisa is an established artist and painter. Both dwelling and office provide studio-workshops for art making. The family home, built in 1985-86 as an architectural synthesis, is both art and repository of art.² For son Gregory, making art and architectural gestures were engrained, so much so that by his second year, when he was enrolled in the professional architecture program at Carleton University (Ottawa), he was primed for the creative explosion of experimental drawing, model-making and theoretical speculation that seized the school when Alberto Pérez-Gómez assumed its directorship (1983-1987).

Although influences from other media have always been apparent in Richard's architectural work, the trajectory of his work took a turn when his son (and later partner) Gregory first attended Carleton, and then McGill Universities, whose professional and graduate programs fell successively under the aegis of Alberto Pérez-Gómez. The later work of Richard Henriquez is clearly provoked by and channels the intellectual pursuits of Pérez-Gómez.

As Howard Shubert notes, the young Henriquez's education at MIT with urban theorists such as Kevin Lynch and Jan Lubicz-Nycz would have provided him with a radical outlook from which to question contemporary modernist notions of architecture and urbanism. Shubert outlines how Lynch's *The Image of the City* (1960) -- which outlines Lynch's empirical studies of the perception of cities, and his conclusions that we rely on mnemonic devices to navigate them -- were radical for the time. Kevin Lynch's *What Time is this Place?* (1972), written five years after Henriquez graduated from MIT,³ makes explicit reference to Francis Yates's writings on the classical notions of the art of memory and the 16th century memory theatre of Giulio Camillo. The work of Jan Lubicz-Nycz, Richard's thesis advisor, in its rejection of institutional typologies and conventions of zoning, entailed a radical reconfiguration of the city in order to re-orient its inhabitants to nature and spirituality. As well, Shubert suggests, Henriquez would have been versed in the contemporary work of Robert Venturi, whose *Fire Station No 4* deploys the tactics of collage and pop art in defiance of the "lexical purity" of modernism, as well as Aldo Rossi's *The Architecture of the City* (*L'Architettura della Citta*, 1966, first translated into English in 1982) which emphasizes the importance of cities as repositories of collective memory. Rossi's *Scientific Autobiography* (first published by MIT Press in 1981) similarly offered various reflections, including those on theater and his conception of architecture as ritual. Louis Kahn -- who would emulate the monumentality of antiquity -- taught briefly at MIT but left in 1957, nine years before Richard enrolled.

1. Gary Hack wrote in a letter recommending Richard Henriquez: "But he is much more than an architect, as a fine artist and sculptor that has brought fresh insights to the art of assemblage. He is centrally interested in the role of memory and objects in anchoring life." In a letter commending Richard Henriquez addressed to the University of Manitoba, dated March 25, 2015.

Similarly Catherine Alkenbrack wrote, "And, always a constant through his busy days of practice, mentoring and generous public contributions Richard's Art. Richard has installations in many locations and buildings and he maintains home and office studio-workshops for art making. Although he has shown in galleries such as the VAG, my favourite installations are in the main entry room of his family house, an ingenious renovation that lifted a little house high in the air, creating a bright, high-ceilinged, lower level, beautifully grounded in lush landscape, with a back garden cut-aways revealing a small outdoor world beyond. Over time, this living space gallery has more and more expressed Richard's growing, closer, connecting inspiration: with the Arts influencing his architecture and architecture influencing his Art." In a letter commending Richard Henriquez addressed to the University of Manitoba, dated March 30, 2015.

Note also that the commentaries in the monograph of his life's work are by a curator (Howard Shubert), a sculptor (Geoffrey Smedley), and an art critic (Robert Enright).

2. Carol Henriquez has said of her husband Richard, "he is one of those people who can come home from a full day of work and, without missing a beat, go into his studio and start working on his sculpture. It just pours out of his body and soul." - From: <http://creatorsvancouver.com/carol-henriquez/#sthash.BoB57ROA.dpuf>

3. Although Richard claims he didn't read it.



The above summary abbreviates the intellectual milieu that precedes Richard's first encounter with Alberto Pérez-Gómez in 1984.¹ Richard openly acknowledges the extent to which he shared in his son Gregory's education in history and theory at Carleton & McGill, and the debt he owes to Perez-Gomez.² What might be less well chronicled is the manner in which the studio work and intellectual enquiry at both schools directly and indirectly informed the work of Richard Henriquez, both through the interest and enthusiasm of his son, and the personal encounters with Alberto.

When Gregory enrolled in the Carleton School of Architecture in 1982, (one year before Alberto's directorship began) Carleton at that time was a stopover for graduates teaching as sessionals from Cooper Union and the Cranbrook Academy of the Arts. The program was an amalgam of a Bauhaus-inspired curriculum and an assortment of full time teachers from the London Polytechnic, Yale and Harvard, etc.³ When Alberto landed as director in the fall of 1983 with his newly minted *Architecture and the Crisis of Modern Science* (1983) the school ignited into a fireball of radical production and inquiry. Within three years, three publications containing student work and faculty essays were published. Gregory Henriquez was one of the top students and published work in the first two. Fifth year thesis projects in the Carleton Folio (1985) published works entitled: "The Theatre as Paradigmatic Space" (Natalija Subotincic) based on an interpretation of the *commedia del' arte* and Perez-Gomez's interest in the *chora* and ritualistic space; and "Dwelling for the Transient and Culturally Lost" (Mark Bunting).

¹. Alberto Pérez Gómez recalls first meeting Richard Henriquez while he was at a Canadian Council of University Schools of Architecture (CCUSA) meeting in Banff, Alberta in 1984. Richard was very interested in speaking with Alberto since the program had made such an impression on him. (From a conversation between the author and Dr. Pérez Gómez, April 7, 2016.)

². Richard openly acknowledges the extent to which he shared in his son Gregory's education in history and theory under the tutelage of Alberto Perez-Gomez at Carleton & McGill; he acknowledges "Alfred Gregory Henriquez, my gifted partner and beloved son, for enthusiastically sharing with me the history and theory of architecture, which he himself was studying under the mentorship of Alberto Perez-Gomez..." Richard Henriquez, "Acknowledgements," in Robert Enright, Howard Shubert and Geoffrey Smedley, eds., *Richard Henriquez: Selected Works 1964 - 2005* (Vancouver: Douglas & McIntyre, 2006): p. vii.

See also Richard's response to Robert Enright's questions about Richard's creative practice being an artistic approach, wherein Richard responds, " ...this has to do with m son Gregory, who is working with me. He's finishing his master's. He was at Carleton University and then McGill with Alberto Perez-Gomez, and talking to a young student about some of the things he's studying today has had quite an influence on my thinking." From Robert Enright, "Architect of Radical Memory," in Robert Enright, Howard Shubert and Geoffrey Smedley, eds., *Richard Henriquez: Selected Works 1964 - 2005* (Vancouver: Douglas & McIntyre, 2006), p. 10.

³. See Alberto's predecessor, former Director Michael Coote's excoriating description of the tenured faculty and exhortation not to be "a very dull school" in his essay, "On Professional Development: A Very Occasional Paper," in the student journal *The Fifth Column*, vol 1, no 2 (Montreal: McGill University, Winter 1981), pp. 10-12.

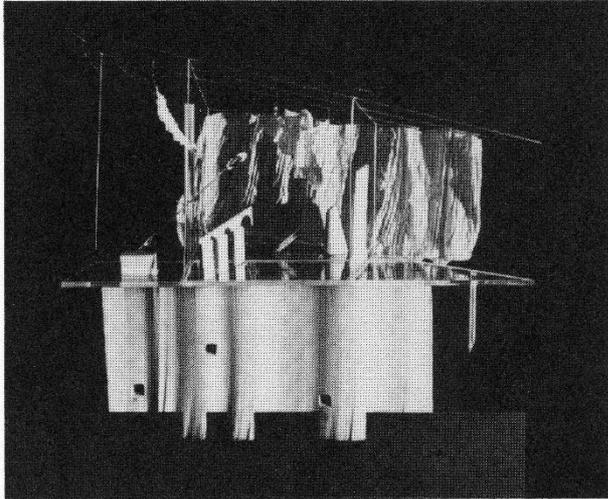


Fig. 3 Natalija Subotincic: "The Theatre as Paradigmatic Space."
Plaster & Wire Model.

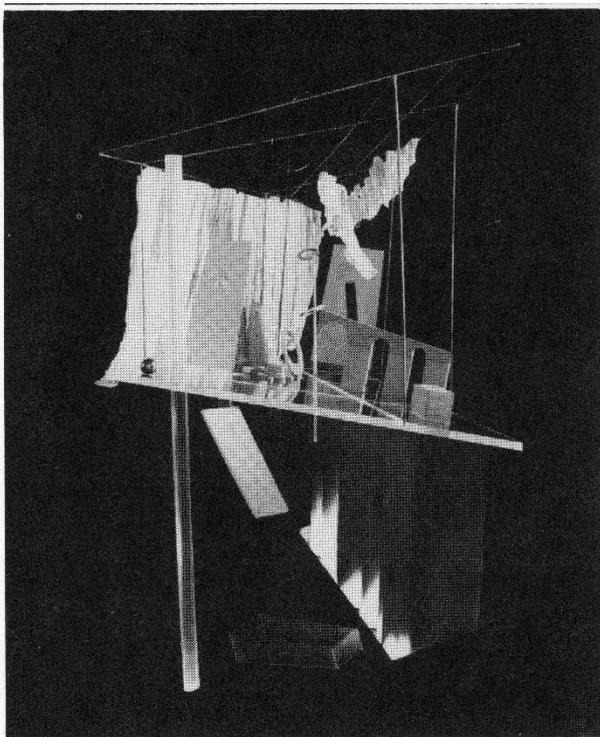


Fig. 4 Natalija Subotincic: "The Theatre as Paradigmatic Space."
Plaster & Wire Model.

A "House for an Alchemist" (Joanne Paul) was a semi-autobiographical proposition for alchemical sublimation presented as a exquisitely crafted cabinet of found objects. A Visiting Critic's Studio lead by John Hejduk explored the spatial dimensions of the 15th century painting, "The Rout of San Romano" by Paolo Ucello.

THE ROUT OF SAN ROMANO

Taking, as a point of departure, the reality of architecture as a task of the poetic imagination, the development of a personal vision is of the greatest importance. Starting with a careful consideration of Paolo Uccello's three paintings of "The Rout of San Romano", students were asked to interpret, and appropriate in their own work, the Renaissance artist's revelation of being. The power of

Kathryn Savage

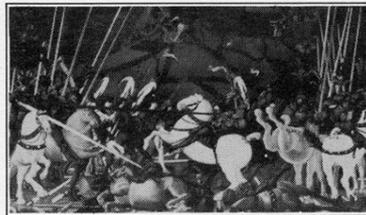
Bernadino della Coda: The ritual is consummated in one death: one explosion, expulsion of soul. Fragments of his being hang, gripped by time, resonating still with their import; done; seen to be done.

JOHN HEJDUK STUDIO

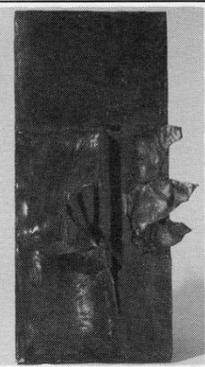
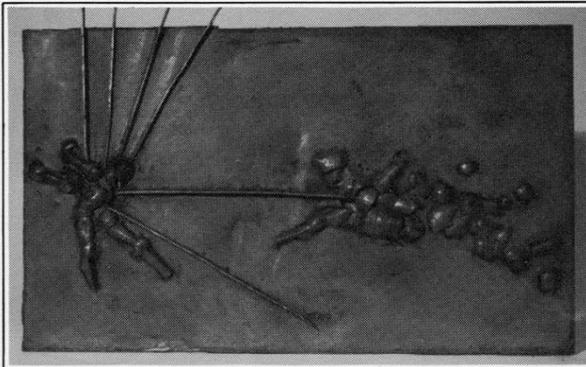
art to reveal the truth of reality was also explored in film, literature and poetry. Students were exposed to several films by Eisenstein and Robbe-Grillet, and read texts by Blanchot and Rilke. The project's success depended on the student's ability to perceive the question, and its relevance to architecture, as a personal dilemma.

Michael Faric

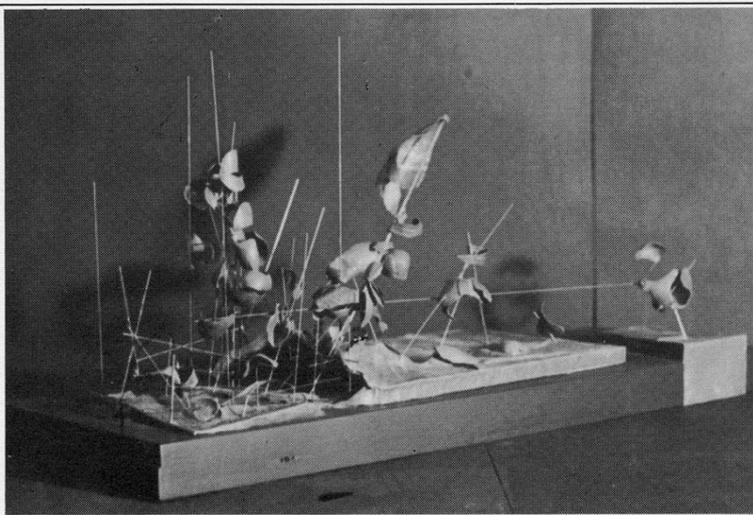
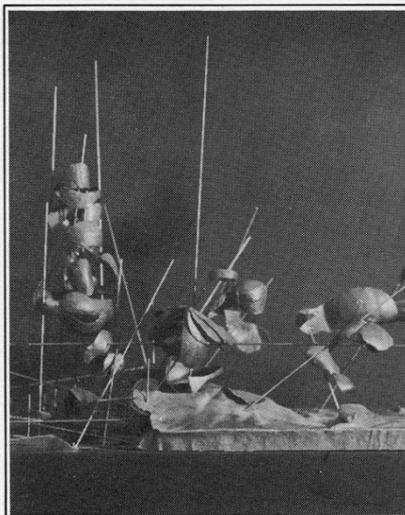
Forming from a seething turmoil, living armour molds rapidly, cooling about you. Thoughts rush towards you, weaving life into torn cloth upon streaming winds. The windblown cloth carried years. Armour which grew from within thickened around till finally freed from that shell.



Paolo Uccello: The Rout of San Romano



Kathryn Savage



Michael Faric

Fig. 5 "The Rout of San Romano" – John Hejduk Studio

Some of the thesis projects published in the Folio were expanded upon in the *Carleton Book* (1986), and included additional theses, such as an essay entitled, "The Surreal Wunderkammer," (Patrick Harrop)

and “The Descendent of the Dragon,” an exploration in text and models inspired by the “Aurelia Occulta Philosophorum” (a section from the renaissance alchemical compendium, *Theatrum Chemicum*) accompanied by a models and drawings connoting a bull and a woman (Michael Piraino).

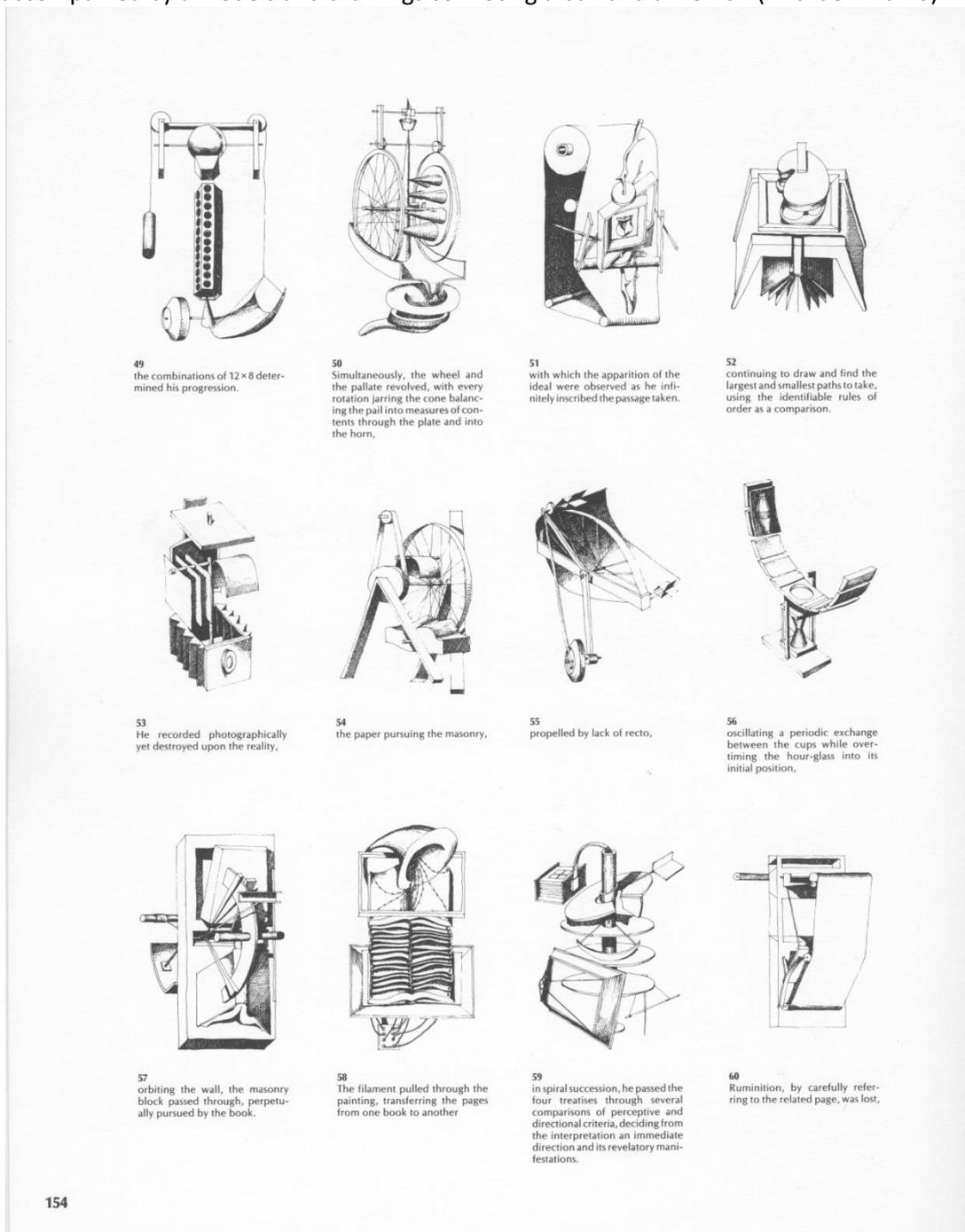
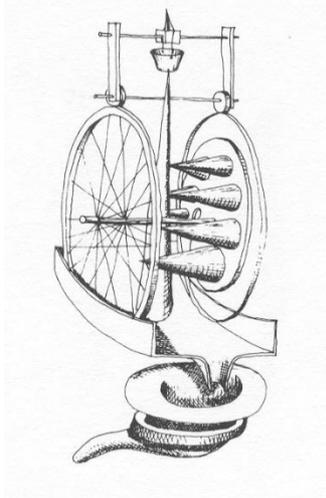


Fig. 6 Patrick Harrop: “The Surrational Wunderkammer,”
Ink Drawings of Literary Descriptions in Raymond Roussel’s *Locus Solus*



50
Simultaneously, the wheel and the pallate revolved, with every rotation jarring the cone balancing the pail into measures of contents through the plate and into the horn,

Fig. 7 Patrick Harrop: "The Surrational Wunderkammer,"
Detail of Ink Drawing.

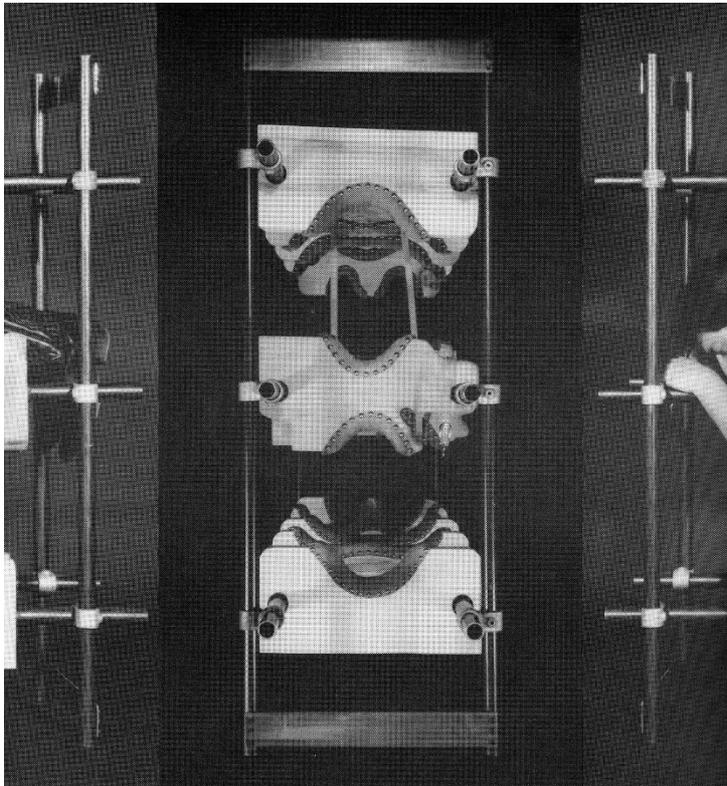


Fig. 8 Michael Piraino: "The Descendent of the Dragon,"
Mixed Media, Steel, Wood, Leather

Instructor Meton Gadelha included an article entitled, "The Anarchitomy of Tec-ture" that depicted three large wooden "machines" built by students under the direction of Daniel Libeskind: "The Surgeon," "The Patient" and "The Observers."

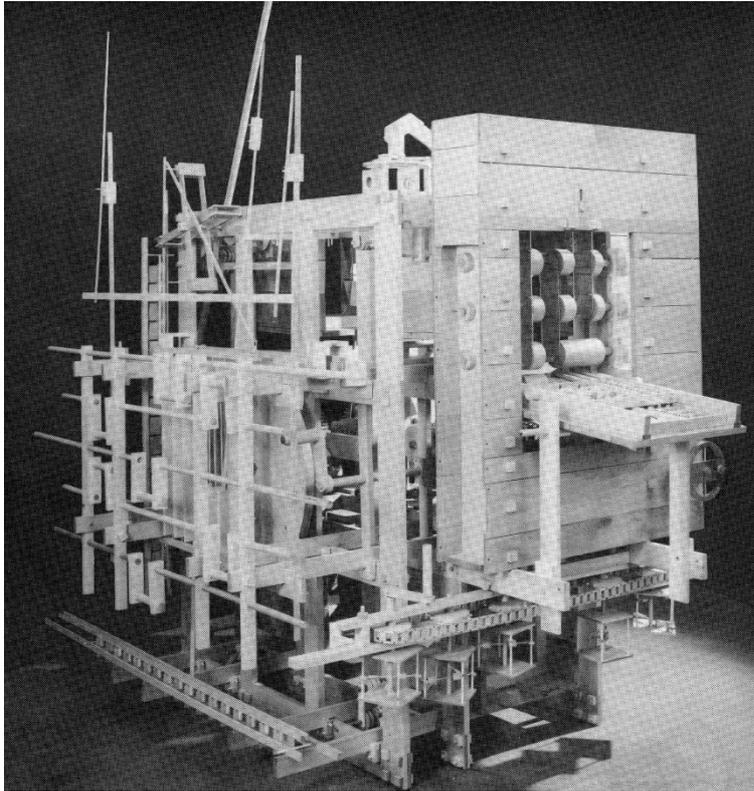


Fig. 9 "The Surgeon," student work under the direction of Daniel Libeskind

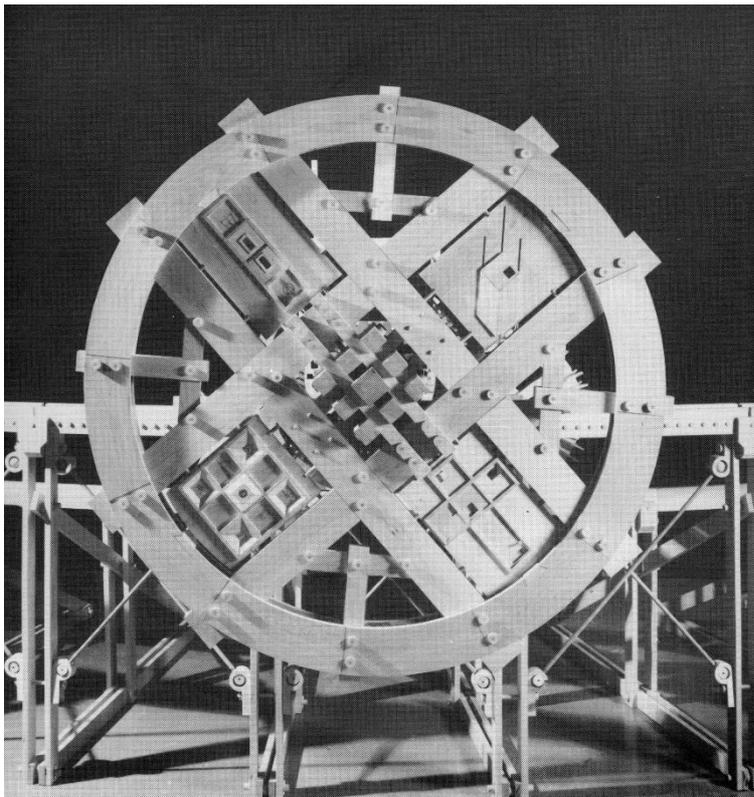


Fig.10 "The Patient," student work under the direction of Daniel Libeskind



Overall, the work consisted of exceptionally large and well-crafted models constructed variously of: wood with exacting joinery; welded steel, meticulously cut and laminated plexi-glass; and plaster painstakingly extracted from plastic and wood molds. Drawings were also large, delicate and obsessively precise hand-rendered drawings in ink, graphite, pencil colour and painting on mylar. The architecture building (designed by Carmen Corneil in 1968) which looked and functioned as a “factory” had two wood shops, a massive dark room for photographic printing and metal fabrication facilities; the effect of these was that the production of the student body was theatricalized by its staircases and platforms, exposed service elevator and dramatically tall industrial doors. The cultural bases of the projects derived from surrealism, Dadaism, alchemy, phenomenology, architectural treatises, poetry, painting and literature - all driven by Alberto Pérez-Gómez’s incitement for a search for meaning in the wake of the dislocation of modernism.

SENSE AND NON-SENSE

This workshop project pursued Jorge Luis Borges' notion of the "necessary monster". It involved the intuitive construction of new nameless things, assembled from fragments of existing man-made objects. By themselves, objects are merely finite quantities of matter, requiring human perception for them to make any kind of sense at all. Of course, sense is not pre-given; it must always be made for oneself.

During the course of this project, certain conventional principles came into play and were implicitly questioned: utility, material, structure, formation, context and naming. However, the critical

PARCELL WORKSHOP

guide for the monstrous is always its appeal to the imagination. Such a project risks falling into anonymous non-sense, but admits the possibility of making sense in a truly profound way. Perhaps monsters are actually things which don't fit comfortably into any of our familiar categories of understanding. They may be possible to experience but impossible to conceive. Therefore they may reveal more about our own architectural perception of order in the world than simply about themselves as weird, disfigured objects.

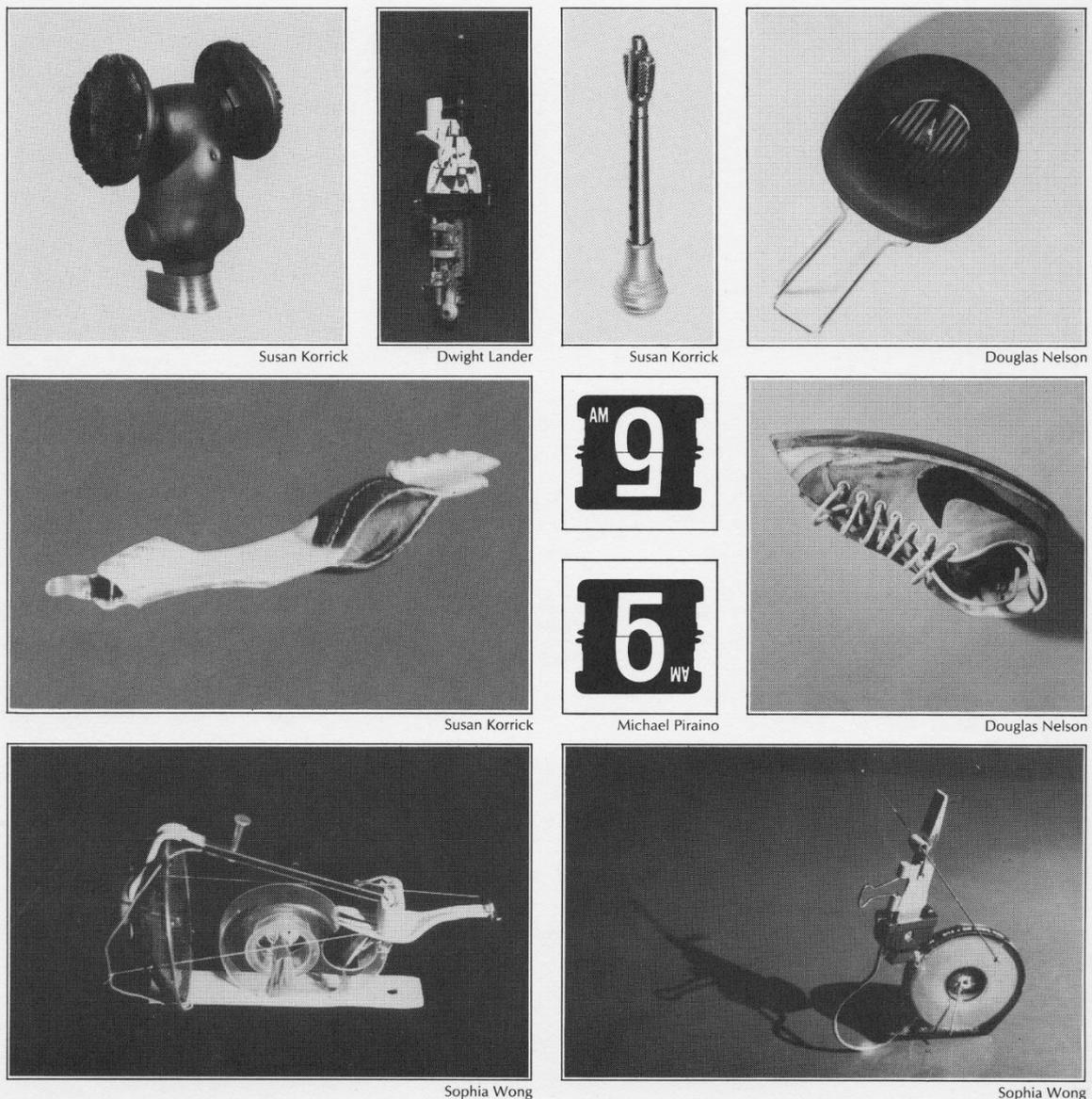


Fig. 11 "Sense and Non-Sense," Workshop taught by Stephen Parcell
Student Projects



The McGill History and Theory of Architecture program that began in 1987 entailed the more concerted study of architectural treatises and related works from antiquity to the present as a means to excavate less obvious motives and belief systems of architects and artists. Gregory and several recent Carleton graduates followed Dr. Perez-Gomez to Montreal. The central theme was how ritual, poetry and narratives of making might guarantee meaning in the otherwise secular and reductionist culture of modernity and the present. Masters students studied philosophical texts – mostly those specializing in phenomenology and hermeneutics -- as well as historical architectural subjects in preparation for a Masters Thesis. In the first two years of the program (1987-1989), topics discussed that later developed into research theses included the Museum of Sir John Soane, the “anaesthetic” effects of Marcel Duchamp, Athanasius Kircher’s *Turris Babel*, and the memory theatre of Giulio Camillo. Other topics were disseminated in a special edition of the student journal *The Fifth Column* (1989), entitled “Parallax,” which contained articles exploring the work of Marcel Duchamp, (Natalija Subotincic), Hans Bellmer (Helmut Klassen) and Frederick Kiesler (Gregory Henriquez).¹

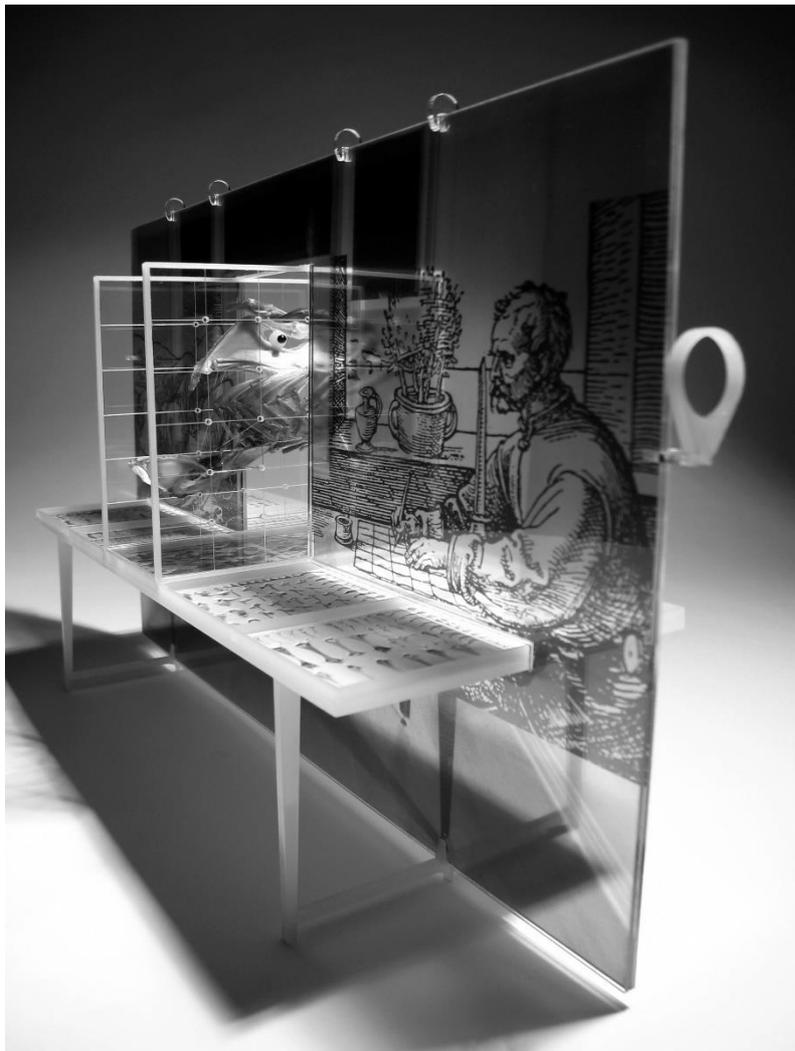


Fig. 12 Natalija Subotincic: *Dürer Bone Table Project* (1992-2008)
Plexi-glass, String & Chicken Bones

¹ *The Fifth Column*, vol. 7, no. 3; (McGill: University Press, 1989).

One of the most compelling aspects of Alberto's tutelage was his encouragement of students to pursue academic interests in a personal way; that the rigorous excavation of one's own story would necessarily lead to an exegesis of one's own time, and with an authenticity not found in the generalized philosophical and historical inquiry employed in most academic studies. Many examples of the works modern architects and artists that were studied entailed the element of autobiography, -- e.g. Jean-Jacques LeQueu, Sir John Soane, William Blake, Giorgio de Chirico, Marcel Duchamp, Aldo Rossi, and others. Autobiography and genealogy provide a personal link to a larger history.

Concurrent with the hiring of Alberto Perez-Gomez at Carleton University, Richard Henriquez began to incorporate new themes and methods in his own work. Perhaps the first such example was his design for the writer's studio at the Leighton Artists' Colony at Banff (1983), which employed a new self-consciousness about the story of its own making: the purchase of the fishing boat, the "Elsie K."



Fig. 13 Richard Henriquez, *Leighton Studio*, Banff
Construction Photograph



Fig. 14 Richard Henriquez, *Leighton Studio*, Banff
Owner of the *Elsie K*.

from a small village on the West Coast and its transport up the mountain in the Rockies in Alberta. This use of a “found object” – a boat intact – dry docked (or marooned) on a mountain begs the question of its own narrative, and of others: the Biblical trials of Noah, or the mad tale of *Fitzcarraldo*.¹ As Shubert points out, an exterior frame over the boat recalls the image of the primitive hut, as conveyed by the Abbé Laugier in his *Essai sur l'Architecture* (1755), and reproduced in many theoretical articles on architecture in the mid 1970s and 1980s.

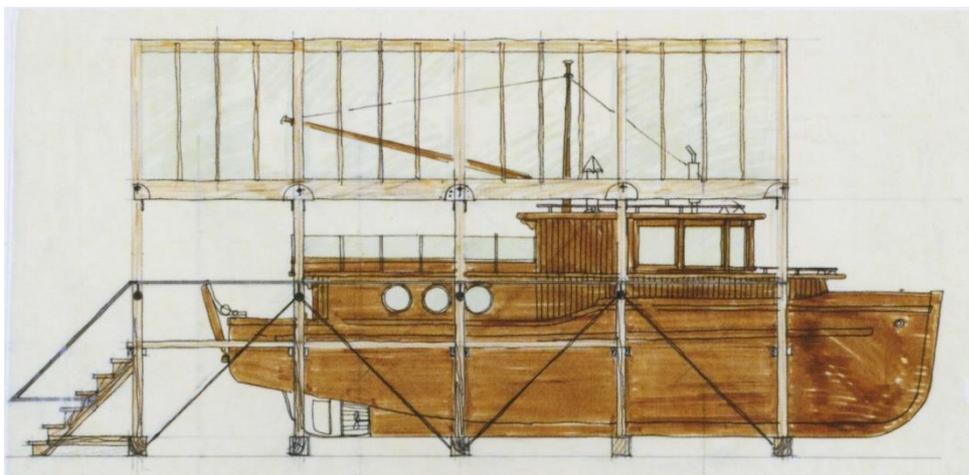


Fig. 15 Richard Henriquez, *Leighton Studio*, Banff
Side Elevation

¹. Made into a Werner Herzog film of that name released in 1982.



Fig. 16 Richard Henriquez, *Leighton Studio*, Banff
Photo from Banff Centre

The displaced boat recalls themes of cultural and personal dislocation that will be reiterated in subsequent projects.

The next project of interest here is the “Jericho Circle House” (1986) that Henriquez began to conceive in 1985. The theme of displacement (and replacement) is reiterated in the act of cutting a wood frame English cottage built in 1937 from its foundation and hoisting it one full story into the air. Four massive columns shaped like screws (or abstractions of Byzantine columns) hold the newly displaced building aloft, whilst the area below the basement ceiling – kept fully intact and exposed, including joists, bridging and the basement windows – becomes the new formal living spaces of the house: formal entrance, living and dining room.

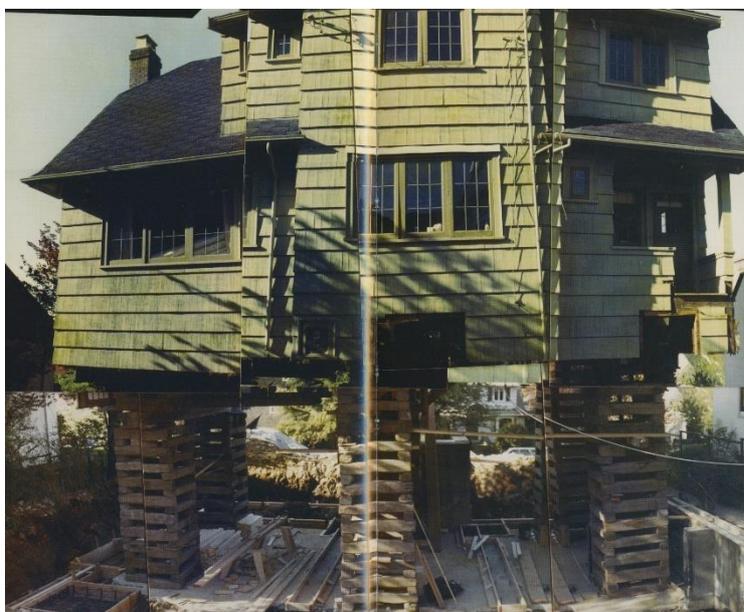


Fig.17 Richard Henriquez, *Jericho Circle House*, Vancouver
Construction, Composite Photo



Fig. 18 Richard Henriquez, *Jericho Circle House*, Vancouver
Living Room, Ground Floor

This is an act of three-dimensional collage, not unlike the surrealist objects and assemblages by Man Ray, Meret Oppenheim, Salvador Dalí and Marcel Duchamp that necessarily entail an act of displacement. It also seems to follow the sensibilities of a new approach to the interpretation of site, and historical artifact, as outlined by the Stephen Parcell in the *Carleton Book*:

A fundamentally different approach to history and design is currently being explored through various projects at certain architecture schools. Unlike most projects, these begin with an already finished historical work, rather than with an existing blank site to be filled up, using current design principles. With a historical artifact as a point of departure, the project proceeds with an interpretive renovation... In order to draw out something from the historical artifact, the project encircles it, probes it, and tries to develop strategies which could begin to clear a path, enabling the world of the artifact to continue. This involves a dialogue of play between the student/architect and the artifact.”¹

Just as the displaced boat invokes a narrative, so too does the uplifted house. The wheel awaits a future ritual whereby in it will be ceremoniously opened. Most curiously a strange wheel is suspended from the central formal staircase and almost touches the floor – this is the memory wheel, depository for significant mementos of the members of the family.

¹ Stephen Parcell, “The Recreation of History,” in Katsuhiko Muramoto and Stephen Parcell, ed.s, *Carleton Book* (Ottawa: Carleton University School of Architecture, 1986), p. 46.



Fig. 19 Richard Henriquez, *Jericho Circle House*, Vancouver
Living Room, showing stairs & Memory Wheel



Fig. 20 Richard Henriquez, *Jericho Circle House*, Vancouver
Memory Wheel

Dispersed throughout the house are personal artifacts and artworks of the family, placed in juxtaposition to one another and displayed against the background of the old house. The house is a marvelous if fragmentary *wunderkammer* that hints at imaginable stories and curiosities of family lore set within the context of older house, reminder of lives that came before. The approach to Jericho Circle House bears resemblance to John Soane's renovation of three adjoining townhouses into his own house, into what would become a repository of his collections of architectural artifacts and art combined with the architectural designs of his life's career, and eventually a museum with an inextricably autobiographical ordering.



Fig. 21 Richard Henriquez, *Jericho Circle House*, Vancouver
Living Room Skylight, Garden beyond



Fig. 22 Richard Henriquez, *Jericho Circle House*, Vancouver
Living Room
(from *Vancouver Magazine*, March 11, 2003)



Fig. 23 Sir John Soane: Soane Museum, 13 Lincoln's Inn Fields, London
"Breakfast Room"

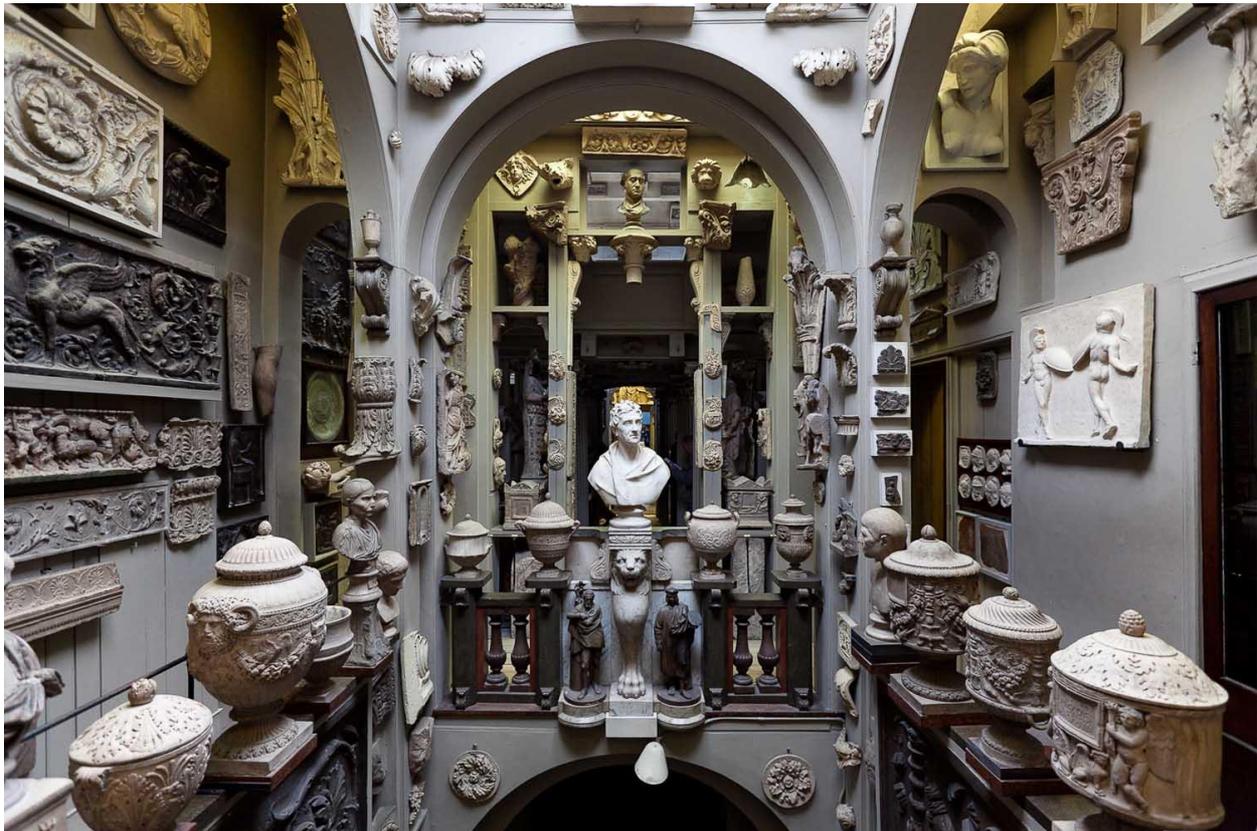


Fig. 24 Sir John Soane: Soane Museum, 13 Lincoln's Inn Fields, London
Bust of Sir John Soane (1753-1837) in the Dome Room

The *Memory Theatre* (1994 and 1996) and *Narrative Fragments* (2012) are two major exhibition projects that further the themes of memory, family history, displacement, narrative, autobiography and wonder. The *Memory Theatre* at the VAG was presented as an installation – a circular room of cabinets straddling a giant tripod that sets it at the second floor level of the gallery.



Fig. 25 Richard Henriquez, *Memory Theatre*, Vancouver Art Gallery
View from below



Fig. 26 Richard Henriquez, *Memory Theatre*, Vancouver Art Gallery
View from above

The theatre is a round room formed by the assemblage of cabinets that, including the door, divide the circle into twelve “zodiacal” slices. At the centre is an “autogeographic globe,” with a hand-pointer (a manikin hand from Carol) that is itself set upon a tripod and freely rotates, pointing to the cabinets, like



a Torah pointer or weathervane. A found plumb-bob lines up the axis mundi; the hand draws the line of the horizon and a compass given by Richard's sister points to magnetic north



Fig. 27 Richard Henriquez, *Memory Theatre*, Vancouver Art Gallery
View from bridge



Fig. 28 Richard Henriquez, *Memory Theatre*, Vancouver Art Gallery
View of interior, showing Globe

The globe loosely alludes to geographical locations associated with the personal and found objects and models placed in the cabinets. The wood cabinets have glass doors and shelves to display the objects, and “drawers” hold books.



Fig. 29 Richard Henriquez, *Memory Theatre*, Vancouver Art Gallery
View of artefacts

Clearly the overall configuration of the “theatre” – which in no way resembles a playhouse -- references both a renaissance *wunderkammer* and the memory theatre of Giulio Camillo.

Narrative Fragments is a more episodic experience, displaying a series of models or sculptures mounted on tripods, with body parts, listening devices, animal fragments, frames, mirrors and shadows



Fig. 30 Richard Henriquez: *Tripod with Box, Bull and Stairs*, Winsor Gallery, Vancouver
Sculpture, wood, found objects



Fig. 31 Richard Henriquez: *Tribute to Jack*, Winsor Gallery, Vancouver
Sculpture, wood, found objects

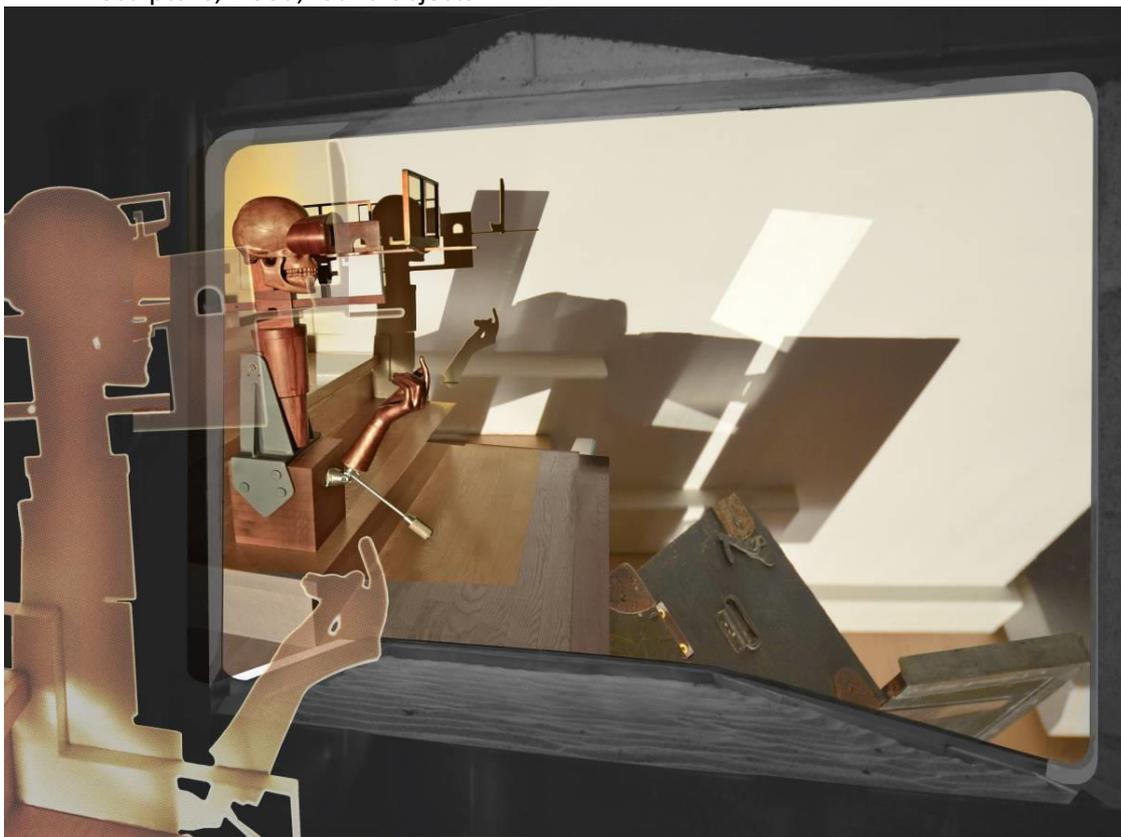


Fig. 32 Richard Henriquez: *Steps and Shadows* (detail), Winsor Gallery, Vancouver
Sculpture, mixed media

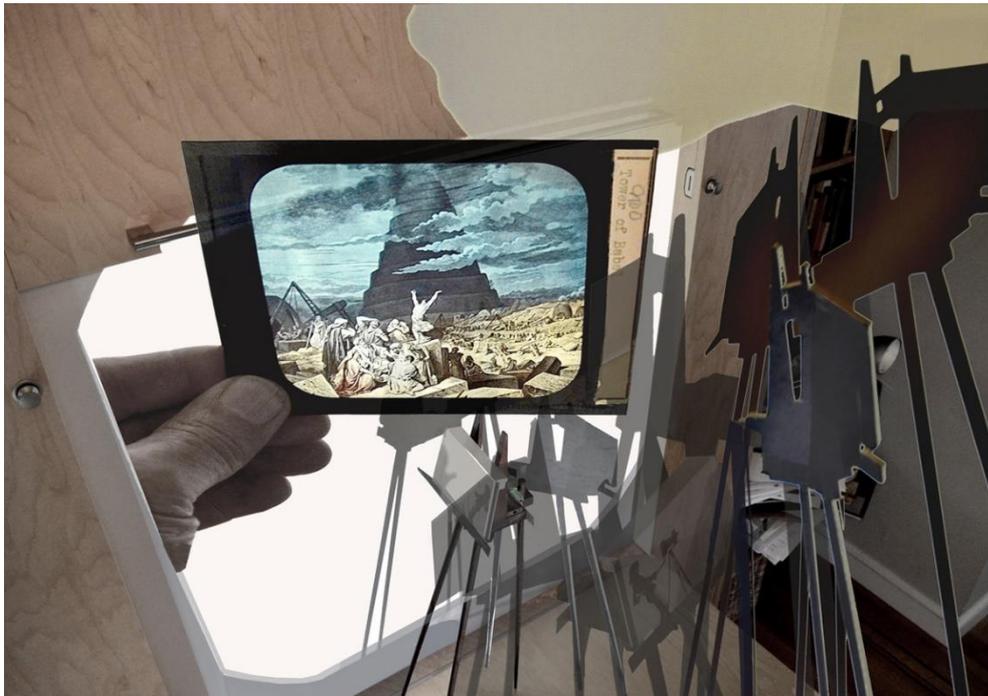


Fig. 33 Richard Henriquez: *Tower of Babel II*, Winsor Gallery, Vancouver
Sculpture, mixed media

Some of the pieces evoke the sensibilities of the animations of the Brothers Quay, using shadows and tiny skeletal remains of small creatures.



Fig. 34 Richard Henriquez, *Stage Set for an as yet Unwritten Play*, (detail)
Winsor Gallery, Vancouver
Sculpture, mixed media



Fig. 35 Richard Henriquez, *Mythical Stage Set*, 1995
Sculpture, mixed media

One entitled, *Stage Set for an as yet Unwritten Play* evokes a Greek amphitheatre, such as the sacred theatre of Delphi, with staircases that resemble seating, and a round stage that evokes the space of the *chora*, whose importance as the mythical origin of architectural space is so well elucidated in the writings of Pérez-Gómez.



Fig. 36 Roman Surveying Instrument: *The stele of the agrimensor Lucius Aebutius Faustus*, Ivrea, North Italy



Fig. 37 Alberto Perez-Gomez:

illustration of the “Roman theater in the ancient Greek settlement of Ephesus (now Turkey) showing the relationship between the amphitheatre, the chorus or orchestra, and the skena, or permanent stage building, of which little remains” in “The City as a Paradigm of Symbolic Order.”

The work of Richard Henriquez repositions the relations of art and architecture on a new continuum. What might be defined as “art” can be traced the divine origins of “architecture,” which is both, and neither, in the contemporary sense. What distinguishes “art” from “architecture” (or not) has a long and tangled history dating back to early foundation rituals, the emergence of theatre and theory, Roman notions of the “liberal arts,” medieval classifications of knowledge, notions of craft, the creeping professionalization of human activities over the last few centuries, not to mention the definitions and categorizations of the “fine arts” dating back to the late 18th century and the emergence of the *Ecole des Beaux Arts* that persist even today. The scholarship of Alberto Pérez-Gómez and the work of his students redefines the role of the architect by uncovering a deeper unity there. What is clear to Pérez-Gómez is that Richard is not merely “an imaginative architect with the eyes of the artist,” as per Douglas Shadbolt, “but purely and simply, a real architect in the historical sense.”¹

Thus it is not surprising that many of the motives in Richard’s exhibitions appear in the narratives that form the architecture. A dyslexic surveyor lays the groundwork for the wrong plan and the ensuing comedy of errors leads to the conception of the Presidio Condominium Tower (1989).

¹. Alberto Pérez-Gómez, “The Architecture of Richard Henriquez: A Praxis of Personal Memory” in *Richard Henriquez et le Théâtre de la mémoire | Richard Henriquez: Memory Theatre* (Montreal: Canadian Centre for Architecture, 1993), p. 14.



Fig. 38 Richard Henriquez: *Presidio Tower*, West End Vancouver

The design of Eugenia Place Tower (1987) references the old growth cedar forests that were removed by 19th century logging consortiums with the invocation of a giant screw on the face of the building that holds aloft a single tree. Tree-stump planters made of concrete and the traces of past buildings remind the occupants that the city is an ongoing narrative, and that it is the role of the architect, as diviner and geometer of past and present, to orient us with its traces, our “roots” -- even if fabricated.



Fig. 39 Richard Henriquez: *Eugenia Place Tower*, West End Vancouver
Photograph of Southwest Facade



Fig. 40 Richard Henriquez: *Eugenia Place Tower*, West End Vancouver
Entrance

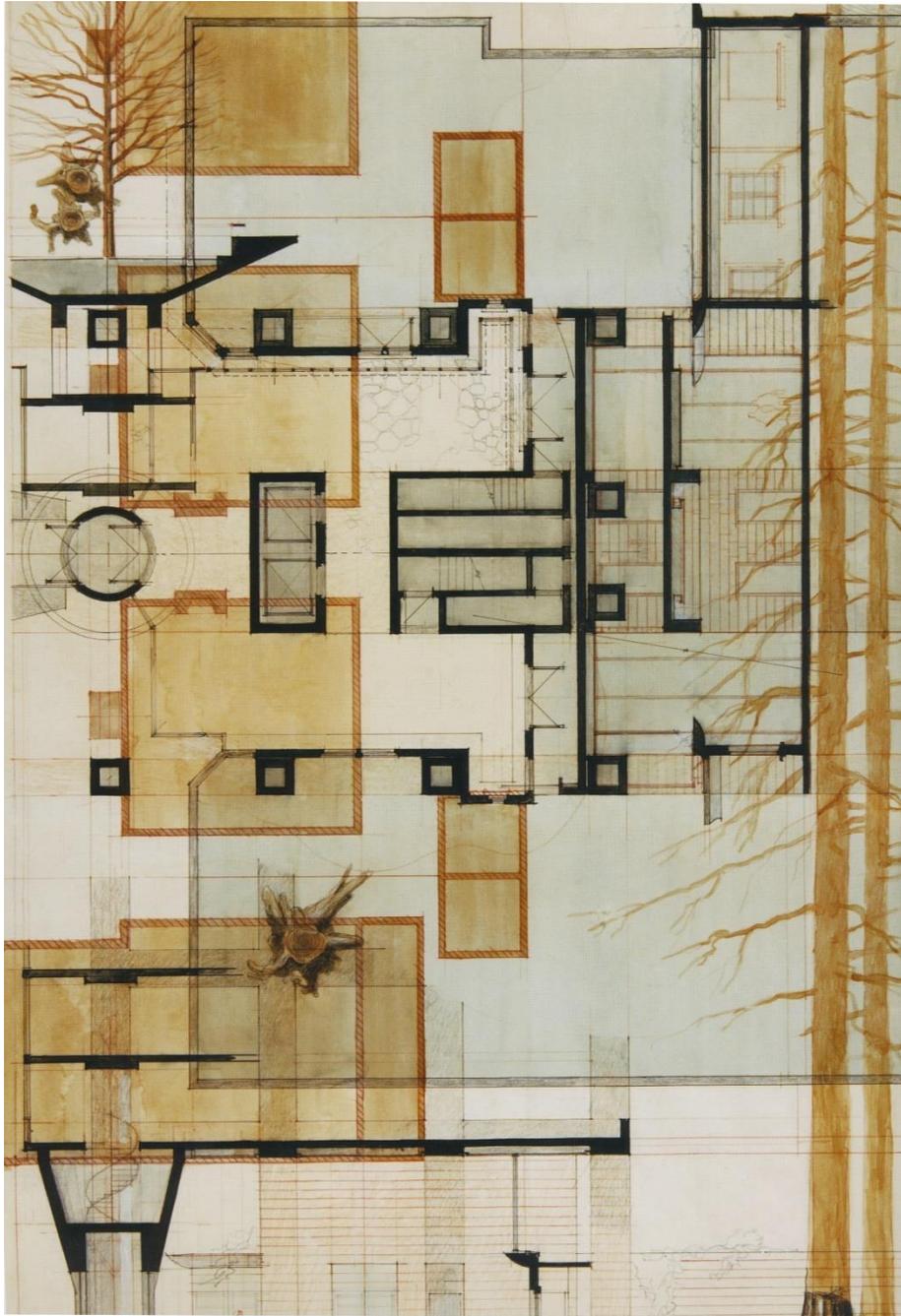


Fig. 41 Richard Henriquez: *Eugenia Place Tower, West End Vancouver*
Drawing: Superimposed Plans & Elevations with Pre-Colonial Trees



Fig. 42 Richard Henriquez: *Eugenia Place Tower*, West End Vancouver
Garden with imprint of floor plan of a previous building on site



Fig. 43 Richard Henriquez: *Eugenia Place Tower*, West End Vancouver
Entrance with tracing of floor plan of a previous building on site,



Subject's Expression vs. Substance's Representation

Lior GALILI | Architect, Artist, and Educator

Abstract

To communicate effectively, architects must navigate an apparent paradox: representing a 3D reality in a 2D document. Though prompted by a *perceptual* need, the act of representation is inherently *political*. Based on the separation between the “thing-in-itself” and its original context, immediacy and meaning, representation charges the object with new symbolic and thus ideological and political values.

This paper argues that the artistic position of the architect emerges as a result of the limitations of the act of representation. In other words, expression begins where representation ends. I discuss the departure from representation in favor of expression as a result of two representational deficiencies: the failure to represent the “thing-in-itself;” and the impossibility of representing a dynamic phenomenon as a fixed symbolic order.

Introduction: The Function of Representation and the Historical Origin of Doubting its Verisimilitude

The notion of Representation refers to the act of rendering a thing-in-itself as closely as possible to the original. However, the relationship between the real object and its simulacrum sustains an inherent gap—a constant distance—based on a fixed hierarchy in which the simulacrum is always ruled by the original.

This hierarchy between the real and the represented is sustained throughout two layers of application: One is verbal, and is related to the system of symbolic signifiers, and the other is visual, and is related to the imagery realm.

In a chapter called “Identification”, from his book *The Sublime Object of Ideology*, Slavoj Zizek writes:

The relation between imaginary and symbolic identification – between the ideal ego ... and the ego-ideal ... is ...that between 'constituted' and 'constitutive' identification: to put it simply, imaginary identification is identification with the image in which we appear likeable to ourselves, with the image representing 'what we would like to be', and symbolic identification, identification with the very place from where we are being observed, from where we look at ourselves so that we appear to ourselves likeable, worthy of love.¹

In other words, the symbolic identification is where we become the “Other,” and the imaginary identification is where we are the “Self”. While the symbolic identification is societal, active and

¹ Slavoj Zizek, *The Sublime Object of Ideology* (New York: Verso, 2008), p. 116



external—a system of generating and constructing collective consciousness by a set of rules—the identification with the image is individual, passive and internal—identification based on an inherent unfulfilled desire. Hence, représentation fulfills two social and psychological needs: the need for law and order (the symbolic), and the need for a dream (the imaginary).

In relation to architectural representation, these two needs are equally active. An architectural drawing aims to communicate both order and vision. But while the essence of a professional architectural drawing—or a construction document—is to convey the order of things, its visionary impact is made deficient by the limitations of the representational mode. The most conspicuous shortcoming of representation is seen in the impossibility of rendering secondhand the thing-in-itself, and the consequent failure to stabilize a dynamic phenomenon.

While disciplines from geography to philosophy to social science to architectural theory are currently engaged in the study of Non-Representational Theories—a discourse which I will discuss further later in this presentation—the first figure who brought public attention to the paradox of representation was the painter René Magritte.

In his 1926 painting “This is Not A Pipe,” Magritte juxtaposes a meticulous drawing of an ordinary pipe, using maximum resemblance to the original object, with text declaring “Ceci n'est pas une pipe” (“This is not A Pipe”). This juxtaposition pulled the rug out from beneath the conventional Western tradition, which up until then linked verbal and visual representations in an ever-reciprocating relationship. Magritte introduced a rupture between verbal and visual signs: because the title no longer supports the drawn content, the whole function and verisimilitude of representation were cast into doubt.

In his 1983 book “This Is Not A Pipe’, French philosopher Michel Foucault points out that Magritte’s move not only shatters the familiar relationship between Resemblance and Affirmation (resemblance no longer serves as affirmation), but also replaces Resemblance with Similitude. Foucault writes:

“None of these is a pipe, but rather a text that simulates a pipe; a drawing of a pipe that simulates a drawing of a pipe; a pipe (drawn other than as a drawing) that is the simulacrum of a pipe (drawn after a pipe that itself would be other than a drawing)...Seven discourses in a single statement—more than enough to demolish the fortress where similitude was held prisoner to the assertion of resemblance.”¹

Following this substitution of resemblance by similitude, the previous hierarchy between the real object and its simulacrum is replaced by a democratic arrangement, according to which all parts are equal. According to Foucault, if “Resemblance serves representation...Similitude serves repetition”. And since Representation is based on the subordination of the copy to the original, Similitude serves as its liberation, or, as the nullification of representation itself.

¹ Michel Foucault, *This Is Not A Pipe* (Berkeley, Los Angeles: University of California Press, 1983), p. 49



The End of Representation: The *Social* and the *Sublime*

Marking the “End of Representation” are two distinct (even opposed) phenomena, which I will now take the risk of merging in order to argue for the *Death of Re-Presentation*:

On one hand we have the social fabric—its dynamic, rich and intricate nature; its density and its unpredictable manifestations—and on the other, we have the Sublime—originally a Kantian notion describing a sensual experience that is above words, and beyond comprehension.

Though the Sublime refers to an individual mental experience discussed in the aesthetics discourse, and the social fabric refers to collective experiences usually discussed in terms of politics, in the context of their inability to be truly and wholly represented, the two share common ground.

From this shared ground, we can discuss them in relation to phenomenology: What is the nature of their surplus, this stuff which exceeds causality, falls outside the logic of reason, and refuses to be placed within the Cartesian matrix?

Describing the illusive nature of the social fabric, in a chapter called “Introduction to Part II: Why is it so Difficult to Trace the Social?” French philosopher Bruno Latour writes:

“The adjective ‘social’ designates two entirely different phenomena: it’s at once a Substance, a kind of stuff, and also a movement between non-social elements. In both cases, the social vanishes. When it is taken as a solid, it loses its ability to associate; when it’s taken as a fluid, the social again disappears because it flashes only briefly, just at the fleeting moment when new associations are sticking the collective together. Although it seemed at first sight that the subject matter of social sciences was easy to locate thanks to ...social order, it now appears that it’s just the opposite: there is nothing more difficult to grasp than social ties.”¹

What Latour notices here is the paradigmatic shift that took place as the result of the fading away of the old social symbolic order and the emergence of new ways of relating, according to which “things are more fluid than they seem”.

Perhaps this is the same realization described by Michel Foucault as “an overabundance of things to be known: fundamental, terrible, wonderful, insignificant, and crucial at the same time”², that thing which ultimately evoked the establishment of the Non-Representational Theories³ in an attempt to create an adequate theoretical response to such situations.

¹ Bruno Latour, *Reassembling the Social* (Oxford: Oxford University Press, 2005), p. 159

² Ben Andesron and Paul Harrison, “The Promise of Non-Representational Theories,” in Ben Andesron and Paul Harrison, ed., *Taking-Place: Non-Representational Theories and Geopraphy* (Oxford: Routledge, 2011): 1-34

³ Ibid.



The Non-Representational Theories emerged as a new theoretical paradigm following the ongoing effect of post-structuralism and, in particular, the influential work of Deleuze and Latour.

Officially established by the School of Geographical Sciences in Bristol in the 1990s, the Non-Representational Theories focus on 'the practice of everyday life' and its multiple forms, and study social synergies, energies and flows in a quest to find new ways of addressing fundamental social scientific matters. It replaced the concern for ideology or symbolic order with observation on the multitude of actions and interactions.¹

Describing the common domain of all nonrepresentational theories, cultural-political geographers Anderson and Harrison write: "What has linked this diverse body of work is a sense of affirmation and experimentation"²

The significance of this description lies in the recontextualization of "affirmation": As Foucault demonstrated, for the western painting tradition affirmation was associated with resemblance—in the case of representation. According to nonrepresentational theories, in contrast, Affirmation is linked to experimentation, which interestingly enough associates it with hesitation and doubt. Thus redefined, affirmation is the depletion of judgment, certainty and finitude, and their replacement by acceptance, uncertainty and infinity.

Another shift in the context and meaning of affirmation occurs in relation to the "thing-in-itself":

If affirmation in representation is the validation of the (illusory) identity between the real object and its copy, affirmation in nonrepresentational theories is the endorsement of the thing-in-itself. In this sense, the social is related to the sublime by their shared desire to capture the real.

In his seminar on *The Ethic of Psychoanalysis*, Lacan defines the sublime object as: 'An object raised to the level of the (impossible-real) Thing'.

Following Lacan, and in relation to the Kantian (unattainable) sublime, Žižek analyzes the paradox of the sublime as an impossible object to represent:

"The paradox of the Sublime is as follows: in principle, the gap separating phenomenal, empirical objects of experience from the Thing-in-itself is insurmountable - that is, no empirical object, no representation of it can adequately present the Thing ...; but the Sublime is an object in which we can experience this very impossibility, this permanent failure of the representation to reach after the Thing. Thus, by means of the very failure of representation, we can have a presentiment of the true dimension of the Thing."³

¹ Ibid.

² Ibid.

³ Slavoj Žižek, *The Sublime Object of Ideology* (New York: Verso, 2008), p. 229



With respect to the proximity between the social and the sublime, here is another possible link:

If Latour reveals the problem of representing the social fabric due to the breakdown of the old symbolic order, Žižek reveals the sublime as positioned outside of this order from the outset. In this sense, both the Kantian Sublime and Latour's Social can be read as the Lacanian Real—a Lacanian concept existing—in and of itself—as autonomic, separated and non-related to both the symbolic order and the imaginary realm.

Expression Begins Where Representation Ends

So how does this End of Representation relate to the emergence of Expression?

In his 1992 book: "Expressionism in Philosophy: Spinoza", French philosopher Gilles Deleuze discusses the common use of the notion of expression in the writings of Leibniz and Spinoza. The significance of Deleuze's extension lies, not only in identifying expression as a departure from a Cartesian logic linking cause and effect, but also, in marking the interconnectivity between the act of expression and the act of representation. Deleuze writes:

"Beyond real causality, beyond ideal representation, what is expressed is discovered as a third term that makes distinctions infinitely more real and identity infinitely better thought. What is expressed is sense: deeper than the relation of causality, deeper than the relation of representation..."¹

According to Deleuze, expression is the replacement of the 'represented' by the 'Sense'; the simulacrum by the original; the symbolic and the imaginary orders by the authenticity of the thing-in-itself.

Going back to Foucault's analysis of the rupture in western tradition between resemblance and affirmation:

If Magritte introduced a rupture between verbal and visual signs, Russian painter Wassily Kandinsky took it one step further.

Not only did Kandinsky demolish the link between resemblance and affirmation; he also, and more significantly, entirely nullified their usage, meaning and missionary role, from both the act and the experience of painting. Describing Kandinsky's role in this perceptual paradigmatic shift, Foucault writes:

"With a sovereign and unique gesture, Kandinsky dismissed the old equivalence between resemblance and affirmation, freeing painting from both."²

¹ Gilles Deleuze, *Expressionism in Philosophy: Spinoza* (New York: Zone Books, 1992), p. 335

² Michel Foucault, *This Is Not A Pipe* (Berkeley, Los Angeles: University of California Press, 1983), p. 34



This double effacement, according, to Foucault was achieved:

“By the increasingly insistent affirmation of the lines, the colors that Kandinsky called "things," ... Kandinsky's is a naked affirmation clutching at no resemblance, and which, when asked “what it is,” can reply only by referring itself to the gesture that formed it: an "improvisation,” a “composition”; or to what is found there: “a red shape,” "triangles," "purple orange"; or to tensions or internal relations”¹

In this context, I will end this presentation with a silent screening of a series of architectural drawings which, when asked “what it is,” can reply only by referring itself to the gesture that formed it: an “improvisation,” a “composition”... “a red shape”...

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¹ Ibid



Chiaroscuro: A Peculiar Deposit

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Abstract

In the domain of design, in which realization seems to employ decisions that derive from utility, and rejoin obligations of the world of aesthetics, the act of staging provides an intersession during which revelations particular to 'what constitutes the experience' are formed. In this engagement of a specific environment, our experience as occupants begins with an impulse to scrutinize everything. In this almost instantaneous assessment, we enter into a dialogue with the humanity of place; an intercourse with time, deep time; and thus, are immersed in the visual and perceptual challenges of the inherited items of experience and, consequently, its cultural educe. The ordinary quality of this type of material surround yields a deeply reflective engagement that assist in maintaining an ontological wakefulness.

Black Contemporary serves as an experiential laboratory for ongoing investigations intended to expand our knowledge specific to the study of atmospheric logics and the American agricultural landscape. The field station is located two miles south of Ames, Iowa. Using experiential perceptions as spatial conditioners, current studio projects focus on the act of making and curating a series of research assemblies within a dormant seed-drying facility constructed in 1979. This work might best be understood as a peculiar deposit of site-adjusted material stagings that indicate the presence of, and makes clearly recognizable, its context as referent rather than source or setting.

Centered on theories of affect and new materialism, this paper presentation focuses on what each material configuration does - rather than what each material configuration is – in order to construct a critical arrangement so unified as a whole that it cannot be described merely as a sum of its parts. Based on a theoretical set of actions the foundational body of work provides a material/visual reflection on the contemporary social configuration of a Midwestern sub-cultural context. The subsequent works provoke a temporal-spatial encounter fueled by a desire to understand the simultaneous and complex nature of cerebral and corporeal experience. Each staging is driven by the nascent possibility of a persistent desire to intercourse with existing material surrounds pursuant a philosophical position that leverages perceptual notions of chiaroscuro. A logic first used in the 1680s by Leonardo da Vinci and Michelangelo Merisi da Caravaggio that had to do with the disposition of light and dark in a picture, or literally "bright-dark," from Italian chiaro "clear, bright" (clarus ~ clear) + ascuro (obscurus ~ obscure). By extension of this etymological dichotomy, the conscious and unconscious, the seen and the unseen, focus and open awareness and the made re-made are factors in the practice of understanding and generating a set of spatial valence within the material culture of a post-industrial site. This paper proposes art and architecture as a mutual practice centered on the human endeavor to come to know the nature of a place through the immersive act of inductive criticism supported by a set of inserted material stagings with a relative capacity to unite or react or interact with the latent dimensions of the inherited landscape.

John Dewey, *Art as Experience*, (New York: Penquin Putnam., 1980), p. 58.



Chiaroscuro: A Peculiar Deposit

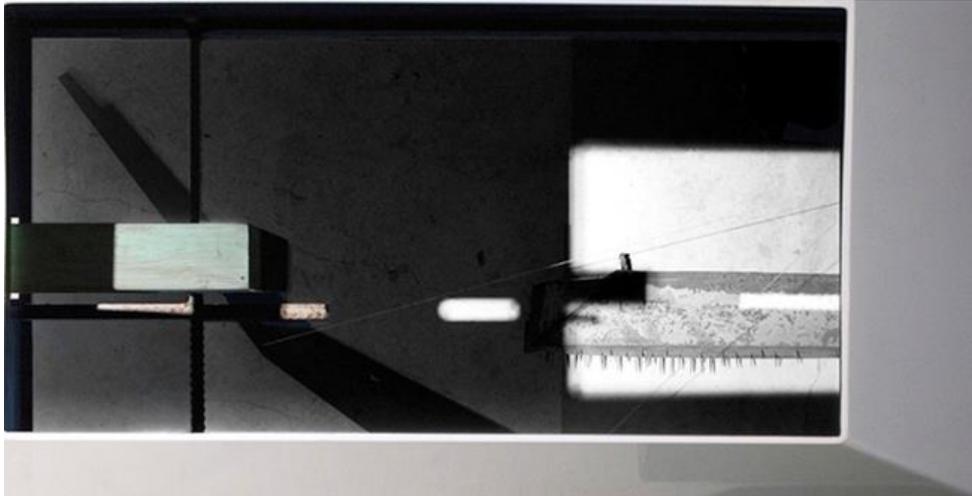


Figure 1: Aerial Viewing Monitor

When the world of clear and articulate objects is abolished, our perceptual being, cut off from its world, evolves a spatiality without images. This is what happens in the night. Night is not an object for me; it enwraps me and infiltrates through all my senses. I am no longer withdrawn into my perceptual look-out from which I watch the outlines of objects moving by at a distance. Night has no outlines; it is itself in contact with me...¹

In the domain of design, in which realization seems to employ decisions that derive from utility, and rejoin obligations of the world of aesthetics, the act of staging provides an intersession during which revelations particular to 'what constitutes the experience' are formed. In this engagement of a specific environment, our experience as occupants begins with an impulse to scrutinize everything.² In this almost instantaneous assessment, we enter into a dialogue with the humanity of place; an intercourse with time, deep time; and thus, are immersed in the visual and perceptual challenges of the inherited material culture and, consequently, its latent state. The ordinary quality of this type of material surround yields a deeply reflective engagement that assist in maintaining an ontological wakefulness.

Black Contemporary serves as an experiential laboratory for ongoing investigations intended to expand our knowledge specific to the study of atmospheric logics and the American agricultural landscape. The field station is located two miles south of Ames, Iowa. Using experiential perceptions as spatial conditioners, current studio projects focus on the act of making and curating a series of research assemblies within a dormant seed-drying facility constructed in 1979. This work might best be understood as a peculiar deposit of site-adjusted material measures that indicate the presence of, and makes clearly recognizable, its context as referent rather than source or setting.

Centered on theories of affect and new materialism, this work focuses on what each material configuration does - rather than what each material configuration is – in order to construct a critical arrangement so unified as a whole that it cannot be described merely as a sum of its parts. Based on a

¹ M. Merleau-Ponty, *Phenomenology of Perception*, (Routledge & Kegan Paul, 1978). P. 283.

² John Dewey, *Art as Experience*, (New York: Penquin Putnam., 1980), p. 58.



theoretical set of actions the foundational body of work provides a material/visual reflection on the contemporary social configuration of a Midwestern sub-cultural context. The subsequent works [Figure 1] provoke a temporal-spatial encounter fueled by a desire to understand the simultaneous and complex nature of cerebral and corporeal experience. Each staging is driven by the nascent possibility of a persistent desire to intercourse with existing material surrounds pursuant a philosophical position that leverages perceptual notions of chiaroscuro. A logic first used in the 1680s by Leonardo da Vinci and Michelangelo Merisi da Caravaggio that had to do with the disposition of light and dark in a picture, or literally "bright-dark," from Italian chiaro "clear, bright" (clarus ~ clear) + oscuro (obscurus ~ obscure). By extension of this etymological dichotomy, the conscious and unconscious, the seen and the unseen, focus and open awareness and the made re-made are factors in the practice of understanding and generating a set of spatial valence within the material culture of a post-industrial site. This paper proposes art and architecture as a mutual practice centered on the human endeavor to come to know the nature of a place through the immersive act of inductive criticism supported by a set of inserted material assembly with a relative capacity to unite or react or interact with the latent dimensions of the inherited landscape.

This exercise began by reconsidering the nature of a set of internal spaces within the seed dryer formerly referred to as the plenum. The abandonment of this mechanical process and our consequent human association leaves the, often naïve, visitor at a loss with respect to understanding its former utility due to the inherent austerity of its confines. The subsequent reference to these spaces, the entrance hall and the drawing room, conjure internal mental pictures of associated uses and social activities as a result of their new, albeit archaic, syntax. This loose intellectual linkage coupled with the instability of the cultural context enables us to more fully enter each room as a space of imagination rather than that which might vanish if made finite. In the context of spatial assignment and cultural practices, Sigmund Freud explains his theory of the unconscious as follows:

Let us therefore compare the system of the unconscious to a large entrance hall, in which the mental impulses jostle one another like separate individuals. Adjoining this entrance hall there is a second, narrower, room – a kind of drawing room – in which consciousness too, resides. But on the threshold between these two rooms a watchman performs his function. (Freud 1917)

This notion is the conceptual basis for the reoccupation of a dormant configuration within Iowa's landscape, whereby a set of buildings and associated spaces (rooms) have been left vacant for decades. Freud knew that he only had to name the rooms and his comparison between *real* space and the space of the mind would be made clear.¹ Similarly, the goal of this effort is to examine, on the threshold between the two rooms and the broader agricultural context, the potential of a set of empty spaces whose original purpose is no longer served yet stand as social symbols of labor's leftover.

Entrance Hall – Assembly One

The dimensional nature of Iowa's agricultural landscape is not immediately discernable. This can be attributed to the absence of an outline of objects seen against the line at which the sky and earth appear to meet in the case of its physical dimension. In the case of its cultural dimension, this might likely be

¹ Georgina Downey, *Domestic Interiors: Representing Homes from the Victorians and Modernists*, (Bloomsbury Press, 2013), p. xiii.



attributed to the intrinsic relationship (both symbolically and ethically) between the family farm unit and the expansive ground plane in which it operates. It is an extent, both physically and culturally, that becomes present and knowable (only) through the first-person dimension; an experiential unit of measure commonly referred to as time.

It is this logic with which the first research assembly has been developed. It is situated within the ground floor plenum space of the seed dryer, the actual dimensions of the entrance hall are 8 by 62 feet in plan. Its height is 10 feet. Access is provided through a small vestibule at the south end of the entrance hall. With the door left ajar and ambient light emanating from an existing opening in the floor assembly above, the viewer is confronted with the installment of a series of like wood elements and tilted steel plate. The arrangement and extent of this componentry is undeterminable given gradient light levels due to the hyper extended condition of the plenum geometry. As the ocular effect of having moved almost instantaneously from daylight to dark slowly recalibrates, the remainder of the componentry, and ultimately the dimensional and material boundaries of the host space, become evident.

Entrance Hall – Assembly Two

For most of us, our comprehension of the inscribed landscape is the aggregate of various momentary engagements with rural America. Awareness is developed through finite experiences as a matter of passing through or attending a farm event. The rural configuration, thus, is the setting for an experience rather than the experience itself as practiced by the family farm unit as a matter of co-existence. Thus, the contemporary experience, unlike the traditional, is not solitary, is not contemplative, and is less concerned with awareness of the environment.¹ What eventually replaced the ethical perception of this landscape typology was the restricted vision of our global, rather than local, scale of exchange. However, there has recently been a conservationist revival as made most evident through community-supported agriculture whereby the farmer is directly linked once again to the consumer. It is changes such as these – fragmentary and pragmatic – that have informed, and been illuminated by, the production of the second research assembly.

This assembly employs a derelict metal conveyor lid placed on the floor with respect to the tilted steel bent. The conveyor lid, worn and distorted by weather, is host to a series of thorns that have been attached to its leading edge. Incident light, emanating from the entrance door left ajar and the light source overhead, frames the resultant intercourse between each of the elements and their host space.

Under this new configuration, the assembly – or, more broadly, the ambient configuration – is not what occupies the entrance hall, but what is completely enveloped by the consequent pool of light and surrounding shadows. In other words, the restricted view of the associated componentry yields what David Leatherbarrow refers to as a topographical inscription, a single cultural framework occupied by our collective imagination. In this way, the perceptual experience of the work forges a return to the solitary, contemplative experience; to a provocation of self-awareness with respect to what is known, consciously and subconsciously, regarding farm culture and the inherited landscape.

Entrance Hall – Assembly Three

The third research assembly considers the generative role of site adjustment in a post-industrial landscape. Deceptive in its vacuum when addressed only superficially, Iowa consists of a broad range of diverse systems and approaches that have been rigorously modulated over decades and thus seem

¹ John Brinckerhoff Jackson, *Discovering the Vernacular Landscape*, (Yale University Press, 1984), p. 63.



integral and thereby a space of absence. Developing an understanding of the rural site, or more anecdotally, “the interior,” necessitates the need for a point within from which one is allowed to perceive for an uncertain duration.

Located along the thrust of the entrance hall, the new set of parts serve as a measure by which people may situate themselves. Developed within a recessed mantel of this set of parts is the arrangement of rotary hoe replacement spoons on a building felt runner. The intrinsic qualities of the existing space are revealed through intercourse with the referent assembly yielding a monadic dimension as referred to in *The Fold: Leibniz and The Baroque* by Gilles Deleuze:

Chiaroscuro fills the monad according to a series which can be followed in both directions: at one end the dark background, at the other sealed light; the latter, when it lights up, produces white in the section set aside for it, but the light grows dimmer and dimmer, yields to darkness and deepening shadow as it spreads out towards the dark background throughout the monad.¹

The occupant, by reciprocal examination, becomes aware of his/her personal presence and its coincidence with relation to the referent-material-and-attendant culture. The culminating assembly results in a field of occupation that discloses the ethical relevance of the latent site that is knowable only by the accumulation of routine and diverse experiences of labor and reflection.

Level Two

Within the logic of landscape studies is an indoctrinated manner of observation. Contemporary culture comprehends and navigates geographical realms via maps, which tend to set up an aerial relationship between reader and subject. Consequent to this intellectual configuration is the necessity to study its other - the atmosphere and outer space. The upper story of the seed dryer operates as an instrument with which such readings can be performed – placing the viewer between heaven and earth; consciousness and the subconscious; certainty and uncertainty.

Located in the drawing room is an aerial viewing station and a ground-viewing station. The aerial viewing station consists of an offset viewing monitor made of 10-gauge steel and wood bracketing through which the world below is seen. The ground viewing station is located at the far end of the drawing room just in front of the duct opening. This work consists of a *camera obscura* and a stacked wood area of repose. The *camera obscura* consists of a set of three painted metal panels as picture plane and 2mm diameter hole in the top of the existing duct as aperture. Light from the external (celestial) scene passes through the hole and strikes the picture plane inside. As stated by Jonathan Crary in his 1992 publication, *Techniques of the Observer*:

The camera obscure performs an operation of individuation; that is, it defines an observer as isolated, enclosed, and autonomous within its dark confines. It impels a kind of withdrawal from the world in order to regulate and purify one’s relation to the manifold contents of the now “exterior” world.²

This world is precisely that thing from which we form our perceptions, not as personal beliefs or

¹ Gilles Deleuze, *The Fold: Leibniz and The Baroque* (London and New York: Continuum, 2006 [1988]), p. 5.

² Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, (MIT Press, 1992), p. 38-39.



imperatives, but in so far as we are all governed by a universal source of light and its consequent shadows. This optic disclosure, the layering of light and shadows, absolves us of our flesh and bone and allows the body to enter time, deep time, and (as pointed out by Mircea Eliade) our collective transcendent reality – the inscribed spatial history of a particular setting developed between human beings and the environments they occupy.

Conclusion

Our experience as occupants of a particular setting begins with the impulse to instantaneously scrutinize everything. This impulse is sustained through an often precisely choreographed threshold. As architect and artist, my goal is to assist the occupant in maintaining his or her initial ontological wakefulness through staging often-temporary assemblies within a host space and thereby extend the passage sequence. In the words of Alberto Pérez-Gómez from his published thoughts titled “Built upon Love”:

The discovery of architectural order necessitates the same sort of critical de-structuring that is familiar to other arts, engaging dimensions of consciousness usually stifled by technical education. Yet for architecture this is not an intuitive operation or unreflective action, but rather the continuation of a practical philosophy and a meditative practice....Thus a work of architecture may engage the primary geometry of human bodily orientation as the base line of a significant melody aimed at revealing the enigma of depth, the dimension of space.¹

To this end, the act of constructing a spatial phenomena field station within one of rural Iowa’s derelict facilities assists in cultivating place-based knowledge through direct engagement with Iowa’s occulted farm community. It is a subconscious engagement whereby we become immersed in the world and do not succeed in distancing ourselves from it in order to achieve consciousness of the world. It employs chiaroscuro; a pictorial practice of arranging light (the conscious) and shadow (the subconscious) in the service of authenticating the cultural essence of lived space and thereby mine its capacity to summon the subconscious and reoccupy the inherited landscape as a dimension of life entwined with the present, a part of our ongoing perceptual experience.

In addition, a nascent body of work in the adjoining 'bins' is being developed that involves working petroleum ink across veneer plywood and assembling found farm detritus on top. Each work [Figure 2] is evidence of the labor of working land, what is left behind, what soaks in and what is furrowed into gesture. It is part of a collection of socio-cultural observations. Each inquiry is part of a process by which the cultural history and perceptual experience of a particular setting is revealed. The resultant staging yields, what Grant Wood depicts in his 1934 mural *When Tillage Begins Other Arts Follow*, the foundation for subsequent forms of human civilization specific to labor and an intensely modulated means of production. The cumulative effort might indicate the potential use of this facility, and all of Iowa’s derelict agricultural facilities, as laboratory inasmuch as it offers opportunities for a rigorous set of observations, practices and experimentation.

¹ Alberto Pérez-Gómez, “The Ethical Image of an Architecture” in *Built upon Love*, (MIT Press, 2008), p. 210-211.



Figure 2: Field Notes: beneath the obscurity of light
Lithography ink, burlap sack, steel strap and galvanized tin on maple veneer plywood - 48 by 96 inches



Ephemeral Landscapes Toward Social Integration

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Abstract

This research focuses on understanding both the behavioral patterns within spaces in selected sites located mostly in Latin American cities, and the urban forms that have been produced. The proposed research method focuses on scientifically informed and artistically driven *ad-hoc* performances in the public space, where researchers and users break the boundary between the observer and the one observed. The Case Study selected for this article is the site of the *Parque del Tercer Milenio*, in Bogotá, Colombia, an area now occupied by a metropolitan park that resulted from the demolition of a historic neighborhood in the 1990's. The research highlights the potential influence of performances as “ephemeral landscapes” to raise awareness about the importance of bridging not only social gaps and understand the urban landscape as a network of representation and engagements that evolves over time.

Introduction

This exercise was conducted in the context of a design research framework that aims to better understand social interactions in public spaces. The research focuses on the shift from object-oriented methodologies toward relationship-focused approaches. Such efforts seek to explore how performances in the public space contribute to induce social interaction to address social inequalities.

The Case Study selected for this particular study is the site of the *Parque del Tercer Milenio*, in Bogotá, Colombia, an area now occupied by a metropolitan park. As mentioned before, the park resulted from the demolition of a historic neighborhood named ‘*El Cartucho*’ at the end of the 1990's. The site was violently razed following ‘Urban Renewal’ principles, which were common practices worldwide in the 1950's and 60's.

This case study contributes to reveal the benefits of *ad-hoc as well as of* and scientifically informed performative interventions in urban spaces, tested in the academic environment. This exercise was developed within an international collaboration among four universities: The Massachusetts Institute of Technology (MIT) School of Architecture + Planning from Cambridge, Massachusetts, USA, and three universities from Bogotá, Colombia: the Universidad Nacional de Colombia, Universidad de Los Andes,



and the Universidad de la Salle. The Urban Development Institute from the city of Bogotá also supported this workshop. Hopefully, this type of exercises will also inform and influence the professional and social realms.

This article is divided into three sections. The first one includes a description of the objectives and methodological principles of this research. The second part focuses on the history of the site and the current urban and contextual conditions, as well as on the method employed to collect data and the manner in which the on-site activities were carried out. The third section analyses the most relevant aspects derived from this study, and delve on how they become useful inputs in the design process. The experiment also sheds light on future methodological applications and challenges. Finally, this article stresses the importance of using a working framework that values simultaneity and balance between theory and action. This framework is expected to serve as a tool that can help to have a better understanding of the intrinsic conditions and the design of public spaces as facilitators of social encounters and conflict resolution.

I. Goals and principles: Understanding social interactions in the public space towards the resolution of social conflict.

The term public space acquires meaning only when people and places interact. In the context of the broader research, a public space has two basic components, its physicality or what we define as “context” (including environmental conditions), and the individuals that perform activities in it, following behavioral patterns that we define as “culture”. Therefore, in order to address public spaces, we need to position ourselves in the “in between” area –between the object and the subject. This approach allows us to better analyze and understand what public spaces are all about.

This is a dual approach --the paradox of wholes and parts--as the means of analyzing urban form and particularly public space. This duality is represented by different factors, all of them interacting at the same time and place. The importance of this relationship derives from how these factors interact. This interaction, therefore, is the key focus of our analysis and interpretation. In fact, this approach attempts to demonstrate that culture is the basic source feeding urban form. Only those principles that govern the use of space (i.e., that implicitly or explicitly contain behavioral patterns connecting people within their immediate environment) are of interest to this research. Therefore, it is necessary to explore how people react to open space, to the spatial conditions, to materials; how they intervene and take advantage of such spaces; and how those spaces influence people's behavior.

This research focuses on “understanding” both the behavioral patterns within spaces in selected sites located in different Latin American cities, and the urban form it has produced. In other words, the process is one of “reading,” both performances within urban form and the urban form itself. The aim of the case studies included in this research is to demonstrate that when using data referring to parts and wholes, collected *in-situ*, and provided that it is possible to map the interactions of ‘people and places’, we will be able to contribute to the appropriate effectiveness of the urban design processes. The suggested method becomes an ephemeral performance and a landscape project, sustained by the collection of on-site data. In this respect, a further objective of the research is to contribute to the field of urban and landscape design through the development of a generic interpretative framework for the



creation of appropriate public spaces. The intent is to accelerate adequate designers' response in accordance with unprecedented urban growth worldwide.

This research calibers how understanding the way we inhabit public space, through quotidian and routing-changing events, can successfully influence cultural, economic, and social change. What does quality design and innovation mean in cities of developing countries and more specifically in the case studies analyzed? Could we understand not only issues of circulation and accessibility but also issues of isolation and social engagement? Could we measure not only levels of activities but also levels of enjoyment?

Let's start by saying that what is good for the more fortunate is also good for the less privileged. "The gap between those who live in poverty and those that do not within cities in developing countries is similar to the gap between the developed and the developing worlds. It is not only a matter of choice, it is a matter of understanding that if I want to live better, my neighbor needs to enjoy a better quality of life also."¹ If this statement is true, then the outcome of this research will impact the relationship between the developing and developed worlds.

The task ahead is to devise ways to connect differentiated and disconnected urban sectors by means of designing systems of public spaces, landscape armatures, and urban and architectural components in a timely, sustainable, and financially sound manner for both formal and informal areas. Quality design in this context means the existence of public spaces that would invite city users and residents of particular neighborhoods to interact in the same turf, enhancing social encounters and facilitating exposure to different parts of the city. Such spaces accompanied by community services as markets, schools, medical and sport facilities, in all urban areas, can contribute to break stigmas and bridge social divisions.

In summary, the aim of this particular case study is to envision solutions capable to integrate the *Parque del Tercer Milenio* –now in a no man's land condition- to the urban life of the city, through innovative interventions in the public realm. Interventions guided by approaches oriented not towards individual design components of the space but rather towards performative relationships.

II. Method and tools. 'Dame tu presencia'. The Case of the *Parque del Tercer Milenio*.

This research starts to address those challenges by focusing on Bogotá's ongoing efforts toward bridging social gaps. These initiatives coincide with the questions posted by the Fifth Session of the World Urban Forum: "The Right to the City: Bridging the urban Divide", held in Río de Janeiro, Brazil, in 2012. In this context, the *Parque del Tercer Milenio* presents an ideal opportunity to understand strategies for conflict resolutions that find in the public space its main field of operation. The study area was limited to the park and two surrounding city blocks in all directions (Figure 1).

¹ See Oscar Grauer, "Democracy and the City", in *Democracy in Latin America*, ReVista (Cambridge: David Rockefeller Center for Latin American Studies, Harvard University, Fall 2002).



Why was this site selected?

EL Cartucho, prior its demolition in order to construct the park, was considered perhaps one of the most challenging and violent districts in Latin America. Its eradication to create a large metropolitan recreational space was initially supported by municipal authorities, and most citizens had a favorable move. In short time, it became evident that the way in which forced eviction had occurred and the actual design of the park did not alter the violent conditions in the new vast open space and in the surrounding areas.

*El Cartucho*¹: *de la opulencia a la indigencia* (El Cartucho: From Opulence to Indigence) is how Juanita León entitles her article published in the Colombian newspaper *El Tiempo*, on the 28th of March, 1999.² In this article she describes the life in a neighborhood that once occupied the site of the current *Parque del Tercer Milenio*, known as *El Barrio Santa Inés*. It started as a residential neighborhood in the seventeenth century, which developed, along with the neighboring area of Liévano as a prosperous and prestigious district until the twentieth century. Both were located close to the foundational site of the city of Bogotá. Renowned professionals and families resided in both Santa Inés and Liévano neighborhoods. Juanita León describes (León, 2011) as “a place profusely planted with trees, with three-lantern street lighting, reminiscence of the best French style.”³

Originally built in 1887 and remodeled in 1913, the main train station of the city (Estación de La Sabana)

¹ Currently, the term “Cartucho” is being used to refer to any downtown area of Bogotá where drug trafficking and social and urban conditions are similar to those of Santa Inés and Liévano neighborhoods at the end of the twentieth century. See Laura Arrieta Ardila, “Hay cuatro nuevos Cartuchos”. *El Espectador* (November 04, 2011).

² See Juanita León, “El Cartucho: De la opulencia a la indigencia”. *El Tiempo* (November 04, 2011).

³ *Idem*.



was built close to Santa Inés. From this moment on, Santa Inés started to provide services and to supply goods for travelers using this means of transportation. Between 1919 and 1925 the Jiménez de Quesada Avenue was built covering the San Francisco River, connected to the Plaza de San Victorino located in Santa Inés. Also a new tramway made its way to this area.

El Cartucho was one of the streets in Santa Inés where, since the mid-nineteenth century, well-organized recycling activities took place. Other nearby public spaces were used for commercial and service activities. For instance, shops and utility offices, close to the main market, surrounded the Plaza Central. Public spaces were places of intense social interaction.

In 1948 the event that was known as *El Bogotazo*,¹ which was to be a turning point in Colombia's contemporary history -resulting in violent riots and fires that destroyed large areas of the foundation core of the city- began to alter the dynamics of the area. Local residents in downtown Bogotá started to move out, heading to northern areas of the city, and abandoning or renting the vacated buildings left behind. Displaced, mostly lower income people, fleeing from the violence in the countryside, started migrating to Bogotá, and began to reside in these once prosperous neighborhoods. Large houses were subdivided to accommodate the migrants in boarding homes, which in time became a hygiene problem due to lack of ventilation and overcrowding.

Between 1948 and 1955 two of the existing streets, Avenida Caracas and Carrera 10, were widened up and transformed into car-oriented corridors. Pedestrian crossing became difficult, further isolating Santa Inés from the surrounding areas. In addition, one of its economic drivers, the market, was demolished.

This area's isolation helped it become a refuge for drug dealers, delinquents, prostitutes, homeless people, and street kids. These unfortunate conditions grew exponentially during the second half of the twentieth century due to unemployment, which in turn, promoted the growth of an informal economy and also of permanent street vendors in the area. Santa Inés and surrounding neighborhoods were now called *El Cartucho*.

In the 1990's *El Cartucho* was demolished to build *El Parque del Tercer Milenio*, which was completed in 2001. Urban Renewal was again utilized to "solve" social problems. The park, instead of solving problems, became no-man's land, further isolating the surrounding areas. Each of the four sides facing the park has increasingly become single-use areas: the East façade accommodates retail shops. These are adjacent to the most important government buildings of the city; on the West some remaining buildings of the Republican period provide public service, while others are abandoned; to the North there is a bustling commercial area known as San Victorino; and on the South façade empty lots and buildings are occupied by delinquents and homeless displaced from *El Cartucho*, masking and threatening the stability of the only residential pocket left in the area, called San Bernardo.

¹ El Bogotazo was a citywide reaction of the population with violent protests, public manifestations and repression that led to the destruction by a fire of downtown Bogotá, due to the assassination of Jorge Eliécer Gaitán, the main candidate of the opposition. For more on the evolution of Colombia's political history, see Marcos Roza Palacios and Safford Frankv, *Historia de Colombia. País fragmentado, sociedad dividida*. (Bogotá: Ediciones Uniandes, 2011).



On the East and side of the park a more recent line of the bus transit system called *Transmilenio*, which runs on exclusive lanes, was incorporated, further isolating the park from neighboring commercial areas. Pedestrians crossing to the neighboring district on this edge only occur only at the corners of the park. A transfer bus terminal occupies the Southeast corner of the Park, and in order for buses to access it; a three-level interchange vehicular ramp system was built. The neighborhood located at the Northeastern corner of the park has become the most dangerous place in the city. It is colloquially called “El Bronx”, and it provides 90% of the entire drug sold in the city, hosting most of the displaced residents that lived in *El Cartucho*, but in a third of the area.¹ It is such a violent place that only the army dares to enter here.

Current plans for the area include the partial demolition of the eastern commercial and manufacturing area, in order to accommodate a large number of new government buildings, including new commercial facilities. To the North, a new shopping mall is also proposed. If built, these two non-residential interventions will increase the isolation of the park, and also the insecurity after business hours.

El Cartucho was created by all of us, as a society that closes its eyes and allows such conditions to prosper, and just saying: ‘thankfully, it is not in my backyard’² sentenced the Mayors’ Office in 2010. It is the same office that proposed the construction of the shopping mall mentioned above. Finally a quote by Architect Rogelio Salmona that summarizes the most relevant characteristic of this site:

“When the city becomes segregated, it does not interact, no social interaction happens; it is a city that starts to have a great number of conflicts. A city that segregates, that becomes intolerant, is a city that is dying; it is a city that becomes barbaric taking over civilization.”³

Method and Activities

The observation and data collection provided information on how it was in the recent past, how the site is currently working, and how *ad-hoc* performances as ephemeral landscapes serve as tools to activate and induce social interactions and integration.

In the context of this research, methodological approaches aim to move beyond the oppositions between the scientific and the artistic. It refers rather to mixed-methods that use both qualitative analysis (questionnaires, interviews, photographs, etc.) and quantitative tools (surveys, counts, statistics, etc.). This methodological field is not new. Lately, it is being used in most social studies.⁴ However, the questions concern the minimum acceptable level of application of each method, and the appropriate balance between both methodologies.

¹ See Juanita León, “El Cartucho: De la opulencia a la indigencia”. *El Tiempo* (November 04, 2011).

² See Secretaría Social Distrital de Integración, *El Cartucho, del Barrio Santa Inés al Callejón de la Muerte* (Bogotá: Alcaldía Mayor de Bogotá, 2010).

³ *Idem* (Translated by the authors).

⁴ See Howard White, “Of Probits and Participation: The Use of Mixed Methods” in *Quantitative Impact Evaluation* (NONIE working paper No. 6, UNEG, 2008).



The implementation of mixed research methods would seem to be a valid mechanism to help uncover the links between different extremes and dimensions of social interaction in public spaces, as well as to construct a more comprehensive picture of the landscape structures, events, and perceptions in the public and semi-public realm.

The '*performative essence*' of this study is not a subversive ambition against academic conventions; rather it is a true interest for understanding processes that intrinsically seek balance. In such cases, practice is research, action equals theoretical findings, findings are products, and the acceptance of products leads to validation. Thus, this methodology while it falls in the realm of applied research, it drifts closer to the emergence of non-dichotomous paradigms. Such paradigms transcend the systems of cause-effect deduction. Nevertheless, the performative and practical character of this article does not contradict neither the scientific not the sensitive methods, as Brad Hasseman explains in *A Manifesto for Performative Research (2006)*.¹

"The line between quantitative and qualitative research is becoming increasingly blurred with the rise of post-positivism and the adoption of qualitative strategies in the sciences and vice versa. Mixed-method approaches are becoming popular in a world here interdisciplinary research is seen as a way forward for innovation and new understandings."²

Qualitative data collection tools were directed to capture how the public space is perceived over time, including the kind of perceptions expected from the spaces in the near future. The final interviewed format was designed based on a questionnaire originally designed in 2009 by Suzanna Pembroke.³ Pembroke's work proposes a method to record how users perceive the space in the recent past and present, as well as their own ideas of what the future could be, in connection with their key social background and geographical locations in relationship with the case study.

This method implies that our perceptions of a place are influenced not only by time or social and cultural backgrounds but also by our relation of proximity and accessibility to the place. In other words, users that live within one mile may have different perception of a certain place than the perception of someone arriving to the place from five miles away.

Subsequently, questionnaires were redesigned in order to better capture the perceptions related to the established guiding principles. The data collected was used to inform the assessment process of the public space under regular conditions, but also the *ad-hoc* performance design process. About 100 questionnaires were carried out within the case study area. The questions were grouped in four sections. The first part: "What do the second part: "Why is this place important for you?" looks for details about the type of interactions, which create a sense of importance to the user. The third part: "What do you do in the space, and what attracts you to it?" focuses on what fascinates, invites and,

¹ See Brad Haseman, "A Manifesto for Performative Research" in Media International Australia incorporating Culture and Policy, theme issue "Practice-led Research"(no. 118):pp. 98-106, 2006.

² *Idem*.

³ Suzanna Pembroke is a member of the Arup's London Office, who has done extensive research on how to understand "Sense of Place", questionnaires were selected as a research tool.



detracts movement and interactions. Finally, the fourth section: “History of this space”, concentrates on why and how the spaces were perceived in the recent past (Figure 2).

Quantitative tools are aimed to collect data related to the traces of people’s movement and interaction in the public space. The intent is to visualize people’s performance detached from traditional social, religious, or cultural categories, but rather in relation to the frequency of occurrence, trajectories followed, and point of attractions.

Three types of tools were used: a) pedestrian counts registered at the adjacent intersections, giving priority to the first three blocks adjacent to the site, in order to understand frequency and volume of movements, b) surveys of existing components and overall conditions, including information about the scale and shape, the type, location and number of amenities and, the number of visitors by time spent in the public space, and; c) sequential photographic surveys to retrace not the trajectory but rather the diversity of interactions performed by users. In addition, random photographic surveys were carried out to capture the diversity of the possible engagements. Such images allow for addressing both how immeasurable human behavior could be, and how beyond such diversity evidences of recurrence could be found (Figure 3).

Parque Tercer Milenio, Bogotá, Enero 2013. Espacio público y equidad urbana

Fecha: _____

Por favor, anote el nombre del lugar y marque en el mapa donde se está realizando la entrevista:

Tiempo al inicio de la entrevista: _____



Buenos días, somos un grupo de investigadores venezolanos, colombianos y norteamericanos que estamos realizando un trabajo de investigación para conocer cómo se desenvuelven los espacios públicos de la zona, y nos encantaría realizarle algunas preguntas.

P1 En relación a esta zona, usted:
(a) vive aquí sí/no
(b) trabaja aquí sí/no
(c) está de paso sí/no
(d) otro: _____

P2 En relación a esta zona, hace cinco años que usted:
(a) vive aquí sí/no
(b) trabaja aquí sí/no
(c) está de paso sí/no
(d) otro: _____

P3 De las imágenes siguientes, por favor indique sobre la imagen con un "✓" las que considere espacio público y con "X" las que no.



Parque Tercer Milenio, Bogotá, Enero 2013. Espacio público y equidad urbana

P9 ¿Cuándo?
1 Temprano en la mañana
2 Mediodía
3 Tarde
4 Temprano en la noche
5 Noche

P10 Cuando visita este espacio ¿Cuánto tiempo se queda?
1 De paso
2 Menos de media hora
3 Mas de una hora
4 Mas de tres horas
5 Todo el día

Ahora algunas preguntas acerca de lo que hace en el espacio y qué es lo que le resulta atractivo

	Todo el tiempo	La mayoría del tiempo	Seguido	Algunas veces	Raramente
P11a Sentarse y leer	5	4	3	2	1
P11b Encontrar un amigo	5	4	3	2	1
P11c Almorzar	5	4	3	2	1
P11d Ejercitarse	5	4	3	2	1
P11e Jugar	5	4	3	2	1
P11f Trabajar	5	4	3	2	1
P11g Pasear	5	4	3	2	1
P11h Asistir a eventos	5	4	3	2	1

Otras: _____

P12 En este espacio se siente atraído por:

	Altamente de acuerdo	Medianamente de acuerdo	De acuerdo	Medianamente en desacuerdo	Altamente en desacuerdo
P12a Diversidad de actividades	5	4	3	2	1
P12b Diversidad de usuarios	5	4	3	2	1
P12c Vistas únicas	5	4	3	2	1
P12d Paisaje singular	5	4	3	2	1
P12e Elementos de agua	5	4	3	2	1
P12f Accesibilidad	5	4	3	2	1
P12g Colores	5	4	3	2	1
P12h Olores	5	4	3	2	1
P12i Sonidos	5	4	3	2	1
P12j Iluminación	5	4	3	2	1
P12k Mantenimiento	5	4	3	2	1
P12l Actividades	5	4	3	2	1
P12m Nada	5	4	3	2	1

Otras: _____

P13 De los siguientes elementos, cuáles cree que contribuyen a la seguridad del lugar

	Altamente de acuerdo	Medianamente de acuerdo	De acuerdo	Medianamente en desacuerdo	Altamente en desacuerdo
P13a Sistema de iluminación	5	4	3	2	1
P13b Sistema de mantenimiento	5	4	3	2	1
P13c Programación/actividades	5	4	3	2	1
P13d Patrullaje	5	4	3	2	1
P13e Señalización	5	4	3	2	1
P13f Mantenimiento	5	4	3	2	1
P13g Nada	5	4	3	2	1

Otras: _____

Parque Tercer Milenio, Bogotá, Enero 2013. Espacio público y equidad urbana

Algunas preguntas sobre su opinión de esta área.

P4 ¿Qué tanto concuerda con las siguientes afirmaciones? Por favor lea las siguientes al entrevistado:

	Altamente de acuerdo	Medianamente de acuerdo	De acuerdo	Medianamente en desacuerdo	Altamente en desacuerdo
P4a Este es un buen lugar para vivir	5	4	3	2	1
P4b Este es un buen lugar para trabajar	5	4	3	2	1
P4c Este es un espacio al que le gusta volver	5	4	3	2	1
P4d Este es un espacio que contribuye a la integración social	5	4	3	2	1
P4e Este es un espacio importante para la comunidad	5	4	3	2	1
P4f Este es un espacio en el que se siente seguro	5	4	3	2	1

P5 ¿Qué tanto concuerda con las siguientes afirmaciones? Por favor lea las siguientes al entrevistado:

	Altamente de acuerdo	Medianamente de acuerdo	De acuerdo	Medianamente en desacuerdo	Altamente en desacuerdo
P5a Este es un buen lugar para encontrar amigos	5	4	3	2	1
P5b Este es un lugar para todo el mundo	5	4	3	2	1
P5c Este es un espacio que contribuye a la integración social	5	4	3	2	1
P5d Este es un espacio importante para la comunidad	5	4	3	2	1
P5e Ofrece actividades para todo tipo de persona	5	4	3	2	1
P5f Este es un lugar para relajarse	5	4	3	2	1
P5g Este es un lugar muy activo	5	4	3	2	1
P5h Este es un espacio importante para la historia de la ciudad	5	4	3	2	1
P5i Este espacio es parte de mi comunidad	5	4	3	2	1
P5j Me siento orgulloso de este espacio	5	4	3	2	1
P5k Este es un espacio donde me conecto con la naturaleza	5	4	3	2	1
P5l Posee atractivos culturales únicos	5	4	3	2	1

Algunas preguntas acerca de los aspectos, la frecuencia y formas en las que visita el lugar:

P6 ¿En los pasados 12 meses qué tan seguido visitó este lugar?

- 1 Todos los días
- 2 2-3 veces por semana
- 3 Cerca de una vez por semana
- 4 Cerca de una vez cada dos semanas
- 5 Cerca de una vez al mes
- 6 Cerca de una vez cada 6 meses
- 7 Una vez
- 8 No lo visitó
- 9 No sabe/no recuerda

P7 ¿En qué momento de la semana visita el espacio con más frecuencia?

- 1 Días de la semana de día
- 2 Días de la semana de noche
- 3 Fines de semana de día
- 4 Fines de semana de noche
- 5 No visita

P8 ¿Visita este espacio en algún tiempo del día en especial?

- 1 Sí
- 2 No
- 3 NR

Parque Tercer Milenio, Bogotá, Enero 2013. Espacio público y equidad urbana

P14 En general, ¿Se siente seguro en este lugar?

- 2 No
- 3 NR

Finalmente, por favor mencione algunos datos sobre la historia del lugar:

P15 Píense en antes de la construcción del parque e indique cuál de las frases siguientes describe mejor la manera en que el lugar ha cambiado desde entonces:

	Mucho mejor ahora	Un poco mejor ahora	Igual	Un poco peor	Mucho peor
P15a La apariencia del espacio	5	4	3	2	1
P15b La cantidad y diversidad de las actividades	5	4	3	2	1
P15c La facilidad de acceder al lugar	5	4	3	2	1
P15d Lo seguro que resulta el lugar	5	4	3	2	1
P15e La diversidad de visitantes	5	4	3	2	1
P15f Sentido comunitario	5	4	3	2	1
P15g Nada	5	4	3	2	1

P16 De las condiciones previas a la construcción del parque ¿Cuál de las siguientes frases describe mejor lo que usted hubiera hecho?

- 1 Preservar algo del sector:
 - 1.1. Edificación
 - 1.2. Actividad
 - 1.3. Espacio público
- 2 Rehabilitar las edificaciones preexistentes
- 3 Construir un nuevo vecindario
- 4 Rehabilitar solo algunas edificaciones y construir otras nuevas
- 5 Introducir:
 - 5.1. Una escuela
 - 5.2. Una biblioteca
 - 5.3. Un hospital
 - 5.4. Un teatro
 - 5.5. Un museo
 - 5.6. Un edificio de gobierno
 - 5.7 Otro: _____
- 6 Ampliar algunas calles
- 7 Crear espacios públicos (plazas/parques) más pequeños
- 8 Todos los anteriores
- 8 Construir el Parque Tercer Milenio
- 9 Otro: _____

P17 ¿Qué diferencia ha generado el parque durante los últimos 10 años con respecto a las condiciones de vida de la comunidad?

- 1 Mucho mejor ahora
- 2 Un poco mejor ahora
- 3 Igual
- 4 Un poco peor ahora
- 5 Mucho peor ahora
- 6 NR
- 7 Otro: _____

P18 ¿Con qué frecuencia visita este espacio en relación a hace 5 años?

- 1 Más seguido
- 2 Menos seguido
- 3 Igual
- 4 No lo visita
- 5 No sabe/no responde

Bogotá, 2012. Espacio público y estrategias de resolución de conflictos

Bogotá, 2012. Espacio público y estrategias de resolución de conflictos

Fecha: _____
Hora en que se realiza la observación: _____
Documentación programática y física del área de estudio. _____
Por favor, anote el nombre y marque en el mapa el lugar donde se está realizando la observación: _____

ZONA PROGRAMÁTICA



P3 Durante un periodo de 15 minutos, observe y documente por favor el número de:

- P3a Transeúntes de paso dirección norte - sur
- P3b Transeúntes de paso dirección este-oeste
- P3c Transeúntes que establece una relación de intercambio
- P3d Usuarios que se detienen a realizar una actividad recreativa
- P3e Usuarios que se detienen a realizar una actividad cultural
- P3f Usuarios que se detienen a realizar una actividad educativa
- P3g Usuarios que se detienen a realizar una actividad gubernamental
- P3h Usuarios que realizan una actividad de vigilancia
- P3i Usuarios que se trabajan en el lugar
- Otros

P4 En el siguiente mapa, por favor identifique los puntos de encuentro/intercambio más relevantes observados:



P1 Según sus observaciones valore el estado de preservación de los siguientes componentes:

	Muy bueno	Bueno	Mediano	Deteriorado	Muy deteriorado
P2a Pavimentos	5	4	3	2	1
P2b Iluminación	5	4	3	2	1
P2c Bancos y asientos	5	4	3	2	1
P2d Cobertura vegetal	5	4	3	2	1
P2e Árboles y arbustos	5	4	3	2	1
P2f Fuentes y espejos de agua	5	4	3	2	1
P2g Pabellones y centros de información	5	4	3	2	1
P2h Ciclo rutas	5	4	3	2	1

Otras: _____

P2 Registre por favor el tipo de actividades observadas según su intensidad de uso:

	Alta incidencia	Mediana incidencia	Baja incidencia	Muy Poca incidencia	No incidencia
P2a Comercio formal	5	4	3	2	1
P2b Comercio informal	5	4	3	2	1
P2c Vivienda	5	4	3	2	1
P2d Actividades recreacionales	5	4	3	2	1
P2e Actividades culturales	5	4	3	2	1
P2f Actividades religiosas	5	4	3	2	1
P2g Actividades gubernamentales	5	4	3	2	1
P2h Actividades educacionales	5	4	3	2	1

Otras: _____

P5 Comparte con nosotros algún comentario o pregunta adicional:

Tiempo al concluir la observación: _____

En caso de confirmaciones posteriores, si lo desea, por favor comparte tus datos:

Nombre del entrevistado: _____

Email: _____ Teléfono: _____

Dirección: _____

Firma de los observadores: _____

The students used this information collected *in situ* in many different ways, some to understand the current state of the area, others to make design decisions. Their understandings and products can be found at the end of this book where their site analysis and design proposals are included.

Performative data collection refers to the changes induced by ephemeral interventions, in relation to how sites are perceived and used. It is a tool to better understand the relationships in public spaces, and as a strategy to transform the observed and the documented trends of interaction. While collected data helped us to understand how the public space behaves during regular conditions, it seems insufficient to provide insight on how interactions would be during routine-breaking events. At this point, the idea of using the data collected and the knowledge gained while working *in-situ*, moved the investigation forward.

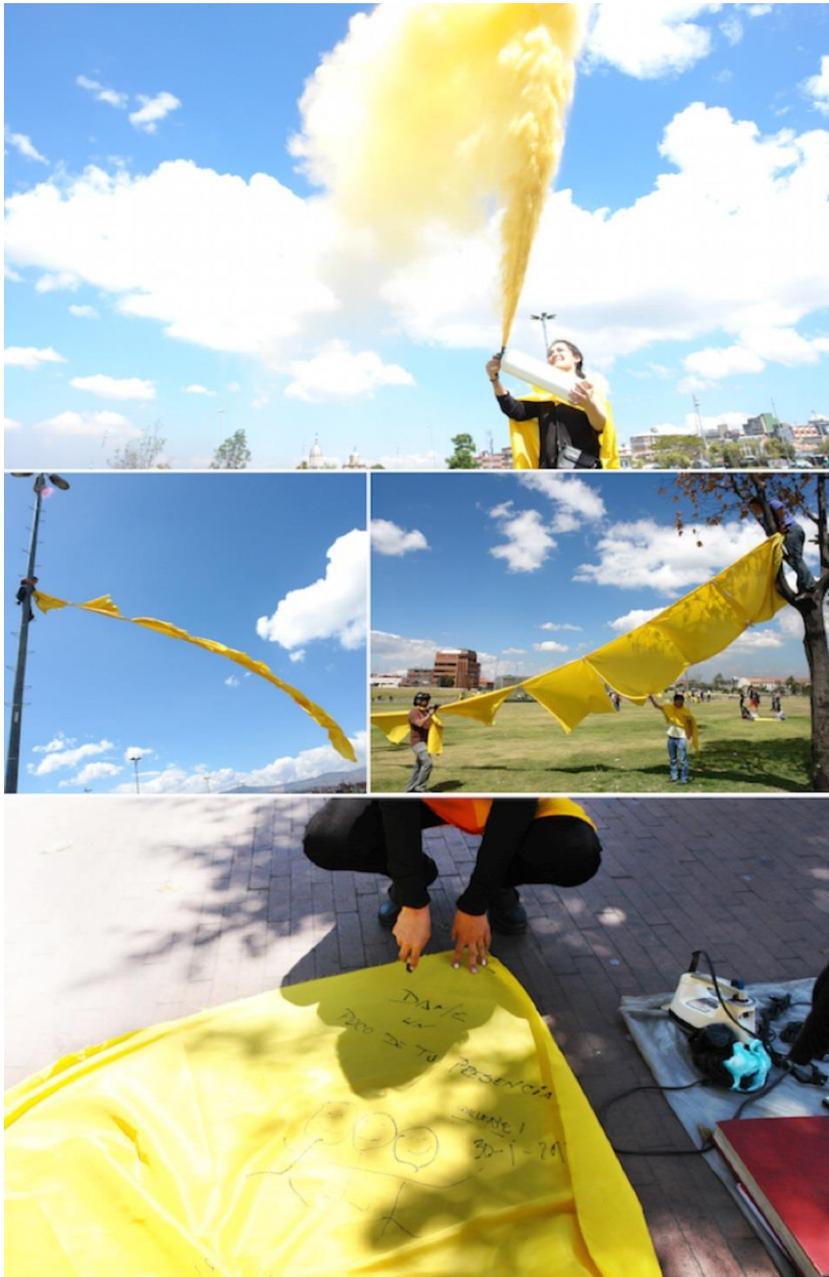
The idea of introducing routine-breaking events as ephemeral performance to purposely encourage social interaction in the space became a methodology. These ephemeral performances are meant to challenge: a) predominant patterns of movement; b) established types of interaction and c) conventional physical appearance of existing space components. In addition, such a performance needs to be of short duration and unique, in an effort to contrast with long-term lasting interactions in the space. Finally, the event needs to remain of a movable nature.

Moving from “looking at” to “engaging with” approaches, the performative interventions entitled ‘*Dame tu presencia*’ became routine-breaking methodological tools, behaving as ephemeral landscapes of social encounter. This type of performance aim to capture what keeps us apart from public space and what and whom do we fear as a group of individuals, while navigating the public space.

In the case of the *Parque del Tercer Milenio*, in a park where all preexistent traces seemed to have disappeared as the neighborhoods were raised, the ephemeral performance consisted of groups of actors occupying the space, covered in yellow cloth. The scene is inspired by familiar literary figures and metaphors that challenge the notion of solitude.¹ Entering from two sides of the park, students, faculty and friends converged at center of this vast open space, filling the common emptiness of this place. Everyone was carrying a piece of yellow fabric to call the attention of passer-byers. Once they met, yellow smoke was released for extra attention. The park got transformed for three hours, as locals and performers merged and interacted reverting the sense of isolation and lack of safety that characterizes this place (Figure 4 and 5).



¹ See Gabriel Garcia Marquez, G., *Cien años de soledad* (Nueva York: Knopf Doubleday Publishing Group, 1967).



III. Outcomes and Contributions. Case Study Contributions to Practice-Research Methodological Approaches.

Three levels of explicit practical results from this exercise were detected in relation to the design process:

a) Comprehensive intakes, when the quantitative, qualitative, and performative data was used to define design strategies in relation to general landscape organization, for the location and treatment of access points -for pedestrians and users of public transit-, and uses to program new activities in the park and in adjacent areas.



b) Partial intakes, when only data derived from the ephemeral performance influenced the design process in terms of new roles for the park, programming morphological changes within the park, and concerning its relationship with surrounding areas.

c) Limited intakes, when the quantitative, qualitative, and performative data had marginal or no influence on the design process. In this case, the information obtained on-site is considered redundant in relation bibliographical data. It is important to mention that in such cases the design proposals were less sensitive to site conditions and contextual relations, despite their compelling design contributions.

The hybrid methodology adopted allows enhancing the mechanisms of observation and documentation from the on-site analysis, including the changes registered during ephemeral performances. The information obtained has an ample degree of influence on the design process. However, the information drawn from the site users, while desirable, may result sometimes redundant. On the other hand, while it is important to obtain quantitative and qualitative data in relation to how spaces are used, this information may not be always relevant when the design goal is to radically modify the landscape relations and modes of user-occupation, as in the case of the *Parque del Tercer Milenio*.

Finally, the ephemeral performance offers the designer instant information that may influence the design process and thus the way the sites may look and perform over time. While it provides useful information, we suggest that future exercises of this nature should analyze the applicability of the performances in relation to three different aspects: a) as a mechanism to evaluate design proposals, b) as a tool to influence the design process, and c) as a method to enhance the implementation of the proposals.

The *Parque del Tercer Milenio* was a challenging testing ground for this hybrid methodology, given the extreme conditions of violent social and morphological changes that led to the current situation which, as has been explained, is not exempt of severe social stress and isolation, and urban fragmentation. We believe that exposing students to this methodology has a major influence in the responsive nature of their design process and products.

Conclusions

Due to the positive reception of the execution of the performances in the public space, the research has raised support to continue to include a wide range of case studies within the Latin American context. The intention is to be able to address the question of social conflict extensively, and to push forward the idea of looking at the relationship beyond issues of cultural specificity. In that regard, five additional case studies have been completed:



1) General Osório and Subway Station, Rio de Janeiro, Brazil (2010). Performance: “The Headless Men”, in collaboration with Pedro Evora, Carolina Ferreira y Arup New York (Figure 6).



2) Plaza Lourdes, Bogotá, Colombia (2010). Performance: “Ocupando Lourdes”, in collaboration with Simon Hosie Samper (Figure 7).



3) Santo Domingo, Medellín, Colombia (2010). Performance: “Dame tu aire”, in collaboration with Carlos Uribe (Figure 8).



4) General Osório and Subway Station, Rio de Janeiro, Brazil (2014). Performance: “Buracos”, in collaboration with Henrique Barandier, Carolina Ferreira, and David Gouverneur (Figure 6).





5) Place Jussieu, Paris, France and The Botanical Garden of Maracaibo (2015), Venezuela. Performance: Ephemeral Botanical Urban Landscape. The work was part of the UNESCO International Scientific Conference 'Our Common Future under Climate Change' and labeled by the 21th United Nations Conference on Climate Change (COP21).



According to what we learned during this process regarding the perception of appropriateness of space by its users, as it highly determines the way in which the collected data can benefit a potential intervention, it is important to highlight the relevance of this type of knowledge of space, coming from a hybrid method (quantitative and qualitative) of observation. The data collected during the *Parque del Tercer Milenio* case study seems to be highly useful to choreograph ephemeral interventions, with the power to radically transform the way in which users respond to a quotidian landscape through a minimum investment of resources and time. However, further research is required to understand what are the benefits that could migrate from the ephemeral to the long lasting new design frameworks, and which, in the long term would be aimed to physically, programmatically, and ecologically transform the public space.

Ephemeral landscape emerging from scientifically informed and artistically driven *ad-hoc* performances in the public space, where researchers and users break the boundary between the observer and the one observed, invites to go beyond the pure benefits of performances in the public spaces. From our perspective, it offers the opportunity to reach a potential new kind of knowledge that celebrates the encounter between beliefs and certainties, art and science. In that sense, bridging the gap that generates social conflict is not far from bridging the gap between the methods that we used to define those conflicts. In other words, the contributions of the *ad-hoc* performances, as strategies of conflict resolution in the space, are related to the long-term contributions of an approach where opposite sides of the equations encounter themselves in the intangible and never ending process of learning from each other.



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Architecture "Made in Israel" Today (2016) Local and Modern - East and West/ A personal essay

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Abstract

The journalist and writer Theodor Herzl, was the father of political Zionism and the Jewish state, the State of Israel. In his utopian novel Altneuland, he portrays stunning imagery, perhaps even more relevant today than ever, the story of a revolution, the story of the rebirth of the state. In His book, the land that was revealed (by Herzl on his visit to Palestine in 1898) as poor, desolate and provincial, turns to become a new world "Altneuland".

Since the beginning of the Zionist Aliyah to Israel, and to this day, the perception of the East and west, in the eyes of the Israelis, has undergone many changes. These changes reflect the historical impact of the region on the self-image of the people living in it. On the other hand, there was, and still is, a Zionist aspiration to design a new local, native Jew and at the same time, maintain an ethnic and cultural uniqueness with its historical depth.

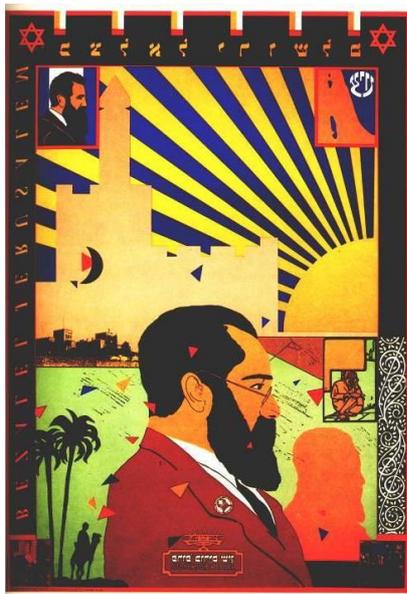


Drawing - Pinchas Cohen Gan

East West and Target

Theodor Herzl in his book *Altneuland* portrays stunning imagery, perhaps even more so relevant today than ever, the story of a revolution, the story of the rebirth of the state. The land is revealed (by Herzl on his visit to Palestine in 1898) as poor, desolate and provincial. After twenty years, in this utopia as well as it turned out in reality, it has become a new world - " *Altneuland* ".

Herzl's contemporary, Boris Schatz, was also an utopian. He founded the *Bezalel Academy of Arts and Design* as a center for arts and culture where New Hebrew art will be fashioned. This is perhaps one of the foundational acts for the creation of original architecture in Israel.



Theodor Herzl
drawing - D. Tartkowiec



Boris Schatz
drawing - D. Tartkowiec

The well-known German poet, Goethe, wrote in his travel diaries: "*Mediterranean is the sun's heat and the lemon blossom*". Perhaps this truly is the basis for Mediterranean culture and architecture, including Israeli architecture.

Israelis and architects in particular, are in a state of conflict between the Mediterranean and western world. There is a strong desire to belong to the Mediterranean - Sea, sun and history of the area.

Israel presents an abundance of "anonymous architecture" landscape buildings such as the Shomera (ancient agricultural watchtowers) found in mountainous farming lands along terraces and Sheikh Tombs, workers' huts at agricultural areas and Bedouin residence.



Guardian ("Shomera") – Anonymous Architect

These structures are perhaps a common form to nature and man and along with their environment, they embody ecological integrity. The landscape provides shelter for Man and reciprocally, Man does not rise above nature or overpower it.

The distinction between place and time is grounded in the convictions of the modern era, in contrast to the ancient perception of these two as a single entity. The desire of many artists nowadays is to capture the unique moment of each place and space. The time of the Shomera or the main street in Tel Aviv, each its pace and the tangible physical expression of its architecture. The time of the Shomera, made of stone, is different from the time of the hut, made of wood, tin and canvas or the time of a modern office building, built of steel and glass, buzzing with activity.

It seems that the modern man and architect has lost the ability to sense the special time of each place.

Yet still, it seems to me that there is an attempt by some of the Israeli architecture to make the connections between time and place. In Israeli architecture, as in Israeli culture, we find the tension between the need to be included in the East, to be part a of it due to existential, cultural, political and ideological reasons, and the desire to be set apart and to view it as a place of otherness and be a part of Western culture and architecture. Often, we can find these two trends coexisting in a single mind of an Israeli architect.

Since the beginning of the Zionist Aliyah to Israel, and to this day, the perception of the East, in the eyes of the Israelis, has undergone many changes. These changes reflect the historical impact of the region on the self-image of the people living in it. On the other hand, there was, and still is, a Zionist aspiration to design a new local, native Jew and at the same time, maintain an ethnic and cultural uniqueness with its historical depth. Therefore, the perception of the East embodies the Jewish and Arab elements, facing each other, and it involves anthropological imagery and aesthetic principles that are a

fundamental architectural concept. Nevertheless, upon looking at the Israeli architectural work, it seems that the East is still quite alien to Israelis, despite their yearning to touch and internalize it. However, one can see the story of Israel's bond to the East as a saga of "Oriental people", exiled to the "West", becoming "Western" and returning to the East with the West on their backs. This saga is substantially expressed in the architecture of the Israeli home. Therefore, we find a 1930's postcard by Pesach Irsai that depicts an Arab Sheikh tomb, a modern Western home and pyramids all together.



Pesach Irsai

Perhaps this is the reason why the dilemma of East and West is reflected most strongly in private homes of the old and new Israeliness. Therefore, we do not find local conceptual "Arabic" architecture, but rather an inimitable Arab village since it is a collection of structures built on a continuum. Despite the short period, we observe the fundamental elements of the local construction the terraces, the scale, the relation to the landscape, modernity and the West - a complex and fascinating synthesis.

Attempts to give answers to these issues of synthesis were made early in the 20th century by architects who arrived from Europe to Israel.

Today we are witnessing the privatization of the Israeli dream – the socialist pioneering ethos of the Kibbutz is no more. Gone are the houses for hundreds of thousands of immigrants; gone is the joint concept of coexistence with the Arab neighbors; gone are the uniform lessons of the Holocaust. Each has his own notion of Israeliness; dreams of his own utopia; carries his unique legacy. Israeliness today is a mosaic of desires, a reservoir of memories and a weave of myths.

Evidently, Israeli architecture today is a private architecture with private insights of time and space while dialectically relating to myth and history.

Today, "eclectic" architecture is still prominent in Israel,

If we scrutinize different projects, we recognize the aforementioned dilemmas in almost every single project.



The Art of Architecture is Architecture

Harry GUGGER | Architect, Prof.

Abstract

The design process in architecture represents a “wicked problem” by which I mean a problem not yet conclusively defined and for which an unambiguously right or wrong solution has still to be found; a problem that therefore can only be remedied to a greater or lesser degree; a problem that, in social terms—and architecture is after all a social commodity—cannot be resolved by purely rational means but only with the aid of rhetoric. I understand rhetoric here to be a method of establishing the truth. In applying rhetoric one does not necessarily seek the truth by rational means but tends to strive for consensus in a discourse. Rhetoric has a double function: it is the art of discourse and at the same time the science of persuasion. It may be added here that rhetoric is, and always has been, universally acknowledged to be the basis for the evaluation of any architectural design.

Thus it appears that architectural design is undoubtedly an artistic practice. To separate the two is impossible. But it is possible to conduct next to the artistic work of architectural design a separate artistic work, like painting in the case of Le Corbusier. Very few contemporary architects have actually become a relevant and successful artist in parallel to their career as an architect. Most architects content themselves with the artistic work of their architectural designs. But there is a third way to go, the collaboration of architects with artists. This is not pointing at the commonly known application of public art to an already established architectural design. Here we refer to collaborations of artists and architects in the process of architectural design.

The work of architects Herzog & de Meuron (H&deM) has again and again exemplified this approach. The proposed paper would discuss collaborations with three artists: Rémy Zaugg, Thomas Ruff and Michael Craig Martin.

The collaboration with Remy Zaugg was fundamental to the work of H&deM. With his book *The Art Museum of My Dreams or a Place for the Work and the Human Being* Remy Zaugg established a theory for exhibition space that was put into practice in the collaborations for the Götz Gallery in Munich, his own artist atelier and for the Kunsthau Aargau. Furthermore, their alliance also led to the design of a strategic regional development plan for the metropolitan region of Basel.

The collaboration with Thomas Ruff will be discussed by referring to two projects that illustrate its reciprocal nature: on the one hand the H&deM exhibition in the Swiss pavilion at the Venice Biennale 1995 where pictures of Thomas Ruff and other photographer artists display the architecture of H&deM; and on the other hand the project of the Eberswalde Library where Thomas Ruff selected images from his newspaper clippings collection to be imprinted on the concrete panels of the building’s façade.



Finally, the collaboration with Michael Craig Martin will be revealed by the project for the Laban Dance Centre in London. As the partner in charge of many of the above mentioned projects, I have experienced the fundamental character of the collaborations in the architectural design process. Most striking was the continuously cultivated awareness of the borders, differences and connections between the domains of art and architecture. Both artists and architects crossed the borders eventually but only to finally retrieve to their own domain.

This is strikingly apparent in the project for the Laban Dance Centre which, as a whole, could be seen as an artwork of Michael Craig Martin. But this reading is immediately questioned by the application of a proper art work, a wall piece by Michael Craig Martin wrapping the dance theatre, the central space of the building. Thru this art piece one inevitably recognizes that all the other interventions on the building that refer to Michael Craig Martin's art practice are fully assimilated by its architecture.



Tikkun Olam 1517: A Cabbalistic Work of Ar(t)chitecture in the Eastern Alpes of Austria

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Abstract

To enhance and widen the ongoing Conferences questionings I would like to present a Case Study concerning a 500 year old piece of architectural-sculptural work. My contribution will introduce that phenomenal, gothic style „Twin - Pulpit / Goblet / Kos - Gallery“ to the scientific community for the first time. This architectural Gallery as a part of a building is situated on the western edge in the nave of a church and is seemingly dated 1517. This church thrones on top of a hill surrounded by the Styrian mining townlet Eisenerz. Eisenerz (or in the Hebraic meaning Barzel) has been famous both in history and geology because of the world’s largest deposit of Siderit. This is a special iron ore which allowed steel production already in “Homeric” times. The Noric iron was mentioned throughout antiquity. No wonder that oral history and written legends claimed that the exploration of the mine had been started in the reign of King David or much earlier already by Tubal Chain.

In my recent objective hermeneutical research about this singular piece of ar(t)chitecture) I became aware more and more that it may represent a wisdom tradition borne by deported Samaritan immigrants to Europe indeed. The twinned two of the Pulpits / Goblets or „Kos“ so singular in the history of architecture could be deciphered as symbolically determined to contain wine and living water. Thus combining the visionary Coming of Elias Artista and surprisingly (instead of Enoch) Miriam (i.e. the gnostic Sophia) (or the goddess Makosh of the Slaves) we can detect an outstanding intrinsic interpretation of the alchemists „Great Work“ or the Rosencrucian „Allgemeine und General Reformation der ganzen weiten Welt“. While the topos of *Elias artista* itself could easily regarded an almost forgotten utopian concept of the 16th Century the world knows nothing until now about a Prophetess or even namely Miriam within that chilliastic happening at the dawn of a new era by works of repair and wonders of recovery.

While analyzing the central symbols and scenes I will explain in detail how in all possibility it comes that we can find an artistic synthesis of Jewish **and** Christian kabbalist **and** Sufi wisdom **and** druidic magic amidst the Austrian Alpes, at a Place which contains Siderit = Barzel = Wisdom. And I will reflect on and contextually explain the 16th Century Idea of healing forces by art and imaginative architecture.

Beside that I am of the Conviction that my Case of an ar(t)chitectural Imago belongs to the religious Crédo and the intellectual authorship of nobody else than Theophrastus Bombastus of Hohenheim named Paracelsus. For an Near eastern audience it may also be interesting to learn that there exists a stone and built example of what I would like to call the “Inaugural Manifesto of the Modern”. Buried in a Western World dead-end village it echoes and closely accords to Semitic wisdom traditions and gnosis.



Blocks Versus Knots

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Abstract

In his pioneering treatise entitled, 'The Four Elements of Architecture' (1851), Gott Semper asserted that the threading, twisting and knotting of threads – as opposed to the massing of blocks of stone – are the foundation from which all else was derived: not just textiles but also buildings. Furthermore, he argued that, 'the beginning of building, coincides with the beginning of textiles,' and that the most fundamental element of both building and textiles, was the knot.

When Gropius opened Bauhaus in 1919, he declared equality between the sexes. Whereas previously German women could only receive an arts education at home, at the Bauhaus, they were free to participate in school-situated courses. Today, the men of the Bauhaus – such as Gropius & Mies van der Rohe are celebrated. The women however - such as Gunta Stölzl and Benita Otte (both weavers) – have in contrast been largely forgotten. One exception is Anni Albers, who only became successful after she abandoned the Bauhaus in 1933. So when Gropius insisted that there would be "no difference between the beautiful and the strong sex" – his choice of words betray his real views: that the "strong sex" were to be directed towards painting, carving and, from 1927 onwards – architecture, whereas the "beautiful sex" had to be mostly content with weaving.

Indeed, Gropius believed women thought in "two dimensions", and men thought in three. Subsequently, weaving and textiles became the only medium through which women could perhaps subversively express their architectural expertise. Or as Gunta Stölzl - the first female studio director of the Bauhaus asserted, "we wanted to create living things with contemporary relevance, suitable for a new style of life. Huge potential for experimentation lay before us. It was essential to define our imaginary world, to shape our experiences through material, rhythm, proportion, colour and form." This paper will examine the spatial legacies created by the textile structures produced by Stölzl, Otte & Albers, examining how their methods shared concepts with and influenced the fields of architecture & interior design as well as their impact upon contemporary, three-dimensional textile works. It will also illustrate how the textiles produced by the Bauhaus women were three-dimensional studies in their own right – through a process of, "supporting, impeding or modifying" the tensions between structure and material" (Smith, 2014). Furthermore, it will contrast recent pedagogic & practice-situated experiments in form finding and spatial innovation that involve woven structures as opposed to block models, proposing that textiles should be more often used as a means solve structural and spatial problems in architecture – and as subsequently contend that textiles should also be considered a key component within the canon of the 20th Century architecture.



The City as Canvas, Architecture as Painting

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Abstract

What if architecture can be as painting? Would there still be a difference between artistic making and architectural making? When we see painters as builders and architects as sculptors can an architectural object become a work of art?

This paper hypothesizes a new method imagining an architecture inspired by painting induced by 3D printing techniques. Where a materialized atmosphere does not need to be subdued to constraints in production. Taking inspiration from painting techniques we can accelerate and expand our knowledge of 3D printing methods for architectural purposes and elicit a reaction in the field of material science, programming, mechanical engineering, physics and chemistry. The paper looks into the analogy of architecture and painting, it describes a theoretical framework, which can turn into a technological research. During a graduation project this was tested through architectural design to come to an understanding of the formal and structural consequences of the analogy. Eventually, a new architectural design and building method is proposed where the city becomes the canvas and architecture can be as painting.

Introduction

This paper hypothesizes a new method imagining an architecture inspired by painting induced by 3D printing techniques. 3D printing has the potential to function as painting and its three dimensionality indicates it can be used as a tool to approach architecture as a painting.

Over the course of history many paintings were made as result of an interaction between art and science. This knowledge can be used as an inspiration to make a new architecture, through technological developments in 3D printing. So why not let science and more specifically, let building science be guided by what goes on in the art world. This paper presents the analogy of the painting process and the building process, and what this means for the thinking process of the architect, how the arts are related to technology.



Painting can be seen as a science, where the act of painting deals with what we can see in nature and interprets its truths.¹ It is exactly this, which attributes to the relevance of this analogy. Not necessarily that we ought to make a building like a painting, but to reshape our view on and reshape our relationship with nature which signifies obtaining a higher level of awareness of the things, objects and phenomena around us.

Method

The three dimensional printing process can be understood as an additive method. The contemporary FDM 3D printer works with a digital file, which is sent to the machine and the machine in turn translates this into a material object through making layers by connecting points on an X Y Z coordination plane. The printer head, the nozzle, moves along a path and deposits the material on this path. After extrusion the layers are fused together to form a solid physical object. The material that is used for the additive fabrication method is liquid during extrusion and solidifies over time. This means that we have a lot of form freedom, however a support structure is needed to prevent overhangs from falling down. Through the additive method we can gather material precisely at the point where it is needed. The additive method can handle a variation of materials, ranging from brick, to concrete and wood. However, this paper focuses on plastic materials. The following paragraphs describe the building process arrived at through rethinking the current technology behind 3D printing and linking this with painting techniques. The result is a proposal for a machine and material, which makes way for extensive technological research and scientific development in the fields of mechanical engineering, material science, programming, physics and chemistry. Where the machine can be as the painter, the building material as paint, the tool as the brush and material properties as pigments. Hypothetically, the city becomes the canvas and architecture can be as painting.

The painter, the sculptor and the architect

The new building process requires a shift in thinking in three dimensions. It repositions the architect in relation to the painter and the sculptor. By delineating the notions that define each artistic discipline it becomes clear how painting, sculpture and architecture come together through this new building method.

Painting, sculpting and architecture are classified as the visual arts. The three arts have gone through developments of various materials and methods. Here the technical discourse of development of architecture is very similar to that of sculpture, since both are intimately tied to each other. An artist that illustrates this relation throughout his work of art is Frank Stella. The Michael Koolhaas Curtain is a collaboration of Frank Stella and Santiago Calatrava. The mural illustrates the reciprocating influence that painting and architecture have had upon each other. At the same time it points towards a vivid

¹ Barash, Theories of Art 2, p.172.



future where both disciplines can merge into one grand gesture.¹ Frank Stella defines the border between sculpture and architecture as follows: 'If it has plumbing it is architecture'. This means that if we have the resources to make plumbing in sculpture or if the way we currently make plumbing can be modified to enable plumbing to move through sculptures as veins, the previous statement is brought down. In return, architecture becomes sculptural when basic illusionistic effects and pictorial elements as in light and fenestration are applied.²

According to Peter MacKeith a painting is paint on canvas and an imaginary picture of the world. A sculpture is a piece of stone and an image, and a building both an object of utility, matter and structure, as well as an evocative spatio-temporal existential metaphor. He says the artistic work manifests itself in both the physical reality of its materialization, and in the reality of the artistic image and expression. Though one can argue if a sculpture can only be made out of stone, MacKeith gives a clear description on how the three arts can be juxtaposed.³ However, if the description of Stella is true, the discrepancy between architecture and sculpture manifests itself merely in the presence of plumbing. Subsequently, if a painting can become sculptural by painting into three-dimensional space, a painting can in theory become architecture. But when putting this idea into practice this remains only true as a metaphor. In the same way it would be ironic to make architecture look like Van Gogh's *Starry Night*, as architecture is not an imaginary picture of the world. And the *Starry Night* is not an object of utility, matter and structure. This being said, the hypothesis, which states that the painting can become the design as well as the building and the city becomes the canvas, is refuted. The metaphor remains a source of inspiration and positions the project in relation to artistic works and the technological developments they are subjected to. After all Walter Gropius appointed the goal of all artistic labor as construction, where everything becomes a whole.

Now that technological developments in building methods point towards a future in which this artistic unity can become reality, an important thing to point out is the relevance of making architecture as painting. Architectural potential can be appointed to being able to build in between complex leftover spaces. Here the technology enables sculptural architecture, and increases the feasibility of engineering complex structures. It also creates an abundance of possibilities regarding the tectonic experience of the user. How this materializes will be further explained in the following paragraphs.

Machine

Gropius envisioned all artistic labor as a whole, where architecture, plasticity and painting come together. Also sculptor Frank Stella and architect and engineer Santiago Calatrava foresee great

¹ O'Brien, "Santiago Calatrava and Frank Stella".

² MacKeith, *Encounters 2*, p. 153.

³ *ibid*, pp. 155-156.

opportunities when the statuary arts are united.¹ It is mainly because of technological developments that this unity becomes reality. The discrepancy lies in the architect's ability to oversee the technological developments and gain a better understanding of programming, material and technology. The corollary to this is that the job profile changes. The architect no longer talks to the contractor but to the machine. The drawing architect becomes a design engineer, which corresponds to a digital way of thinking.² This can be interpreted as a paradox when thinking of sculpting and painting as an intuitive art, where a digital way of thinking is not necessarily needed. In bringing the arts together through technological developments in the field of 3D printing and robotics, a close look to how painting techniques and movements of the painters body can bring the technology a step closer to designing a machine with which we can work intuitively. Here the word 'machine' is used to avoid connotation. Features such as 3D scanning could even translate the movements of the architect into a 1:1 scale building, through automatically generated digital files. This paper, however, focuses primarily on the relation between painting techniques, the bodily movements of the painter and what it means for architecture when we take inspiration from this for robotic additive manufacturing and 3D printing.

The brush and the nozzle

The machine connects the digital with the material reality of architecture. When the machine follows digital orders, set up through computational tools, the materiality becomes digital.³ In the art of painting one can recognize a painter's style i.e. through the tool that is used for applying paint onto the canvas. The analogy between using a machine for construction and looking at painting techniques therefore lies in the tool that is used to make a specific texture or surface. Here the transition to three-dimensionality begins where a robotic arm can change the tool the 'hand' is holding. This tool is the nozzle which shape takes its inspiration from the paintbrush or spatula. The following table shows a proposal of how the nozzle as we know it can give an implication of the effects on materiality per brush type.

	fan	flat	spatula	rigger	round
goal					
approximation					

Figure 12 The brush and the nozzle

¹ O'Brien, "Santiago Calatrava and Frank Stella".

² Carpo, "From craftsman to draftsman", pp. 83-86.

³ Gramazio, Digital Materiality, p.12.



However, the end goal is to design the shape of the nozzle to create the actual effect rather than an approximation. Future experiments can also focus on variation in nozzle temperature, to play with the material outcome. In chapter 0 the proposed 'brushes' are further tested with seal to gain a first understanding of the tectonic consequences of this proposal.

Material

The material that is used for the additive fabrication method is liquid during extrusion and solidifies over time, a property inherent to both plastic and paint. The next paragraph further explains the workings behind this movement through physical states. The intrinsic material properties contain information on how the drops or strokes materialize. The digital code that determines the directionality constitutes only a small portion of the final physical result. This means that movement takes place through space and through the physical states, both need to be taken into careful consideration. Thus the fabrication process has two temporal components:

1. The machine lays the liquid plastic along a path from start to end.
2. After the material emerges from the nozzle a second process starts: the liquid begins to cool down and harden. Therefore it needs to be deposited on the surface before it cools down.¹

It might be hard to imagine plastic materials being capable of providing a comfortable living environment. Turning to plastic as a building material however, enables the construction to be more materially economic.² We need to become conscious of how we are dealing with raw materials in the current construction of homes, consisting of prefabricated components and on site material wastes. Additive manufacturing methods do not only create less material waste, but also open new doors for materialization. When applying the method in a dynamic and intuitive way the material deposition is lead by natural forces.

In the following experiments the analogy between paint and plastic, will be analyzed in terms of how the movement through the physical states affects the materiality when changing the stroke and brush type as explained in chapter 0. With each brush type variation can be made in the pressure that is applied during extrusion, which results in a different materiality.

A hypothetical material

A characteristic of plastic materials is the capacity to change its inherent properties through additives. In that sense the plastic is not only 'plastic' in terms of materiality or viscosity, but also in terms of being able to mold the laws ordering its nature. Using a plastic material influences the design logic and

¹ ibid, p.13.

² van der Horst, The City as Canvas, p. 164.

generates unexpected aesthetics.¹ However developments in material science is needed to enable such a material to be used for architectural purposes. This paper further deals with the material as a hypothetical material with material properties resembling those of paint and plastic. By looking at the materiality of the different plastic materials we can conclude what material properties the materials should have to be put into practice. The following image shows an experiment with acrylic seal, where the application of different brushes as described in section 0 come is tested in terms of its materiality. As the material properties of seal are different than that of plastic and paint the experiments give a preliminary insights into the architectural potential of three-dimensional painting.

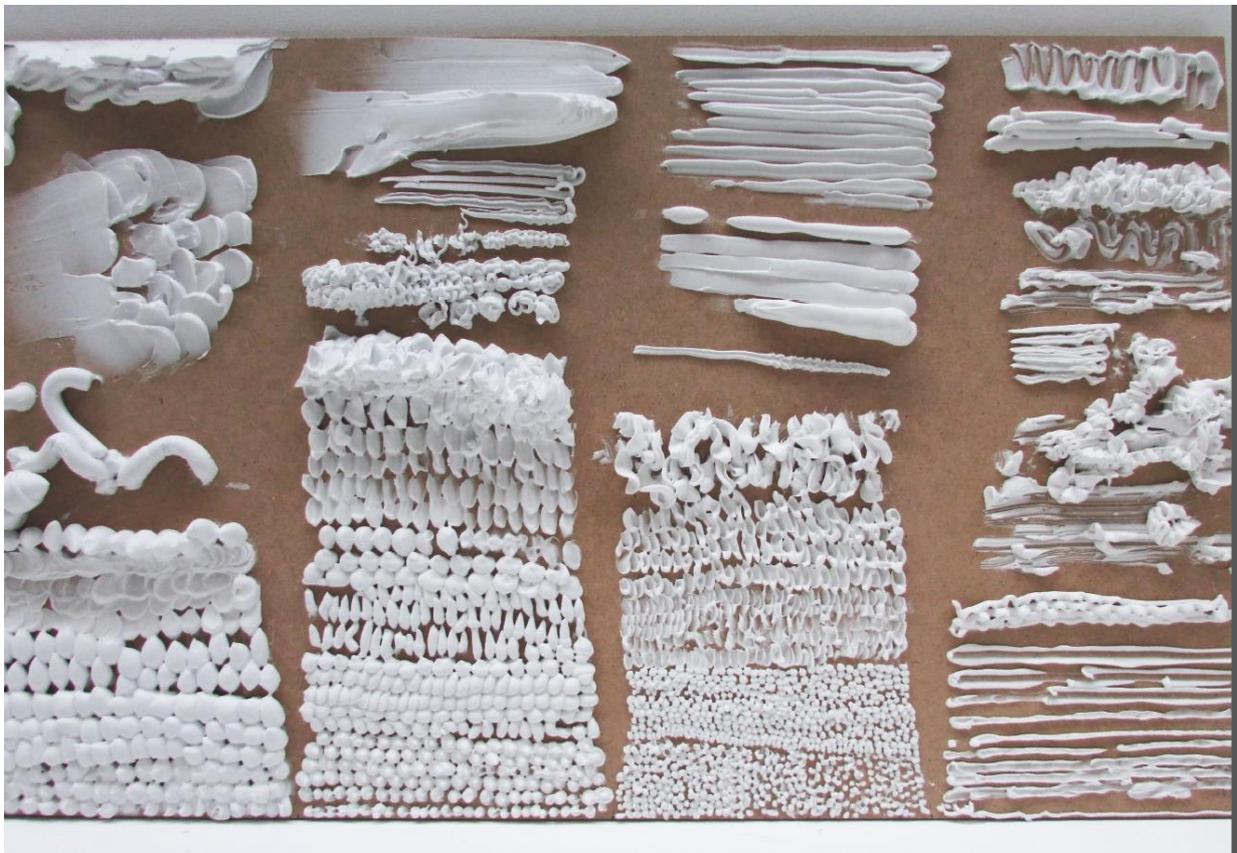


Figure 13 Brushstroke experiment with acrylic seal

Mixing material properties

The machines enable two techniques of mixing material properties. One, through layering materials over each other, another through creating gradients with material pixels. This paragraph further develops this idea. In order to test the analogy between paint and plastic in terms of blending, the experiments are executed with a material that enables blending after extrusion. This experiment skips the complex testing of blending plastic. The experiments are now executed with both acrylic and silicone seal to be able to clearly see the variations in transparency. The silicone material has a higher level of

¹ Gramazio, Digital Materiality, p. 15.

viscosity and therefore blends more easily during application. Another option for blending is to blend during extrusion with a nozzle that can extrude two materials at once. This nozzle can then create a gradient throughout the print. The digital code tells the nozzle when to extrude more of material A or B to control the outcome of the gradient. However if we want to mix the material properties after extrusion this can be done through three-dimensional pixels, similarly to the pointillist painting technique. The next chapter will describe how more of these ideas from painting can be applied in architecture through this method.



Figure 14 Mixing material properties

The art of making architecture

The 3D print technology adds to the existing toolbox of the architect on several levels. It changes the design process, construction and aesthetics. Although the construction is carried out digitally, the computer does not need to be a mandatory design tool. The computer software inherits preordained limitations, and the architects might need to design their own software.¹ All tools have their own technical possibilities, limitations and conditions. By mimicking the material behavior in an analog way,

¹ Hausegger, *The Force is in The Mind*, pp. 58-63.



the design process can be freed of some technological constraints. Section 0 presents a first approach in applying a physical tool, seal, to get a feeling of materialization of the design and three-dimensional thinking. In that way the design process consists of using anything as a potential tool to help us think, and might lead to inventing a new tool.

It is crucial that architects now and in the future choose their means consciously and master their tools. Accessing generic tools enables architects to create their individual design instruments and thus generate diverse forms of expression. The drawing and the model are the most common tools for architects to visualize their idea of the building. This section focuses on using the physical art of painting as a tool for architecture and thinking about building, and how the drawing or painting is related to the physical outcome. Many architects have also been painters and sculptors. Where painters and sculptors deal with the physical outcome directly, architects experience a discrepancy between the drawing and the physical outcome, due to the size and scale of architectural constructions.

In the digital age, our preference of serial repetition, which was the product of industrialization, is being transformed into the re-approval of the 'natural' uniqueness of craftsmanship. However, the digital is a result from centuries of human engagement with logic. To the contrary painting is an analog tool following principles from centuries of experimenting with paint and color. The paradox of combining the digital with painting, the rational with the intuitive, requires a shift in thinking. Using painting as an instrument to design in three-dimensional space pushes the designer to exploit the human potential for associative thinking in order to discover new organizing principles, and establish new relations with the built environment, where old principles are given new meaning. Subsequently, the art of painting and sculpting point out that the disadvantage of architects work is not being able to work with the object of thought directly. The sketch and the model are much closer to painting and sculpting, than a drawing is to architecture. And the architect is hardly ever able to conceive an exact image of the final outcome. Moreover, architecture plays within the rules of society, subjected to building regulations. The artistic work that is now considered beyond the work of architecture due to building regulations such as, earth art, performance, installations, and constructions, still deal with architectural themes. What is striking is that these arts rarely make use of the drawing because it is almost impossible to develop a clear depiction of the artistic thought through this medium (Evans 1986).

The drawing as art or as a tool

The floor plan has been a means for understanding design as a conclusion of sketches and models, either digital or physical. In the plan as a working drawing every line should be accurately considered, every screw has to be in the right place, and every specification is binding.¹ The spatial concept is orthogonal on a working drawing such as the plan, therefore, if the statuary arts become unified, as explained in section 0, the working drawing is not only a design tool, but functions as a mediator between architect and machine. Figure 15 indicates how abstract a working drawing might become for this method. The

¹ Spiro, "The Working Drawing", pp. 11-19.



drawing merely represents the directionality of the movement that needs to be translated to the machine. If the practice of architecture is repositioned in relation to painting and sculpting, we can say two things; the drawing can become art or it can be ignored in its entirety and substituted with, in this case, the digital code. Robin Evans, explains the two options as follows:

1. Direct, emphasizes formal properties of the object to be made (tangibility, presence, immediacy, direct action)
2. Abstract, focuses on the disembodied properties of the drawing (abstraction, mediation and action at a distance).¹

The diagrams in Figure 15 are a first attempt to visualize the properties of materialization, the abstract. The abstract artistic drawing becomes the visualization of effects, thoughts, architectural theories and tectonic experience. It juxtaposes the material and the immaterial. Evans claims the two cannot be combined as is currently done in architectural drawings. The abstract drawing has limitations in representation and not all things architectural can be arrived at through drawing. Therefore he states that the abstract drawing should be abandoned if the architect judges the effect of a certain materiality more interesting than the information for construction. Then drawing is no longer a code for construction but remains an enigma. Similarly to 20th century painting, the drawing is introduced as a work of art, it is no longer a working drawing for construction but becomes an image of thought.² For the proposed method both the abstract and the direct form an interaction. The direct drawing represents the tectonic experience and the abstract the logic behind it. However, the two dimensional plane of the drawing remains an issue here. When trying to draw a complete representation of materiality and materialization, the drawing merely functions as a conceptualization of the arrangement of spaces. Perhaps the final drawing of the design will be a distortion of three-dimensional space, in order to grasp the essence of three-dimensional thinking on a two dimensional plane.

The art of painting

In architecture there is a tendency to go against gravity, to go upwards into verticality, to take control over the natural laws. The context in which we find ourselves as architects today is a time in which mechanization leads the way for production and design. Where the machine is taken into consideration when designing. Mechanization of production shifted preference to the orthogonal.³ In the arts we have seen shifts in painting styles, from figurative, to realist to surrealist, impressionist, pointillist and action painting to name a few. The focus for this research, were the painting styles, which imply and show

¹ Evans, *Translations from Drawing to Building*, p. 37.

² *ibid*, p. 39.

³ Giedion, *Mechanization Takes Command*, p. 201.



movement, literally the movements of the painter; the pointillist, impressionist, expressionist, and action painting. The machine remains to work through mechanization but it is a mechanization of movement. By studying the movements of the paint and the painter one comes to an understanding of the mechanization needed for the machine. As mentioned in section 0, two temporal components are taken into account; movement in a direction from A to B but also movement through physical states. The following paragraphs consider what we can learn from painting styles, pointillism, impressionism, expressionism and action painting, by analyzing their interrelations on both an artistic and scientific level.

Pointillism and impressionism

The pointillist technique of Georges Seurat was inspired by color theories of scientists Michel Eugene, Chevreul and Ogden Rood. The painting method is called divisionism and makes use of colors in patches that trick the human eye into blending them creating luminance and shape.¹ Van Gogh was a postimpressionist who experimented with the pointillist technique using the spatula for applying layers of strokes. The techniques were deployed for illusionistic purposes, but inspire architects and engineers to rethink material distribution in structures. Van Gogh's rapid application of paint creates short strokes and gives his paintings a dynamic and expressive feel. Taking a closer look at Van Gogh's *Starry Night*, we can see how different directionalities of the strokes cover each other according to certain logic. Van Gogh applied different layers of directionality, varying in color and density. If this can be translated into three dimensions, this technique provides opportunities for creating a new kind of composite structure.

In chapter 0 it is explained that the method makes use of the directionality of the material as the digital code that generates the architectural form and materiality. An interpretation of the directionality of the painting is shown in figure 2, consequently the diagrams, in figure 2, function as 'drawings' for making the model in seal. The layers look woven together like textiles but they permeate one another. This has consequences on the material in terms of strength through the structural configuration. The diagrams show the directionality of the material deposition and form a first step towards rethinking the architectural drawing.

¹ Bergman, *Miracle de la couleur*, p. 107.

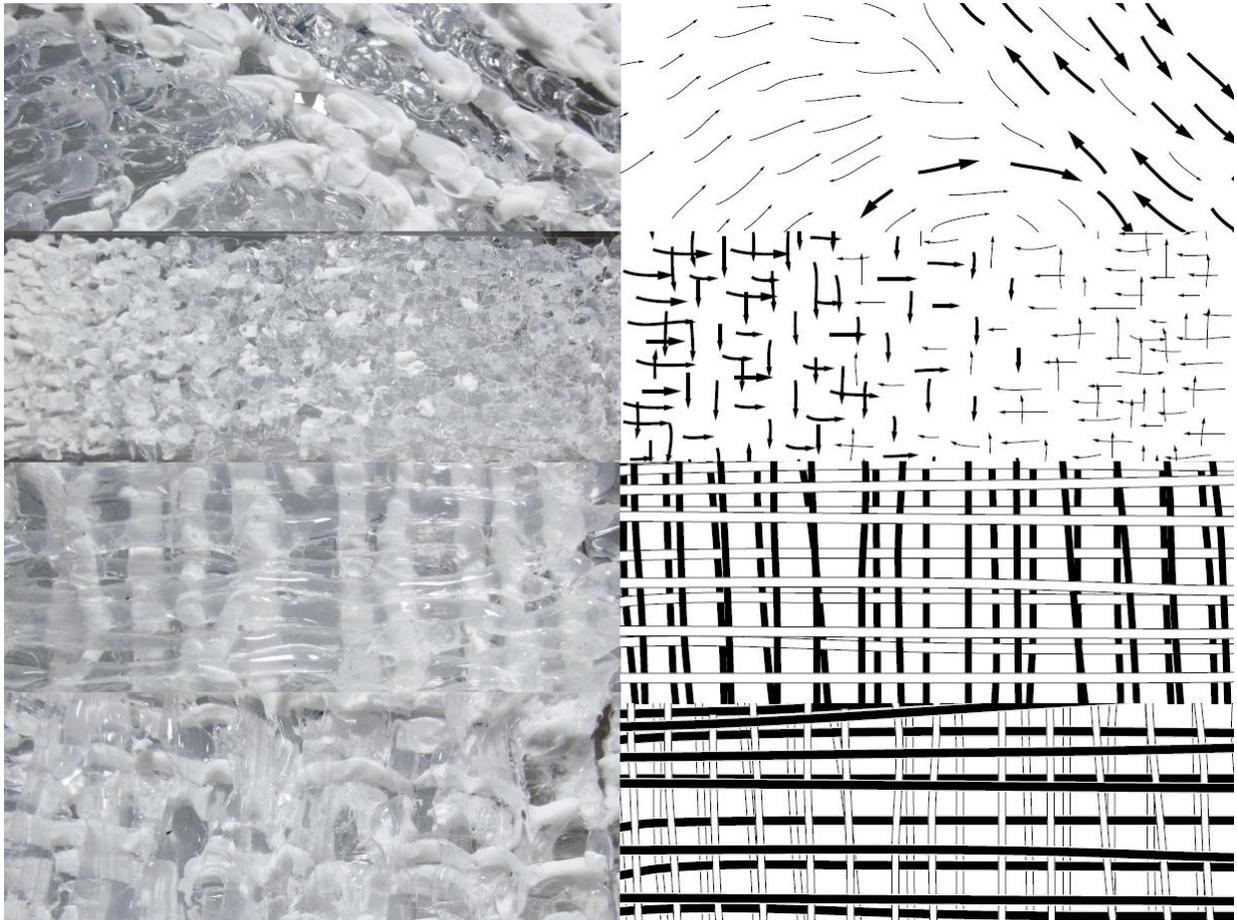


Figure 15 Direct and abstract drawing

When looking at painting techniques such as the pointillist, it is perceivable how small components (colored dots) form an entity, much like a constellation. However the impressionist used less colors in their palette than their predecessors, their color blending was everything but simple or spontaneous. A pigment analysis clarifies the complexity the colors used, for instance in the darker purple colors of Claude Monet's, the Gare St.Lazare.¹ Combinations of multiple pigments lead to a great variety in end results. The impressionist worked with color with great ingenuity, you could say, like engineers. They thought of artistic solutions to grasp and solidify an atmosphere. For architecture, painting as such could therefore function as a design study, as a tool to concretize and atmospheric concept to be arrived at through 3D printing.

¹ ibid, p. 110.



Figure 16 Painting as a design study

Expressionism and action painting

After the pointillist and impressionist style, movements of both the body and paint were intensified. Expressionist Karel Appel used heavy outlines, and carefully thought out the compositions. As a painter thinks in visualizations for Karel Appel painting was a way to relate to his surroundings. A philosopher or scientist views the world from an independent perspective. Appel expresses his ideas of the



environment by fusing the human body with its surroundings in his paintings.¹ In architecture, as in sculpture, it never occurs that all facets of a work can be perceived at the same time. The human body continuously rearranges itself in relation to the architectural work.

The experience of an architectural object related to aesthetics can be an arrangement of bricks that happens to have a structure of a house. The ways we experience architectural objects may contribute to how we comprehend, and interact with, those objects. How we perceive details in a certain way.²

Our experiences of space and spatial positioning, depth, edge detection, color, and light yield multiple interpretative possibilities across architectural objects, including the simplest forms and smallest or largest parts of objects.

Painting works according to the law and order of the brushwork, horizontal and vertical outlines, precisely composed like the modernists or a deliberate negation of the outline like the impressionists attempting to reveal the natural richness of our surroundings. Hundertwasser, an architect, sculptor and painter, who perhaps in the same way, sought for a reconciliation of humans with nature. Rejecting the straight line, being convinced a line should not be straight as we as humans cannot draw a perfectly straight line without a ruler, signifying it is not natural. Different but yet in line with this thought we can place expressionist Jackson Pollock. Pollock placed his canvas on the floor and decided to drip. Pollock used very fluid paints, which enabled Pollock to draw in space. Meaning he needed to be very active like a dancer, moving feet, arms and hand actively, launching paint to the canvas below.³

Materializing movement

The pointillist, impressionist, expressionist and action painting present different thoughts on i.a. painting, line, color, composition and brushes. They all reveal how bodily movement, be it through hand arm or fingers, create works with a hierarchical structure which naturally flows from the mode of application. Looking at these styles opens up doors to all new kinds of possibilities for 3D printing. In transferring this thought to 3D printing as described the only natural straight line is the line created by gravity: the fall-line. Where a material solidifies during its fall, comparable to the forming process of a stalactite. Through technological developments in material science one can imagine this to become a construction process of for instance structural columns and vertical façade elements. It creates natural structures in which the material is moved by gravitational and centrifugal forces. The potentials of this method can be further exploited / investigated on the levels of thermo-dynamical properties of the material, how it moves from liquid to solid.

¹ Appel, Man im Lebensraum

² Fisher, "Philosophy of Architecture", p. 55.

³ Khan Academy, Painting Techniques of Jackson Pollock



Figure 17 Representation of movement through time and space

When motion rather than perspective is chosen as a means of expression painting yields a dynamic picture instead of static.¹ Figure 17 shows an experiment in which the time-factor contributes to making visible the elements of a motion. It is needed to establish the relation to how movement evolves in space if we can accurately monitor the movement we can come to the most efficient way of building through mechanized movement. Space, time and movement thus are constant variables that need to be taken into account when working with this method, before, during and after construction. Then, a new realm opens, new forms and new expressive values, transcending the domain of the engineer. Modularity is no longer necessary in terms of production costs and speed, however rhythm in structure and space is still a factor playing a role in the way we perceive spatial qualities.² As an architect working with this new method a design process starts of by looking at the possibilities of the building method. These primarily lay in how a material generates a form merely through movement of the machine and the material solidification over time; it's formative nature. So, it would be silly to try to form the shape of a design according to a preordained idea. Rather, it is desirable for construction speeds and structural properties to try to work with the formal capacities of the method as given and work from there.

¹ Klee, A Pedagogical Sketchbook, p. 114

² Grafe, "The Bold Truth", p.4

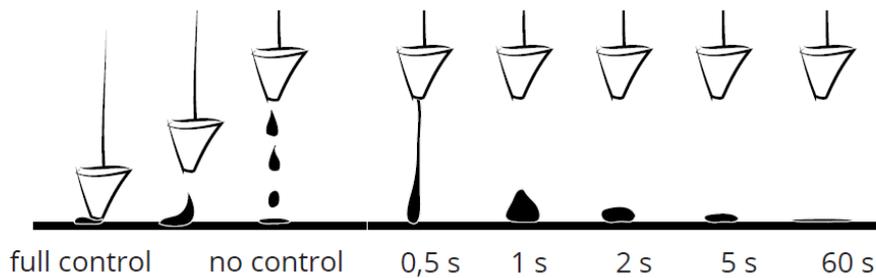


Figure 18 Variation in control over material deposition and solidification time

The proposed method of 3D printing in building construction can be improved to accelerate the building process by accurately determining when to keep in control or lose control over the material. The paradox of losing control of the material outcome with 3D printing lies in the fact that, this fabrication technology works with a digital file, in which the computer can accurately determine the outcome. The architectural design therefore is a combination of ratio and intuition, of precision and causality. Here this notion of causality and unpredictability is key. Precision flows over into vagueness creating an atmosphere in which the duality becomes visible.



Figure 19 Building of a painting



The laws of nature

As mentioned the architect needs to master knowledge on material science, programming as an extension of its own expertise of building science regarding structural principles and hierarchical order in detailing. It masters the laws of nature and is able to use this rational information for an intuitive design process. Observing the effects of gravity and centrifugal forces that come into play reveal how hierarchies of structural principles naturally flow from it. These steps become clear in the building process, which shows how and when material is applied with control or without. In the arts this opposition between control and freedom can be roughly found in realism and abstraction.

Through analysis of different painting styles we have seen how artistic making embodies curiosity towards the laws of nature, which is in essence the drive for scientific research and development. In this case, with architectural design at its core and as a driving factor. Now science and art take in a new position within architecture through this method. And reveals the relevance of artistic making as a tool for thought, as art makes sense of how to structure ideas in a certain way. Then artistic objects, be it a painting or an architectural work, are produced with intentionality while dealing with the nature of the material used. The final form is not an inevitable outcome of nature, but is limited to possible outcomes of the given matter and employs nature's techniques.¹ It is in this way that we as architects can continue to be inspired by painting and release ourselves from convention in thought and practice.

Finally, I would like to highlight one specific artist, Sigmar Polke, his art was a reaction to the deliberate industrial look of the art of Roy Lichtenstein. It was not precise, not industrial, but messy and smudgy. However, he was a thorough scientist who was able to make paintings, which could change color according to the temperature of the environment. And it is exactly this line of thought which is inspiring to me in terms of what we can learn from the art of painting to denormalize and destabilize the engineer inside the architect and with that bring out the artist.

To conclude, this paper provides new insights for future research in 3D printing for architecture. It puts architectural design in relation to the art of painting and points towards a promising future, where the city becomes the canvas and architecture can be as painting

¹ August, "Building Beauty", p.18.



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Arction and Fashitecture – Towards Minoritarian Appearance in Public Space

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Abstract

The paper assesses the Signature of Appearance as a type of micropolitics that elucidates a new type of action space within public space. Based on common principles of architecture and fashion as major political strategies in public spaces, the SoA is defined as an everyday, informal hacktive tactic that is perceived as disrupting the given space's social order. By undermining the construction of meaning in the streets, it becomes a direct action, a minoritarian act that deconstructs urban resistance potential. This study addresses the writings of Deleuze and Guattari, as well as visual ethics theories referring to Arendt's Space of Appearance concept.

Keywords: Signature of appearance, minoritarian, public space, direct action, urban resistance potential

Fashion, Architecture and Urban Space

Fashion and clothing cover the body while architecture encompasses and covers the totality of practical, virtual and theoretical spaces derived from the body. The body and the environment, the person and the world, are not differentiated as diametric opposites; on the contrary, the living body is in continuous engagement with the reality of the environment.¹

Fashion is an inherently discriminatory and non-democratic economic system.² In a constant state of *becoming*,³ fashion reveals the endlessly changing dimension of human appearance and transforms the body into an objective concept unrelated to culture but significantly connected to global reality.⁴

A lot of architecture looks more beautiful without human inhabitants... But I have always intended to design architecture to look more beautiful with humans' present... When I think

¹ Maurice Merleau-Ponty, *Phenomenology of Perception* (trans. Donald A. Landes) (Oxford and New York: Routledge, 2014).

² Otto von Busch, *Fashion-able: Hacktivism and Engaged Fashion Design*, Ph.D. dissertation (Gothenburg, Sweden: School of Design and Crafts, University of Gothenburg, 2008), p. 33.

³ Gilles Deleuze, Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (trans. Brian Massumi) (Minneapolis and London: University of Minnesota Press, 2002 [1980]), pp. 3-7.

⁴ Adam Briggs, "Response [to Andrew Hill, "People Dress So Badly Nowadays: Fashion and Late Modernity"]," in Christopher Breward and Caroline Evans, eds., *Fashion and Modernity* (Oxford and New York: Berg, 2005), pp. 79-85.



about architecture, I think of it as a piece of clothing that must be wrapped around human beings... It is about how the structure can create a space for human beings.¹

“Fashion is architecture,” fashion designer Coco Chanel once said. “It is a matter of proportions.” Hussein Chalayan, a contemporary exponent of the profession, refers to his interest in the experience of space as a fundamental part of his approach: “In a way fashion designers are like architects because we play with creating a space around the body and architects create a bigger space around the body... My focus is on the body, not necessarily on the person that occupies this body, not in the way this person can act in those double glazed spaces, the garment and the built space.”² Novel affects for the sake of singularity constructed a representational architecture that is largely disconnected from what people need, what they can do or act on, thereby creating fixed images of appearance. The art of building has been transformed into a business of self-display and promotion through the design and construction of figurative motifs, rendering it an object of consumption.³

The very cities we inhabit refuse to support the type of individualism we are told we should be carrying out, opposing the ornamentation such individualism is said to yield.⁴ In practice and in theory alike, fashion and architecture are perceived as spatial mechanisms whose formal strategies are based on singular phenomena: “The singular is thus the final step in the differentiation of the universal moment and, simultaneously, in realization.”⁵ The reality they consolidate is a major phenomenon grounded in predetermined visually and spatially fixed patterns.

The everyday in public space: Singularity as a major political mechanism

In accordance with studies that examine the construction of meaning in urban public space (UPS) among passersby and other users, Signature of Appearance (SoA) research expressed the manner in which ⁶ passersby contributed to the construction of meaning in the designated space.⁷ Behind these symbols are the physical meaning and values that architecture introduces into built-up space,⁸ as well as fashion, that imbues human physiological aspects with semiotic values in the Space of Appearance (SpA).⁹ The

¹ Toyo Ito, Dezeen Magazine interview (<http://www.dezeen.com/2014/07/31/movie-interview-toyo-ito-architecture-clothing-wrap-around-human-beings>).

² Hussain Chalayan, interview referring to his dance performance exhibition at Sadler’s Wells, 2000.

³ Mohsen Mostafavi and David Leatherbarrow, *On Weathering: The Life of Buildings in Time* (Cambridge, MA: MIT Press, 1993).

⁴ Andrew Hill, “People Dress So Badly Nowadays: Fashion and Late Modernity,” in Christopher Breward and Caroline Evans, eds., *Fashion and Modernity* (Oxford and New York: Berg, 2005), pp. 67-79.

⁵ Łukasz Stanek, A Review of “Henri Lefebvre on Space: Architecture, Urban Research and the Production of Theory” (Minneapolis: University of Minnesota Press, 2011), p.139.

⁶ Matthew Carmona, Tim Heath, Taner Oc and Steve Tiesdell, *Public Places Urban Spaces: The Dimensions of Urban Design* (London: Routledge, 2010); Edward Relph, *Place and Placelessness* (London: Pion, 1976).

⁷ Zivia Kay, “The signature of appearance: A gaze-changing reality” (under review, 2015).

⁸ Carmona et al., *Public Places*.

⁹ Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958), pp.198-199. “Where I appear to others as others appear to me, where men exist not merely like other living or inanimate things, but to make their appearance explicitly... The space of appearance must be continually recreated by action.” Arendt contends that speech and action distinguish the human presence, define The Space of Appearance, give it public and political meaning and represent a person’s singularity, that informs reality of the principle of freedom of unexpected action.



body submits to the social order, as it is subject to public space, yet also dictates this order by disseminating the paradigms of fashion and consolidating its significance. The two fields thus entrench their control over everyday realities.¹ As such, fashion and architecture should be included among the major political mechanisms described by Deleuze and Guattari. Like the other mechanisms in this² category, they create a hierarchy that leads to competition and consequently arouses confrontation and resistance. Urban design instills order into the relations between built-up, fixed space and the random, fluid appearance of passersby, establishing relations between them as a routine, everyday confrontation.³ The daily encounters become a demonstration of power, a practice that rules the passerby public and differentiates it as a group of “others.” The everyday in UPS is a tool that dictates a social and political order⁴ and inculcates it through visual practices. The strategic model in the public arena creates an infrastructure of regular action and movement patterns, acting in accordance with a political rationale with economic motives. In the context of Deleuze and Guattari’s minoritarian conception, this planning model is considered major because it applies power relations based on fixed and stable identities. The social reality implied by this spatial order is unambiguous because the opportunity-saturated space is limited to a restricted map of connections. The order enables adoption of a variety of concrete positions, transition from one position to another and change in power relations only in a relative and spatial manner that does not charge it with meaning. The “place” has been transformed into an ultimative arena of publicness, basing its superiority on time, change and freedom of action.

Clothing and buildings are phenomena that enclose disorder in forms embodying singularity. Both share an effort to reduce the individual’s freedom to take unexpected action by introducing an economic agenda as an everyday major politic.

Resistance potential in public space – An intermediate situation of becoming

Public space gives rise to conflicts between the body’s independence and its position as dictated by the built-up area. This experience of individual helplessness is a paradox of modern humanity, that is inundated with global forces perceived as unrestrained in nature. The paradox of modernity impels large population groups towards violent and costly struggles and demands that attention be paid to political agents of resistance.⁵ Everyday life and everyday architecture represent ambiguity in planning and prescribe a survival routine.⁶ The act of going out into the street activates a cultural and social coercion mechanism that is assimilated into the city, standing in stark opposition to the meaning of everyday life as an individual act that invites people to realize their freedom of action – or their potential for subversion and resistance – to effect change. *erate urban space research Conceptions that seek to lib*⁷

¹ Michel De Certeau, *The Practice of Everyday Life* (trans. Steven Rendall) (Berkeley and Los Angeles: University of California Press, 1988 [1984]), p. xix.

² Deleuze and Guattari, *Thousand Plateaus*, pp. 277-97.

³ *Ibid.*

⁴ Henri Lefebvre, *Critique of Everyday Life*, vols. I,II,III (London: Verso, 1991[1947]).

⁵ Ines Weizman, ed., *Architecture and the Paradox of Dissidence* (London: Routledge. 2013).

⁶ Venturi, R. and Scott Brown, D. (2004). *Architecture as Signs and Systems: For a Mannerist Time*. Cambridge (MA): Belknap Press.

⁷ De Certeau, *Practice of Everyday Life*.



from the dominance of systematic planning discourse direct criticism at the *crowd, custom and habit*, that enslave individuals, causing them to forgo the personal contact with reality that guides their lives.¹ Furthermore, people suffer from a lack of social awareness and of opportunities for taking action.²

The everyday erosion of major political mechanisms in the personal space of passersby in public space intensifies their recognition of the boundaries of their power, making them feel helpless as their freedoms are repressed.

The need for action³ engenders a minoritarian, individual state of being. When spatial order is imposed on the microenvironment as a major political reality that limits opportunities for action therein, the victims of such coercion can develop an architecture that realizes their resistance potential, causing unrest in the designated space, as in refugee camps, for example. Concrete spatial phenomena, such⁴ as smugglers' tunnels, together with haphazard or labyrinthine construction, are perceived as characteristics of the repressed group's minoritarian status that turn restrictive, rigid space into a weapon in their battle.⁵

The *SpA* and the built-up environment clash in urban public space (UPS), the shared playground of architecture and fashion, because each develops singularity and constructs a social order to which passersby are subjected. Resistance potential is thus established as a function of human presence. Each person develops his own discrete, individual resistance potential, that is stored for eventual realization. Arendt contends that the *SpA* accords resistance potential public and political meaning and informs reality of the freedom of unexpected action.⁶ Resistance practices are nomadic, constantly changing their form and location.⁷ As *SpA* apparently embodies resistance potential, the routine appearance of passersby, itself charged with such potential, may be applied as a minoritarian political mechanism for active achievement of change.

This paper introduces a philosophy that promotes the urban resistance potential resulting from the interface of architecture and fashion, conceived as micropolitics that reinforces the significance of human appearance in a space conducive to the incessant emergence of change in all its various forms.

¹ Le Corbusier, *Precisions: On the Present State of Architecture and Urban Planning* (Cambridge, MA: MIT Press, 1991).

² Axel Honneth, *Disrespect: The Normative Foundations of Critical Theory*. (Cambridge, UK and Malden, MA: Polity Press, 2007), p. 87.

³ Gilles Deleuze and Félix Guattari, *Kafka: Toward a Minor Literature*, (trans. Dana Polan) (Minneapolis: University of Minnesota Press, 2006 [1975]).

⁴ Sylvaine Bulle, "Non-meaning and uprising in architecture: Concerning several appearances of disorder and amorphousness in architecture and in the Middle East" (trans. into Hebrew: Yael Bergstein), *Interdisciplinary Cultural Forum*, 4 (Tel Aviv: Resling, 1988): 14-22. [Hebrew]

⁵ Irit Katz Feigis, "Spaces stretch inwards: Interactions between architecture and minor literature," *Public Culture* 22/3(62) (2010): 425-32.

⁶ Arendt, *Human Condition*, p. 199.

⁷ Deleuze and Guattari, *Thousand Plateaus*.

The Signature of Appearance and its contribution to urban public space

Architecture and fashion accord meaning to UPS. As such, the power array prevailing in the public arena can be disrupted by applying transient minoritarian action tactics that are not linked to any fixed place or identity but rather hacktively undermine the mechanism that constructs meaning in that space.

A new aesthetic channel of action is a prerequisite for achievement of change in urban space.¹ A study² was conducted to determine the manner in which the appearance of passersby in public space contributes to construction of meaning therein, thereby identifying the personal action space that participates in setting the public agenda. A hacktive design laboratory³ was set up for this purpose, at which appearance-related items (clothing and accessories) were designed for experimenters. Each such item included semiotic hints at new types of action in the given space. The findings attested that random observers interpreted the appearance of the experimenters as an attempt to define a new action space within public space. They perceived such appearance as a routine and unplanned, originating in personal preference rather than a desire for protest. Furthermore, the observers indicated that they were willing to participate in such action.



Fig. 1: Hacktive Design Lab examples

The study concluded that it is indeed possible to define a personal space, on the order of magnitude of an SpA, that could be rendered an action space by charging the SoA therein with meaning as a routine-breaking action in public space. The nature of this action space will be dependent on those who activate

¹ David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1989).

² Kay, "Signature of appearance – Gaze-changing reality"; Zivia Kay, "The *Signature of Appearance* and its contribution to meaning construction in urban space – an empirical study" (under review, 2016).

³ Hacktivism in the context of appearance design refers to use of a system of clothing and appearance conventions in a manner that subverts clothing and fashion system regulations and their self-evident function as a visual standard.



it, displaying flexibility in terms of its defining practices. The new territory, that realizes the SpA's action potential, is limited to the distance between action and body. Using the semiotics of fashion and the appearance itself, it intervenes in the process of constructing meaning in UPS, constituting a new aesthetic façade that leaves its signature on those who observe it. The signature of activity that the appearance leaves, the SoA, provides observers with a new conception of action in the relevant space.

The SoA in public space – a minoritarian political mechanism

As Deleuze and Guattari assert, to become otherwise always requires a “third term,” a “something else” that opens the body to the normally imperceptible process of transformation. They point out that “the something else can be quite varied” and can enable a “molecular proximity” between two entities that leads to their mutual becoming.¹ “By embracing everyday life as a raw material, architects can change the conventions of how buildings are assembled, to ground style, and the aesthetic experience of buildings, in the micro-politics of the everyday.”²

SoAs are a proposal for an aesthetic infrastructure, for micropolitics in public space that will dismantle UPS resistance potential and realize the political nature of the SpA. Passersby assessed the SoA as an individual, personally motivated, unplanned activity and interpreted it as a call to action in a manner different from the routine action prevailing in public space. Their immediate perception of the SoA was an action calling for change in public space, a performative expression of political significance. They saw it as an expression of a personal preference, as differentiated from protest or spoiling for a fight. They saw it as an unplanned action with no organization or partners behind it, an action that avoids authority, eludes confrontation and rejects formation of a front. The SoA is experienced as the minoritarian act of an individual who seeks refuge from the power imposed by UPS, hoping to counterbalance the effect of the norms defining the major systems of this space to which he is subordinate. The SoA is interpreted as an individual solution by the passerby public, that shares in charting changes within the space but does not wield power over others. In this respect, it becomes a minority, plays down action and adopts minoritarian political tactics that can be shared by the “others” as well.

The minoritarian approach sustains the minority phenomenon. The SoA is interpreted by passersby as an unplanned, routine and personal phenomenon – minor in that it constitutes an individual state of being originating in the passerby public. The SoA manifests an individual's meager minoritarian power, weakened by the forces that public space exerts on him. The passerby strolls through urban space and experiences helplessness imposed by formalistic mechanisms and majoritarian strategies. The SoA can be designed so that it transforms the SpA informally into a minoritarian political activity space that undermines fashionable identities, shatters built-in definitions of use and upsets power relations.

¹ Stephen D. Seely, “How do you dress a body without organs?: Affective fashion and nonhuman becoming.” *Women's Studies Quarterly*, 41(1) 2013): 247-265.

² Farshid Moussavi, *The Function of Style* (New York: Actar, 2015), back cover.



Becoming, for Deleuze and Guattari is a mode of extracting the body's own virtual capacities that have been foreclosed by a capitalist, humanist society.¹

"The SpA must be continually recreated by action"² The SoA is dynamic, as are all minoritarian phenomena. It is not being but an extended occurrence of the creation of being, of independent, performative action. It is formulated in the language of clothing and appearance and undermines the power relations – grounded in economic mechanisms of fashion and planning – that limit action in the designated space. The performative notation through which a new action in space is formulated defies the dictates of fashion and the exigencies of action that determine spatial design.

Minoritarian action seeks an outlet in situations in which it is impossible to conceive of a power structure or of victory in battle. It is not an organized activity but the *becoming* of a new order. The SoA pinpoints options for action in personal space and reduces dependence on public space. It decreases and deconstructs entrenched conflictual relations between opposites, between the individual and his participation in what is public.³ A human being as a subject is *major* by definition, but his participation in creating action space through recognition of an SoA is a *minoritarian becoming*. The micropolitics of⁴ the SoA is manifested in realization of the SpA's political affinity; as a minoritarian becoming, it provides impetus in the struggle for release from the prevailing order. The SoA reduces the influence of major politics on architecture and fashion in the new action space and equips one's body with the ability to create a transformation in the space between oneself and other bodies, between the given space and other spaces, between the realistic and the potential, the virtual. Fashion semiotics are not used to achieve a fully transformative effect on the body, but rather as a means of achieving a full transformation of the space to which they are applied.

¹ Gilles Deleuze and Félix Guattari, *What is Philosophy?* (trans. Hugh Tomlinson and Graham Burchell) (New York: Columbia University Press, 1994).

² Arendt, *Human Condition*, p. 199.

³ Deleuze and Guattari, *Kafka*; Deleuze and Guattari, *Thousand Plateaus*.

⁴ Deleuze and Guattari, *Thousand Plateaus*, p. 291.

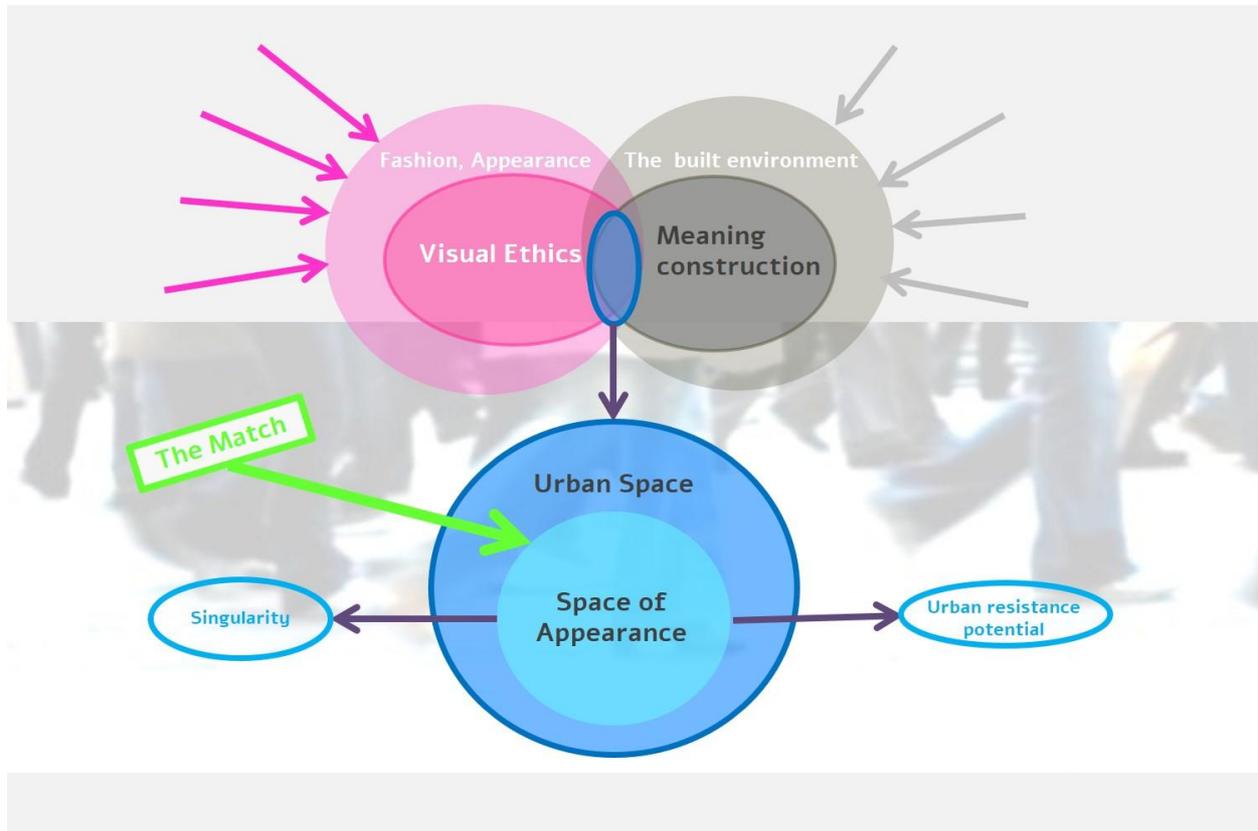


Illustration 1: Arction and Fashitechture

The *Zeitgeist* – From Normalizing Strategy to Hacktive Tactics

Strategy is directed an overtly definable object, while tactical calculation, by contrast, requires no overt singularity or “otherness.” The lack of a need for distinct differentiation to exist enables tactics to filter down to the other’s space in an unintentional and discontinuous manner, not for purposes of conquest or evasion, but rather to act in concert with circumstance.¹ Strategic models aim at differentiating the other, thereby creating reality that can be manipulated according to political or economic rationales. By contrast, the SoA is a tactical phenomenon that is validated by its everyday encounter with the other, the encounter between appearance and the random, capricious gaze of the other. Its meaning, that is dependent on the other’s conception, exists and disconnects in an instant. It ignites the other’s awareness – not with the intention to conquer it absolutely but to arouse it. The dependence between the onlooker’s attention and the appearance is a direct consequence of the time of the encounter and everyday culture, not place. Its value, in turn, is a direct consequence of the visual meaning it embodies.

Deleuze and Guattari describe minoritarian phenomena as active micropolitics that engender² weakness and attenuation, seeking to uproot the ruling political system while avoiding the expression patterns that create this system and the activity patterns it dictates. The SoA is a performative act that neither engenders confrontation nor abandons the struggle to the “official” representatives of the

¹ De Certeau, *Practice of Everyday Life*, p. xix.

² Deleuze and Guattari, *Thousand Plateaus*, p. 292.



relevant idea. The SoA is a micropolitical phenomenon that suits Deleuze and Guattari's definition. Passersby interpreted it as a call to action and were willing to attempt similar events. It is active because it arouses awareness and willingness to act. It does not strive for change by creating confrontation but rather promotes a change in opinions and disseminates a new conception. They considered it an individual initiative that proposes an alternative use of space, a phenomenon that is not conducted by representatives of a particular conception nor one that demands victory. It is conducted in an intimate, performative manner with a limited range of activity in terms of its physical dimensions and the breadth of its virtual significance. Use of activity patterns motivated by major political mechanisms, such as aesthetics dictated from above, cannot lead to change.¹ By contrast, the combination of semiotics of clothing and performative principles accords the appearance an unexpected aesthetics that instills flexibility in public space. An activity pattern that makes new use of the curb on which it is grounded is hacktive because it uses a conventional semiotic system to expand options for system action. The SoA is an individual act that changes activity patterns in public space; consequently, it is a direct and hacktive action. Passersby expressed willingness to try the activity that they interpreted as an individual and unorganized initiative, not as an act of protest or opposition, as a minoritarian measure that offers a non-confrontational alternative – micropolitics. They are ready to extend a gaze-dependent network structure into public space whose very existence accumulates the power to shatter the spatial order.

In conclusion, the SoA realizes the political affiliation of the SpA and enables exchange of the resistance potential of UPS with minoritarian action tactics. The Signature of Appearance undermines the manner in which passersby perceive their freedom of action in this space. Their willingness to attempt similar events attests to the relevance that they ascribe to individual and unorganized action tactics. It is a performative phenomenon that is not dependent on place or time. Its nomadic and elusive existence enables it to participate in undermining paradigms that were assimilated in the space by major, economically motivated political mechanisms. The proposal for a performative solution derives practical insights from Deleuze and Guattari's discussion of minoritarian issues, intertwined with conceptions of personal, hacktive action.

¹ Harvey, Condition of Postmodernity.



FRAMES+FIELDNOTES Existential Architectures for the Landscape of Climate Change

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Abstract

This paper is a summary of a longer publication that argues an experiential metric facilitated by artful architecture is an essential part of understanding landscapes as they carry us toward a difficult environmental future. The theory is structured by two elements: “spacing paths” which move across the landscape and “timing places” for dwelling or pausing. These pieces are further refined in a conceptual design for a recently abandoned wetland on the fragile coast of Staten Island. The project develops an architectural environmentalism that is based on experience, and the less tangible traces of memory and emotion as much as it is based on what is empirically measurable.

This paper is an abbreviated version of a master of architecture thesis dissertation published under the same title at Dalhousie University in May 2016.

Introduction

One of the most remarkable qualities of spatial art and architecture is how they often perform as devices that frame our perceptions and experience in a field of otherwise indecipherable space.¹ While we often think deeply about the experiential outcomes and perceptual invitations art provides, the function of this quality in architecture is largely overlooked.

Architecture exists on a scale that mediates between the beguilingly vast and the familiarly human. In some ways it transforms space and time into places and events we can dwell in and remember. One of the most important things we perceive and measure experientially is the landscape: a spatial field that now more than ever we ought to pay attention to as the natural systems and environments within it shift quietly faster toward a difficult future. Many of us don’t have an experiential metric for climate change; a metric that includes an emotional understanding of what’s at stake. “There is the scientific and ideological language for what is happening to the weather, but there are hardly any intimate words,” Zadie Smith points out in “Elegy to a Country’s Seasons.”²

¹ “True qualities of architecture are... existential, embodied and emotional experiences,” Juhanni Pallasmaa, “Space, Place, Memory and Imagination: The Temporal Dimension of Existential Space,” in *Spatial Recall: Memory in Architecture*, ed. Marc Tribel (New York: Routledge, 2009), 25.

² Zadie Smith, “Elegy to a Country’s Seasons,” *The New York Review of Books*, April 3, 2014, accessed July 13, 2015, <http://www.nybooks.com/articles/2014/04/03/elegy-countrys-seasons/>.



New Yorkers got an intimate experience of what is happening to the weather in October 2012 when “Superstorm” Sandy made landfall. One of the areas hit hardest by the storm was, and continues to be the eastern shore of Staten Island. After astonishing storm surges swept houses far off their foundations, the community of Oakwood Beach was subsequently abandoned, and a ruptured marshy landscape that tells a longer story of change was released from the fabric of the city. By borrowing empathic and experiential strategies from art, architecture that facilitates an existential understanding of change and quality in the abandoned landscape of Oakwood Beach can be carefully considered, framing perceptions and experiences of the site in an almost elegiac fashion.

Places and Paths

Landscapes are gigantic, their vicissitudes even more so, and we will only ever partially understand what is there.¹ As J.B. Jackson put it: “Anyone can look, but we all need help to see that it is at once a panorama, a composition, a palimpsest, a microcosm; that in every prospect there can be more and more that meets the eye.”² When we introduce architecture as a mediator between the gigantic and the familiar it presents us with opportunities to understand landscapes and how they change. In this project, architecture that frames our perceptions and experiences of landscapes is understood as a network of places and the resulting paths that connect them. Places in the landscape, defined by pause, lend themselves to understanding temporal shifts; while paths, defined by motion, lend themselves to understanding spatial shifts.

Architecture structures the places we pause. If you spent a year in one place you are be able to see the changes that come with the seasons. If you stay longer, you can see how much these shift from year to year or day to day. Henry David Thoreau’s journals about the natural world he observed by simply being in one place for nearly his whole life have since been used to track climate change in eastern Massachusetts.³ When structuring a place, architecture facilitates the observation of such things, and we should take time to consider what we are framing.

A path, on the other hand, is a structure of motion. As we move along, we perceive the varying spatial qualities of the landscape around us much more than the temporal ones. With each step something slips away while the next thing appears in front of you producing “a relational tactile world of impressions, signs, sights, smells and physical sensations.”⁴ Walking along a trail you might first passes through an illuminated maple grove followed by the eerie atmosphere of assorted conifers and finally past the

¹ Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (London: Duke University Press, 1993), 71.

² J.B. Jackson, “Introduction,” *The Interpretation of Ordinary Landscapes: Geographical Essays*, ed. D.W. Meinig (New York: Oxford University Press, 1979), 6.

³ Rebecca Solnit, “On the Dirtiness of Laundry and the Strength of Sisters,” in *The Encyclopedia of Trouble and Spaciousness* (San Antonio, TX: Trinity University Press, 2014), 278.

⁴ Christopher Tilly, “Space, Place, Landscape and Perception,” in *A Phenomenology of Landscape* (Oxford: Berg Publishers, 1994), 34.



dappled space of birches where it is low and moist. The design and construction of paths is therefore an instrument of spatial observation we should tune appropriately to the landscape that holds it.

Positioning Places and Paths

Engaged perception of a landscape is profoundly affected by our position within it. Position not only affects what is observed, but also the attitude we have toward it and ultimately the actions we take such that “views of nature influence treatment of nature.”¹ If we consider the capacity of architecture to position us in nature, we can thus invite new attitudes toward it. In particular, occupying experimental or unusual points of view, as Susan Stewart points, out often “results in a ‘new perspective’ on the object” being perceived.²

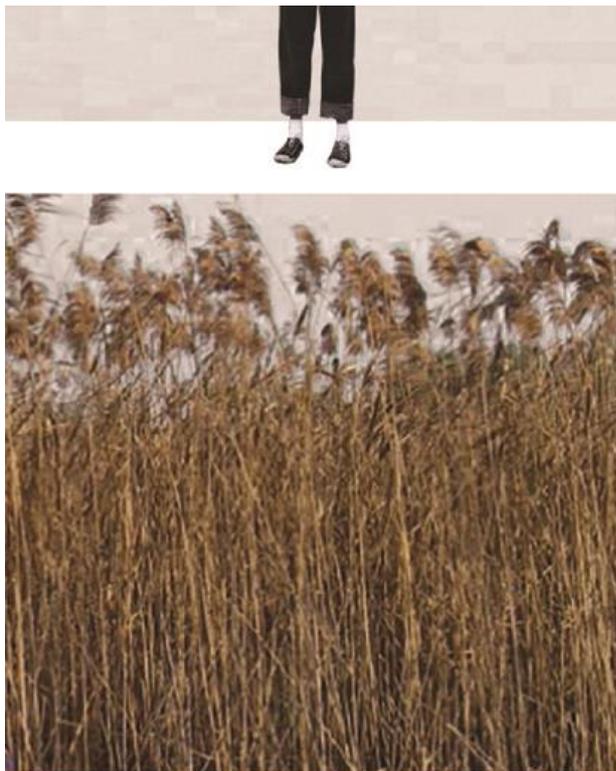


Image 1: Diagrammatic collage illustrating a position above the natural context of the thesis site.

The view from *above* was historically very hard to achieve. It really wasn't until the airplane that we gained the self-conscious awareness we have today of our surroundings.³ Viewing human settlement from above is an identity forming activity, not unlike seeing oneself in the mirror or pondering a candid

¹ Lauren Kolodziejski, “What is Missing? Reflections on the Human-nature Relationship in Maya Lin’s Final Memorial,” *Environmental Communication* 9 (2015): 430, accessed September 14, 2015, doi:10.1080/17524032.2015.1047883.

² Stewart, *On Longing*, 78-79.

³ David Leatherbarrow, *Uncommon Ground: Architecture, Technology, and Topography* (Cambridge, MA: MIT Press, 2000), EBSCOhost (AN 138426), 15-16.

photo taken from an obscure angle. As Stewart suggests, "...the view from above remains a view from elsewhere,¹ and as such it can prompt critical reflection.



Image 2: Diagrammatic collages illustrating positions within and without.

Within is the position we generally occupy from day-to-day. It is difficult to be critical or reflective when you are truly immersed in your surroundings.² Instead you are engaged in experience, forming memories and acting out volitions.

Being *Without*, on the other hand, is important for solidifying experience. Being *without* can provide environmental contrast, clarity, and resolution regarding a different situation or position, particularly a difficult or unusual one.

¹ Stewart, *On Longing*, 79.

² "We are typically not capable of deep imagination outdoors in wild nature," Pallasmaa, "Space, Place, Memory and Imagination," 25.



Image 3: Collage illustrating positions below and inverted in the natural context of the thesis site.

The positions of *Below* and *Inverted* question how far we need to go to gain new understandings and perspectives. Inversion is a highly memorable and rarely occupied position, the experience of it is deeply engrained and rigorous investigation demands looking at the landscape from many angles. Similarly, the view from below could offer novelty with out the same intensity. The landscape would appear dominant while the viewer begins to feel vulnerable, thus destabilizing the perceived human dominance over nature, which has been so prevalent over the last two centuries. As part of her meditation on the gigantic and the miniature, Susan Stewart suggests firmly that the gigantic, namely nature and history ought to “swallow us... that the transcendent position be denied the viewer” so that our urge to dominate or miniaturize what essentially cannot be, is avoided and the view from below preferred.¹

¹ Stewart, *On Longing*, 89.

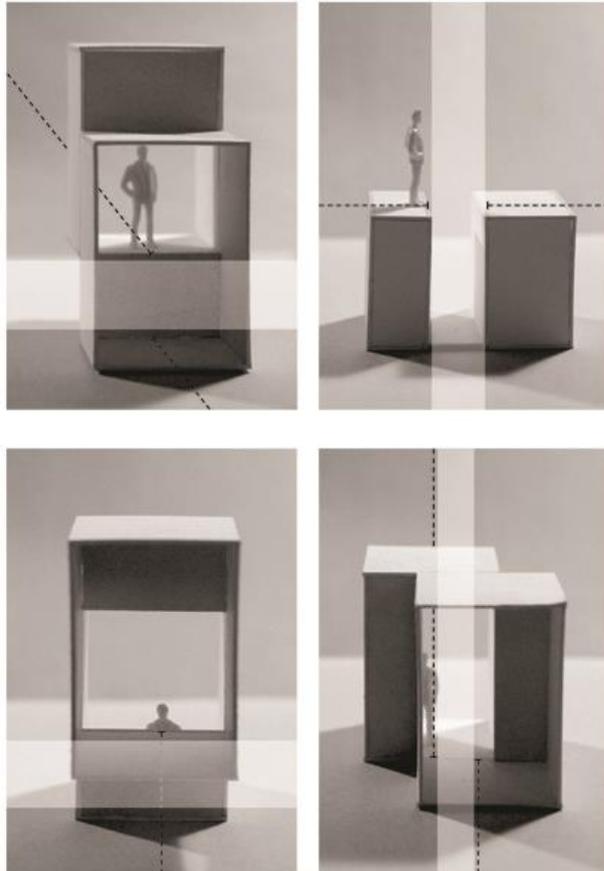


Image 4: Model studies exploring modes of spatial disruption.

The previous statements about places and paths and positions only work if we invite attention. The more unusual positions achieve this because they are inherently disruptive, but the others are likely to have little effect. As much as we frame time and space, there is no way of ensuring a certain experience or awareness; but by introducing spatial disruption there is a way to provoke it. Encountering the unexpected may initiate renewed awareness and a heightened perception of one's surroundings. Disruption is what makes the site for this project so interesting. Both spatially and temporally it is a disrupted place.

Spacing and Timing

Oakwood beach is an abandoned community on the east coast of Staten Island, New York. A couple hundred homes, mostly converted seasonal bungalows, were once tightly packed on several narrow streets before they were purchased and demolished by the state government. Kissam Avenue, Fox Lane, Fox Beach Avenue, and Tarlton Street reach prominently and precariously away from their neighbours on higher ground across a large marsh toward the ocean. There is a sewage treatment facility and



national park to the south, a public beach and boardwalk to the north, and a long dune of unmanaged coast to the east.

The low laying land feels open and vast with only a few patches of trees, most of which occur on the inland slope of the dune. Water moves through the wetland in a highly affected manner, along straight channels, efficiently draining the hard-scaped community further inland of its stormwater. Throughout the area, the prolific *phragmites australis*, a towering invasive reed, grows in a rhizomatic mat of roots and a sea of swaying stems.

It is a place of cycles, gradual shifts and instants of disruption. Daily, the tides move in and out along the coast. The seasons bring migrating birds, freezing and thawing, and the growth, seeding and decay of plants, among other things. Over the years it has been appropriated, artificially filled, altered, eroded, and disrupted by flooding, fires and other natural disasters, including Hurricane Sandy in 2012.

During the storm, the community sustained significant flood levels for several days as the water drained back into the sea. Afterwards, community members gathered to discuss interest in a government buyout which they fought for and succeeded in obtaining. About 311 homes were purchased by the New York State government in the years following the storm, many of which have now been demolished.¹ As a result, the development front along the coast has retreated.

Though it may be hidden under a layer of imported topsoil, or behind the misleading beauty of invasive plants, Oakwood Beach is systemically shattered. The marsh doesn't flow like it should; the earth is a medley of mis-matched matter, and the streets stop and start in a nest of dead ends and demolitions. The optimistic designer will tell you we can refine the mess into a beautiful sustainable system of closed loops, and seamless continuity in which the boundaries between nature and culture fade and everything is one. While it is definitely a vision worth striving for, let us not forget: "Sunshine dulls the mind to risk and thoughtfulness,"² and all the places short on sunny days are as important as those that aren't. That is to say, things that don't work have an indispensable value of their own.

¹ Nate Lavey and Myles Kane, "Retreat from the Water's Edge," *New Yorker* video, 12:28, October 16, 2014, <http://www.newyorker.com/news/news-desk/hurricane-sandy-retreat-waters-edge>

² Adam Alter, *Drunk Tank Pink: And Other Unexpected Forces that Shape How We Think, Feel and Behave*, (New York: The Penguin Press, 2013).



Image 5: Site Plan: Six interventions highlight the natural and cultural traces of the site.

Spacing Paths

Consolidating spacing and timing with places and paths outlines an architectural vocabulary of “timing places” and “spacing paths” that lends itself to experiencing and perceiving the vast complexity of the landscape’s temporal and spatial qualities. A network of “spacing paths,” mediates movement across the landscape.

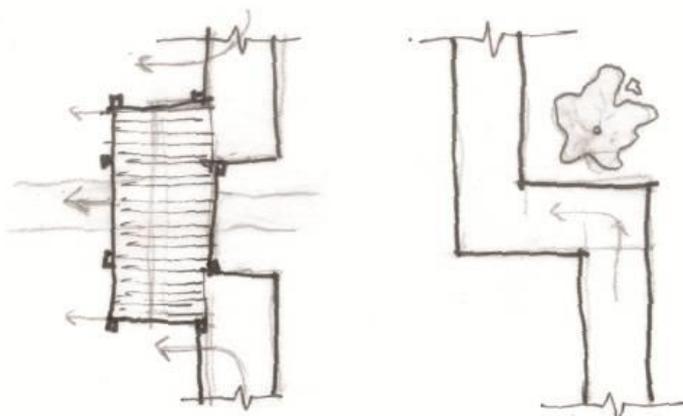


Image 6: Situation shear is a method that emphasizes landscape features by expanding, contracting and shifting the path as it encounters them.



By considering loops, dead ends, straight lines, offsets, and parallax elements these paths position us in our surroundings in informative or novel ways that help alter our attitude toward nature. Furthermore, a gradient of intensity across the site with respect to position and intimacy with the land makes sure the project overall is not too difficult to inhabit while also establishing a procession.

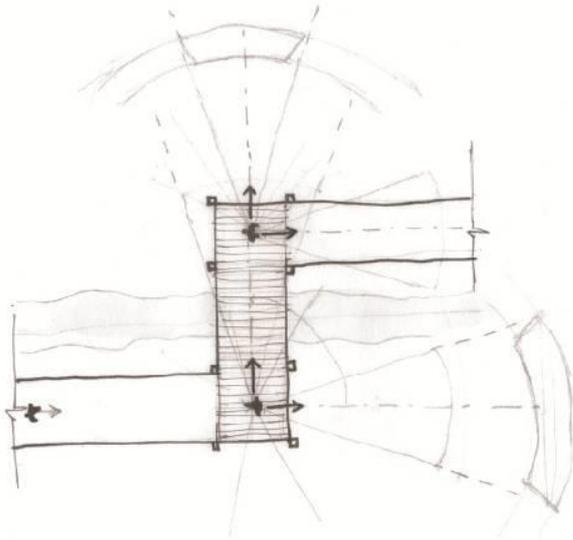


Image 7: Moving through abrupt turns in the path increases visual scanning of the surroundings.

Affirmation was taken from David Leatherbarrow's differentiation between situation and position and how this affects design. In pursuit of a more experiential design strategy, Leatherbarrow suggests:

... we would accept the challenge of imagining a terrain with gaps or unclaimed areas, a discontinuous field, an uncommon ground, a horizon no longer dominated by a constructed vista said to be 'true,' nor by the adventure of comprehensive design. Discontinuous in this sense would signify a mosaic field built up situation by situation, not taken for granted, like space, as an extended receptacle wanting infill.¹

The strategy for this site comprises a fragmented network, built up situation by situation. In departure from Leatherbarrow's assertion however, a sense of the orthogonal persists in the geometry of each intervention. The tension between the precision of each path and the incongruences of the context brings an instrumental opposition into play. Transgressing from the formality of the path to the informality of the site is to pass from one state of mind into another prompting reflection on the prior.

¹ Leatherbarrow, *Uncommon Ground*, 19.

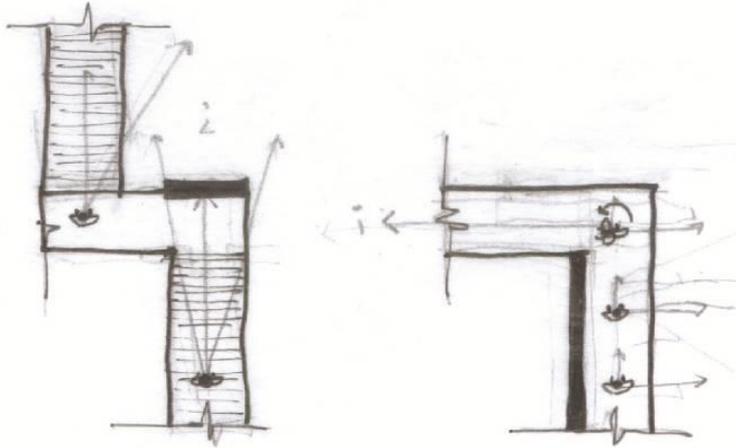


Image 8: Walls and other obstructions are occasionally used to delay views in order to invite anticipation and renewed attention.

In many ways, the alternation between structured and unstructured space in the following six interventions is reminiscent of the interplay between culture and nature: our urge to draw a bold line through the ebb and flow of a marsh, to close with streets what ought to remain open.

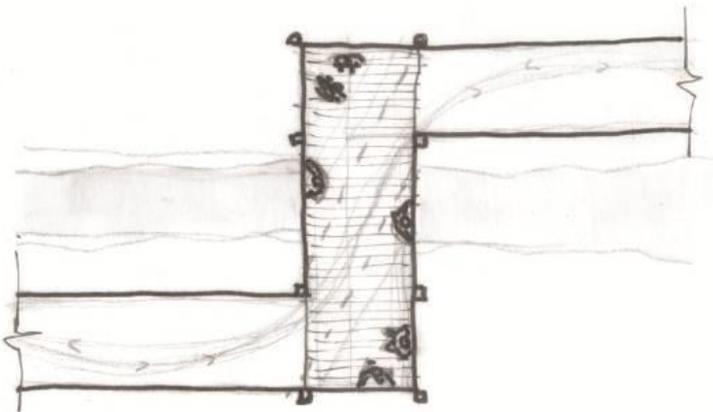


Image 9: Jogs in the path provide nooks and eddies for slower movement or complete pause.



Image 10: Upper Cove in plan and cross-section.

Beginning from the north, *Upper Cove* spans the place that will eventually become a tidal channel. For now, it connects Oakwood Beach with Cedar Grove Beach and a public boardwalk nearby. Upper Cove is a gentle positioner. For the most part, it floats on top of the land, rising and falling subtly until it leaves the surface behind and offers a position surrounded by water.

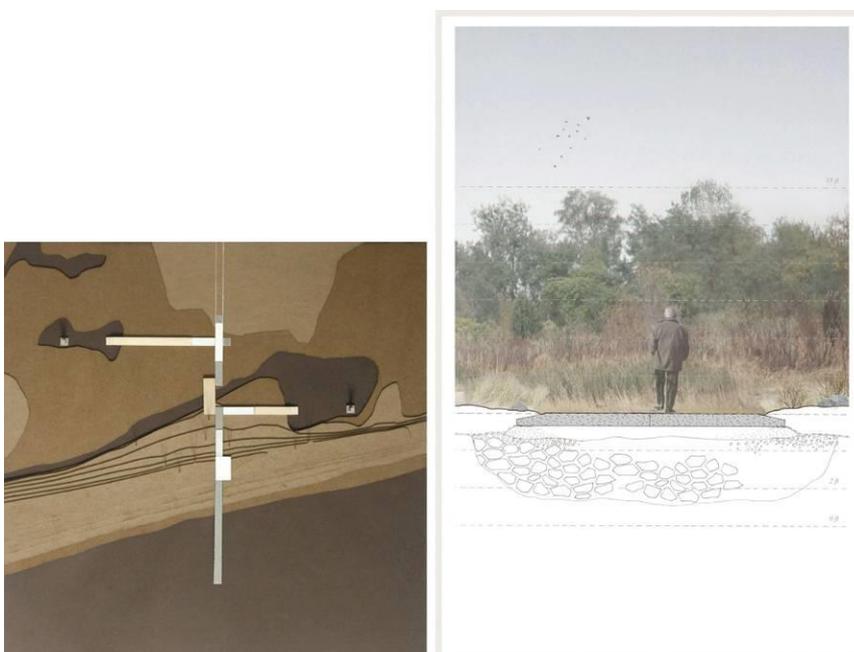


Image 11: Kissam's End in plan and cross-section.



Further down the beach is *Kissam's End* where a small footpath and culvert used to be. Crossing a small creek, the path jogs, as if sheared by the flow of the water. On the other side it ascends to the top of the dune in a subtle fashion before being disrupted by a vertical drop that expresses the height of the dune in a memorable fashion. The jogs and disruptions make this intervention slightly more intense than the previous one.



Image 12: Swallow's Post in plan and cross-section.

Inland from *Kissam's End*, *Swallow's Post* traverses into the marsh on a very narrow wooden boardwalk that extends between two old house foundations. From within the tall reeds, slim steel posts rise in a grid against the sky. At the top of each post is a little colony of white birdhouses. The boardwalk is suited to single file or solitary walking, facilitating reflections and contemplations. One's position is far below the top of the towering phragmites, and railings which would severely limit a feeling of immersion, are not necessary. The reeds grow right up to the edges of the boards. Understanding the seasonal changes in height, colour and texture as well as observing the various creatures that make the reeds their home is much more likely from this position.

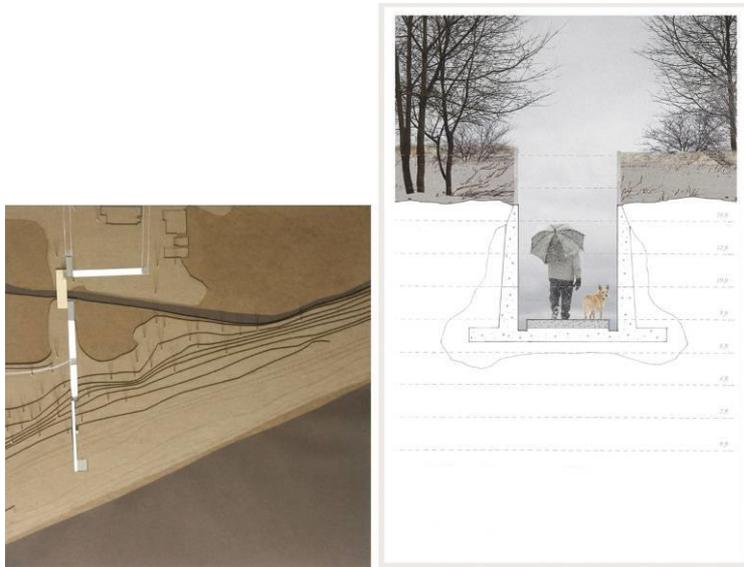


Image 13: Tarlton's Pass in plan and cross-section.

Toward the shore, *Tarlton's Pass* replaces an existing bridge and trail with a path that abruptly narrows and cuts through the sand dune, as if compressed on either side by the mass of the land. Concrete walls taper to a thickness of just 3 inches so plants can grow right up to and even over the edge of the wall, enveloping the path and the walker in the natural context. At the wall's highest point, an small alcove with a place to sit and pause provokes contemplation of the vertical walls, and the possibility of registering the height and significance of the topography with our bodies, instead of just our eyes. Once through the pass, the path expands again releasing the walker out on to the beach where no motion in particular is prescribed.

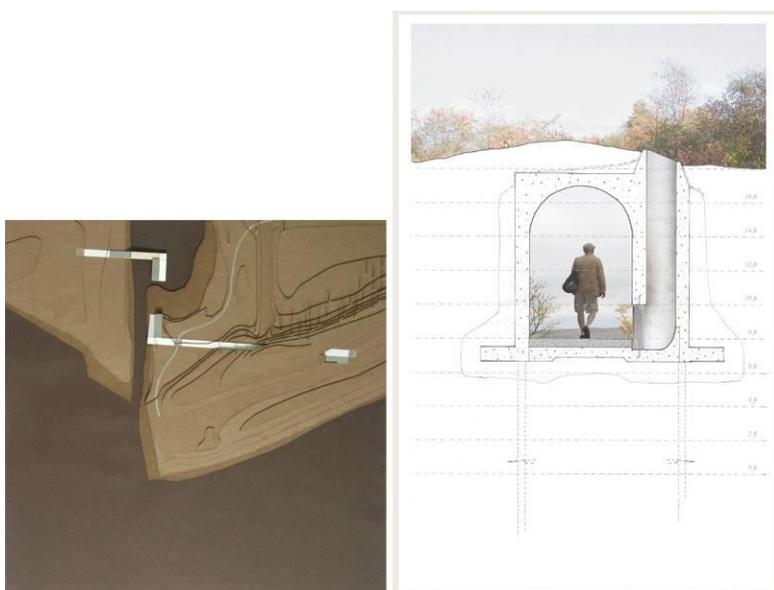


Image 14: Lower Landing in plan and cross-section.



Lastly, *Lower Landing* is the southern most installation and it connects Oakwood Beach to the coastal trails in Great Kills Park. Instead of cutting through the dune, this installation continues the gradient of intensity by going underground. Along the incision, the land rises until it completely covers the path. A domed roof makes it feel as if the land has curled over the walkway like a giant wave while a light well illuminates an opening just above the floor. To have light emerge at our feet suggests a position of inversion and emphasises the unusual situation of being below the environment and symbolically subordinate to it. At the creek, a wooden bridge crosses the tidal inlet but not the adjacent intertidal zone leaving the walker to determine when and how they will complete their crossing while providing all the formal invitations to do so.

Timing Places

Sprinkled within the network of proposed paths, are places and passages that depend on temporal rather than spatial changes in the landscape in order to be accessed. Though there are many shifts and transitions in Oakwood Beach, these designs focus on the seasons and the tides. They also draw from the notion of disruption previously explored as a necessary tool for facilitating attention. This movement through the landscape requires explicit mental and experiential dialogue with the natural world; a consideration of what it's up to and when that replaces our usual indifference and entitlement. It epitomizes a hard lesson learned in Oakwood Beach after Hurricane Sandy: that living *with* nature is very different than living *beside* it.

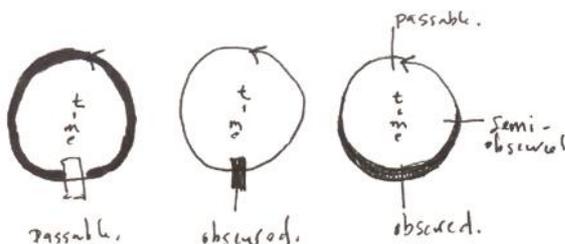


Image 15: Some different options for using timing as a disruptive mechanism; varying degrees of abruptness.

At *Lower Lading*, making the crossing from Oakwood Beach to Great Kills Park or vice versa is only possible at low tide. The crossing is an unmediated, adventurous experience of uneven and potentially muddy walking surfaces. The lack of infrastructure stands in contrast to the highly structured path on either side of it, an opposition that emphasizes each condition. It's not immediately obvious if the



crossing will be possible until you walk down the ramp that takes you to the tidal flat. If the water is too high, there are waiting spaces on either side that look down on the crossing and across at each other. The intensity and intimacy of the experience is part of the gradient that runs across the site, lessening as you move north toward Upper Cove.

The tidal gate at *Upper Cove* and the crossing at *Lower Landing* bookend Oakwood Beach. Access from either direction depends on the water elevation making this stretch of coast unique along the shore. Unlike the unmediated crossing at Lower Landing however, Upper Cove is relatively easy. The piers on either side step down toward each other, getting close but not quite meeting. A wooden dock rises and falls with the tides in the tracks of four steel columns and connects the two piers. The dock can be accessed at a range of water elevations to not only account for fluctuations in tide levels, but to also extend the time at which crossing is possible, lessening the disruption.



Image 16: As the tide rises, the floating dock eventually meets the steps at the end of the pier.

The mental exercise of choosing when to cross is a valuable one. Gauging at what point it is safe, anticipating that point and feeling a sense of accomplishment and gratitude are the un-formalized experiential components of this design that make it valuable in its very “inconvenience.”



Seasonally, when temperatures drop during winter, the open water in the marsh at Oakwood Beach freezes, making the area much more accessible on foot. Departing from *Kissam's End*, two Marsh Towers rest on small concrete islands surrounded by water and reeds. There is a small place to sit, a shelf for firewood, a fire pit and a chimney. Four operable screens can be opened or closed to suit the needs of the occupants for shelter from the wind and views of the surrounding landscape. In the summer the towers can be seen over the reeds and from the paths as a reminder of the opportunity winter brings.



Image 17: Operable screens provide protection from the wind or open to a view. When not in use, the screens on all four sides are closed.

In the warmer months, *Swallow's Post* fills with the sound of purple martins newly arrived from South America. They feed on insects in the marsh, and streams, what makes the purple martin especially remarkable is its utter dependence on humans for a their homes.¹

¹ Kenn Kaufman, "Purple Martin," *National Audubon Society* website, accessed February 6, 2016, <https://www.audubon.org/field-guide/bird/purple-martin>



Image 18: A collage illustrating the atmosphere of birds arriving in spring.

The arrangement and structure of the tall birdhouses in this project are simple, allowing the arrival and inhabitation of the birds to be the ultimate focus and defining element of the space. The structural elements that support the houses are simultaneously the structural elements that support human observation so the architecture facilitates a dialogue between nature and culture without impressing itself on the exchange.

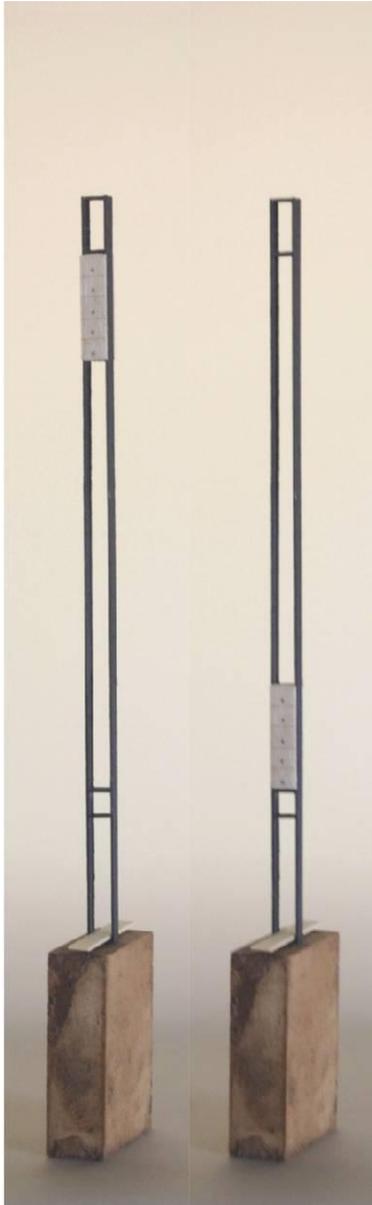


Image 19: The birdhouses raise and lower to be cleaned out each year using a simple pulley system.

While the other interventions operate on a principle of human occupancy that depends on a change in the landscape, this intervention shifts the focus away from human occupancy. The occupant in this case is the flock of birds. They depend on seasonal changes in the landscape for migration and successful reproduction but critically, they also depend on us. We are a part of the landscape and our place in the natural world is one with responsibility.



Futures

Necessarily, these interventions are calibrated to the present. As climate change and other shifts take place, there is a point at which they may stop operating. Since the 1970's bird counts for most species across North America have been declining.¹ The purple martin is certainly one of them. Changes in the weather could effect their migration patterns and timings as well. If temperatures rise such that winters become significantly warmer in the northeast, ice will stop forming in the marsh at Oakwood Beach restricting the use of the marsh towers. Though the tides will never stop so long as there is a moon, sea level rise will eventually flood out the tidal flat at Lower Landing while the path at Upper Cove, when it isn't underwater may become a mid-tide rather than high-tide crossing.

Memory conspires against nature. The forgetting can begin in the instant that a change takes place: the human mind did not evolve to see its surroundings - what we so clinically refer to as 'the environment' - as the focus of our attention, but rather as the backdrop against which more interesting things take place.²

The inherent futility of these pieces is a way of calling attention to our surroundings. It's important because it leaves behind a marker of how things were at a particular time. It undermines shifting baseline syndrome and helps us remember that any climactic "new normal" is really abnormal if we take into account the past.³ Memory is essential in understanding the scope and severity of the changes taking place, which is why experiential measurements are necessary.

If it's true that "Longing is triggered as one of the primal drivers for creative human action by the loss of something precious,"⁴ then the inevitable failure of something has the potential to be profound. Zadie Smith says, "In the end, the only thing that could create the necessary traction in our minds was the intimate loss of the things we loved," when she meditates on the transition from "the elegiac *what have we done* to the practical *what can we do?*" about the climate crisis that surrounds us.

Conclusion

The changes in the weather are changing the world we live in; a landscape that is marked and marred by our collective act of dwelling. By learning to read into the beauty and complexity of our landscapes using architecture, we can embrace the shifting stories to form a deep understanding of the precarious natural context we depend upon. This conceptual project has illustrated some of the ways architecture speaks a dialect of the landscape language, performing in tandem with its environment as a mechanism

¹ Quirks and Quarks, "Songbird's Range Get's Squeezed by Climate Change," *Canadian Broadcasting Corporation*, February 6, 2016.

² J.B. MacKinnon, "The Nature of the Problem," in *The Once and Future World* (Toronto: Vintage Canada, 2013), 21.

³ MacKinnon, "The Nature of the Problem," 19.

⁴ The Curators, "Longing and Desire," *Sehnsucht* (New York: SpringerWien, 2010), 29.



that reveals what we might not otherwise notice as it slips across space or through time. Architecture like this can help us transition into a culture of respect and awareness by evoking sensitivity to what is observed.

The timing places and spacing paths carefully inserted into the wavering context of Oakwood Beach connect us to what is larger than ourselves in a way we are able to decipher; a way that does not stun us with vastness. They are existential architectures that celebrate the slow accumulation of experience. As changes in the very nature of the planet accelerate, our futures depend on being able to tune into this repository of experience to be able to say with conviction: “Something is wrong.” After all, climate change is place change. It’s not merely the atmosphere, way up high and safely distant from our homes and neighbourhoods, that is changing. It is our homes and neighbourhoods, here, there and everywhere else around the world. It is the loss of things close to us, the memorable and resonant qualities of the places we grew up, the houses we live in, the landscapes that nurture us, the cities we cultivate, which are at stake. The more we are able to see this the more we might do something about it.

It might be the case that I’ve taken an emphasis on experience and perception too far. And it’s probably true that the real solutions incorporate all aspects of architecture, taking the technological, empirical, and certainly the economic into account. But I perceive a lack of concentration on the less tangible characteristics of our built environment, the beautiful and artistic ones, when it comes to conversations about sustainability. I wonder why, just as Zadie Smith pondered the lack of an emotional vocabulary for what is happening to the weather. If there is one thing to get emotional about, this may just be it.

With further consideration and adaptation, I think the elements of this project and the research at its foundation can be translated into any number of contexts from the strictly rural to the intricately urban. We need a new environmentalism in the discipline of architecture. By appealing to the phenomenological capacity of design to inform perception, empathy and experience, we can move toward a built environment that balances the existing emphasis on technology and efficiency with a celebration of the less tangible notions of memory and narrative as necessary, and beautiful parts of an astounding global movement.



A Sfumato of Past and Present

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Abstract

The Corkin Gallery, the Young Centre for the Performing Arts, in Toronto, Ontario, and the Culture Yard, in Elsinore, Denmark, are three contemporarily transformed spaces which architecturally blur the lines of past and present. Each warehouse redevelopment follows careful design guidelines of *sfumato*, a painting technique established by Leonardo da Vinci, each employing an individual perspective of the approach. The Corkin Gallery achieves a harmonious blur in its design by distancing certain elements, while the Young Centre leaves many components unseen. The Culture Yard uses visual hallucinations to make its connection to its predecessor, yet all examples reveal similar architectural ploys. Differentiation between structural and mechanical systems is unsure to most viewers, as the architects have utilized tectonic and aesthetic techniques to merge the present with history in each building.

Adaptive Reuse

While many adaptive reuse projects and building revitalizations attempt to either duplicate original structures and materials or oppose the predecessor entirely, these three examples of industrial restoration successfully blur the design of the old and new. An uninterrupted continuation of a traditional piece of architecture usually involves imitation of that building's materiality and its details, which can be difficult to achieve many years after the original structure was built. This technique is often only successful when the architect is working at a respectful scale to the original building, and has the identical materials and architectural language available to him or her.¹ Likewise, designing an addition in the opposite mindset, one which entirely contrasts the existing structure, can have its faults as well. Communities tend to identify culturally with historic sites in their towns and cities, and designers must be cautious to not obliviously impose on the esteemed character of the site.² However, the three historic warehouse sites of the Corkin Gallery, the Young Centre for the Performing Arts, and the Culture Yard, each maintain a distinguishable consistency with their respective transformation. By means of blurring original details, forms, and materials, they each abstractly reference their appropriate predecessor.

¹ Steven W. Semes, *The Future of the Past* (New York: W.W. Norton, 2009) p. 173.

² Ibid. p. 223.



Sfumato

A blur is the modulation of a clear image. Blurring occurs when a fog is imposed in one's sight of vision, and can signify the equality of items in an image, or the deterioration of one's memory.¹ Blurred images, within art, can also hold a key to the human imagination, fantasies, and notions of the subconscious.² *Sfumato* describes the painting technique of blurring by use of indefinite shadows. The word is a derivative of the two Italian words, *fumo* and *sfumare*, the first translating to "smoke", and the second meaning, "to rub or blend together the edges of colour the way smoke diffuses".³ Da Vinci and other artists employ the technique to obscure details and colours in paintings, which contrasts the harshness of defined contours and pure colour. *Sfumato* is also used in painting to exemplify edges of an object being blurred by shadows, to soften that object's rigidity by blending its form into its respective shadow.⁴

In architecture, methods of *sfumato* can be transferred to subdue harshness between structures and their additions. By designing a transformation whose materials, language, and form harmonize with the existing building, the two will blend together in a cohesive manner. The outcome of the painted *sfumato* relies on the adjustment of each physical precedent, such as amounts of light, objects' positions, as well as the focus of the observer's eye, so that it can be clear which perspective of *sfumato* is in use.⁵ These perspectives include *spedizione*, its ideas evident in the Corkin Gallery, *notitia*, evident in the Young Centre for the Performing Arts, and *cognitione*, seen in the Culture Yard.⁶

The Corkin Gallery: *Spedizione*

Spedizione is the painting technique which stresses the disappearance of details and edges of objects as they become distant from the observer.⁷ The Corkin Gallery, in Toronto, Ontario, is a respectful conversion project using *spedizione*, "objects becoming distant", of what was once the spirits storage room in the Gooderham and Worts Distillery. Designed by Shim-Sutcliffe Architects, the gallery is now home to a variety of contemporary and vintage photography, digital media, paintings, and sculptures exhibited throughout the former warehouse.⁸ Upon arrival, the complexity of the transformed space is distant from guests,⁹ as they initially believe they are able to view all the gallery has to offer.¹⁰ However, the space is one of unfolding layers in actuality, inherently creating engaging views of the following spaces.¹¹

¹ Tom McCarthy, "Blurred Visionary: Gerhard Richter's Photo-paintings," *The Guardian* (22 Sept. 2011. 15 Nov. 2012)

² Yves Tanguy and Alexander Calder, *Tanguy, Calder: Between Surrealism and Abstraction* (New York: L & M Arts, 2010) p. 14.

³ Claire J. Farago, *Leonardo Da Vinci and the Ethics of Style* (Manchester: Manchester UP, 2008) p. 161.

⁴ *Ibid.* p. 161.

⁵ *Ibid.* p. 162.

⁶ *Ibid.* p. 163.

⁷ *Ibid.* p. 163.

⁸ Beth Kapusta, "Distilling Time," *Architecture* 95.5 (2006): 62-67, *Avery Index* (15 Nov. 2012) p. 62.

⁹ "Corkin Gallery," *Canadian Architect* 55.5 (2010): 22-23, *Avery Index* (15 Nov. 2012) p. 22.

¹⁰ Barbara Dixon, "Shim-Sutcliffe Adapts a Historic Distillery to Create Toronto's Contemporary Corkin Shopland Gallery," *Architectural Record* 193.6 (2005): 192, *Avery Index* (15 Nov. 2012) p. 192.

¹¹ *Ibid.* p. 192.



A steel bridge insertion is visible at first glance of the interior, which houses an office and library, shielded by sandblasted glass sliding panels.¹ Brick piers seem to bear the load of the bridge from one's entry view, yet disappear and leave the bridge floating as one progresses down the stairs.² A ramp system is introduced, running its way around the main gallery hall, creating an initially unseen passageway.³ The private corridor is surrounded by a new drywall enclosure, hiding most HVAC and electrical work.⁴

Many original components of the building are distant yet still present, being retained and refurbished. The Douglas fir wooden floorboards are remilled and recycled throughout the gallery space,⁵ some reinstated as risers on the new staircases.⁶ Excavation a meter deep into the original ground surface reveals the entirety of brick pillars, which sets the rhythm of the new program.⁷ As well, lightweight metal bases now support the existing load-bearing wood columns. Only one original component is entirely distant, a unit of the original wooden flooring, whose removal generates the possibility for the main gallery's double height space.⁸ The Corkin Gallery's use of *spedizione* in its initial visual hiding of architectural elements, modification of some, and complete elimination of others provides the historic space with a pleasurable intricacy guests do not expect.

The Young Centre: *Notitia*

A coat of steel grey paint conceals the metal stairs, along with the exterior wooden overhang, sheltering visitors as they leave and enter.⁹ The entrance leads into the lobby, covering what was once exterior courtyard space between the two warehouses, now surfaced with a layer of polished concrete.¹⁰ Bulky Douglas fir trusses enclose the ceiling of the lobby space, perched over clerestory glazing, and appear to be floating on top of the heavy brick walls.¹¹ Green paint hides the original materiality of the wooden fenestration,¹² and windowpanes have been doubled for extra insulation.¹³ Also unseen is the newly inserted elevator,¹⁴ encapsulated in golden wooden paneling, which runs down to the service corridor below ground, made up of vat-supporting stone walls.¹⁵ However, once the performances begin and focus shifts to the actors, the architecture disappears by means of *notitia*, in its elegant simplicity and historical coherence.

¹ "Distilling Time," p. 64.

² "Shim-Sutcliffe Adapts a Historic Distillery to Create Toronto's Contemporary Corkin Shopland Gallery," p. 192.

³ Gary M. Dault, "Work of Art," *Canadian Architect* 50.4 (2005): 22-25, *Avery Index* (15 Nov. 2012) p. 23.

⁴ "Shim-Sutcliffe Adapts a Historic Distillery to Create Toronto's Contemporary Corkin Shopland Gallery," p. 192.

⁵ "Corkin Gallery," p. 22.

⁶ "Shim-Sutcliffe Adapts a Historic Distillery to Create Toronto's Contemporary Corkin Shopland Gallery," p. 192.

⁷ "Work of Art," p. 22.

⁸ "Shim-Sutcliffe Adapts a Historic Distillery to Create Toronto's Contemporary Corkin Shopland Gallery," p. 192.

⁹ Stanwick and Flores, *Design City Toronto*, p. 65.

¹⁰ *Ibid.* p. 65.

¹¹ "The Young Centre for the Performing Arts," p. 61.

¹² Stanwick and Flores, *Design City Toronto*, p. 65.

¹³ "Young at Heart," p. 44.

¹⁴ Stanwick and Flores, *Design City Toronto*, p. 65.

¹⁵ "The Young Centre for the Performing Arts," p. 61.



The Culture Yard: *Cognitione*

Cognitione describes the comprehension of visual sensations in art, created by one's mind.¹ The architects at AART have achieved the blurred addition of the Culture Yard, in Elsinore, Denmark, by use of *cognitione*, "visual hallucinations". The historical site of the Culture Yard, is similarly the focus of this contemporary and striking complex.² Past and present structures are easily decipherable from an exterior view, however blurred together upon entrance. The building amalgamates the industrial society, part of which once worked on the shipbuilding yard, with today's fast paced culture of streaming information.³ Concert halls, conference rooms, exhibition spaces, a library and museum all occupy the seamless yet multifaceted community centre.⁴

The glass-enclosed spaces of the building, while revamped, still take patrons back to earlier centuries,⁵ maintaining a relationship with the exterior surroundings.⁶ Modules of the enclosure can be opened in warmer seasons to allow greater interaction with the building's natural environment. While specific pieces of the façade are sheathed in perforated aluminum paneling to reduce excessive sun infiltration, exceptionable views from the interior are still accessible.⁷ Tourist attractions such as the channel of water connecting Denmark and Sweden is visible through the triangulated curtain wall, as well as the Kronborg Castle, famous for its role in one of Shakespeare's plays.⁸ At night, the Culture Yard can be seen as a lantern from afar, its internal lights illuminating the community. The crosshatched lines of the façade exaggerate the complex's volume,⁹ reminding passersby of the sails of a boat.¹⁰ These patterns resonate onto the original brick structure encapsulated inside, and are perceived by immersed guests.¹¹ Fortunately, the intriguing latticework satisfies environmental responsibilities by cooling and heating the fused structure with natural means, as well as appealing architecturally.¹²

¹ Farago, *Leonardo Da Vinci and the Ethics of Style*, p. 163.

² Amy Frearson, "The Culture Yard by AART Architects," *Dezeen* (11 Nov. 2011. 22 Nov. 2012)

³ Casey C. M. Mathewson and Ann Videriksen, *A5 Copenhagen: Architecture, Interiors, Lifestyle* (Point Reyes Station, California: ORO, 2011) p. 27.

⁴ "True Cultural Expression," *World Architecture News* (13 Oct. 2011. 22 Nov. 2012)

⁵ Lauren Grieco, "Aart Architects: Culture Yard," *Designboom* (11 Nov. 2011. 15 Nov. 2012)

⁶ "True Cultural Expression"

⁷ "The Culture Yard in Elsinore," *Arkitektur DK* 55.4 (2011): 2-9, p. 3

⁸ "Aart Architects: Culture Yard"

⁹ "The Culture Yard by AART Architects"

¹⁰ "The Culture Yard in Elsinore," p. 3

¹¹ "True Cultural Expression"

¹² Mathewson and Videriksen, *A5 Copenhagen: Architecture, Interiors, Lifestyle*, p. 27.



The original concrete and brick structures are completely revealed inside, although reinforced utilizing armoured steel columns.¹ Left as an industrial element alike the rest of the building, it is unclear to guests whether the reinforcement is new or old. The original wrought-iron staircases and balconies are also present within the complex, and new ones of identical materiality are introduced.² As well, interlacing structural mechanical systems cross through both spaces, covered in coats of paint consistent throughout the building.³ Visitors of the Culture Yard discover themselves hallucinating that the new additions to the shipyard are an integral part of the initial structure. Through the use of *cognitio*, the new building serves as a collective environment between the past and present.

Conclusion

While all three adaptive projects employ a different perspective of *sfumato*, they each use da Vinci's technique to successfully blur the distinction between old and new structures. *Spedizione*, "objects becoming distant", is used skillfully in the design of The Corkin Gallery to keep guests intrigued by the spaces they are initially unable to view. While original architectural elements are still intact, they are at a distance by their subtle restoration. *Notitia*, "objects are unseen", is utilized in the Young Centre for the Performing Arts with competence, as guests are unable to identify which programs correspond to which spaces in their interchangeability. As well, a number of structural components are concealed with paint, so that their materiality is unseen, while roof trusses appear to float above walls. Finally *cognitio*, "visual hallucinations", is present in the design of the Culture Yard as an initially contrasting addition becomes blurred within the original warehouse building. The captivating new façade has many roles, as a sun shield, a scenery view, as well as a lantern screen, and abstractly displays the new interior structure which is easily confusable with the original. In these examples, all architects have designed modern building technologies to sensitively preserve the heritage of each site. The three separate structural reuses soften the harsh edges between the past and present, each blending its form into its respective shadow.

¹ "The Culture Yard by AART Architects"

² "True Cultural Expression"

³ "The Culture Yard by AART Architects"



Pressing On: Acts of printmaking as interpretation of being-there

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Abstract

This paper reflects upon the continuing emergence of a print-making studio built and inhabited several years ago in Portland, Oregon, USA. The evidence at hand is the offspring of the studio itself in the form of multiple, hand-burnished monotypes fabricated from within which perform re-imaginings of the identity of both setting and maker in their horizontal context: lodged together in territorial and temporal specificity, wedged between earth and sky, thrown between beginning and end. Through the enactment of 'extended gestures,' persistent acts of marking up and pressing down, of combining the horizontal gesture of striation across surface (drawing into ink upon plate), and the vertical gesture of impression calibrated to the strength of the artist's body (burnishing paper over inked plate), a partnership is formed between corps and matter, a conversation through intimate embrace, leaving both transformed and betrayed in each new work, testimony to an unfolding relationship, to a life together.

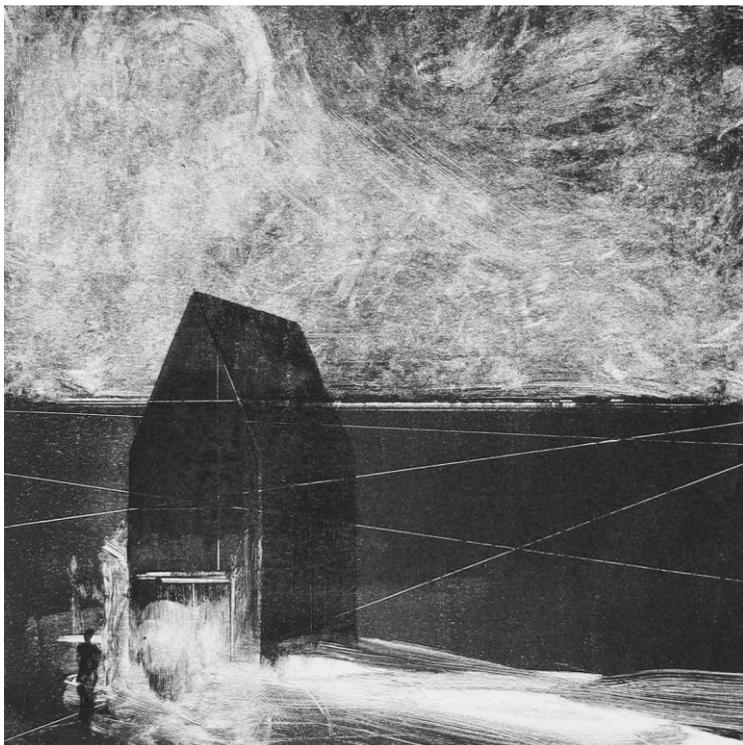


Figure 1: corpus-animus with cardinal axes, monotype study



Parts and Whole

"The experience of the Other culminates in the experience of Unity. The two opposite movements are intermingled. In the drawing back the leap forward is already latent. The downward plunge into the Other presents itself as a return to something from which we were previously uprooted. Duality ceases, we are on the other shore. We have taken the mortal leap. We have become reconciled with ourselves."
Octavio Paz¹

My understanding of the role of human creative activity, that is *poiesis*, has emerged from my own grappling with the question of Being, struggling to remain 'in touch' with a profound and ineffable unknowingness, framed by the inexorable questions of being human: Who am I? Where am I? What is my reason for existing? When will I end? These questions, I believe, recognize the presence of a transcendent dimension of otherness integral to being human, effervescing from within all presumptions of familiarity, clear-sightedness and firm footing in the amble across the course of our unfolding lives, challenging the comfort of the well-worn trail. Acknowledgment of otherness, this predicament of enduring incompleteness, has become increasingly less significant in human behavior these days, and even less acknowledged in the things we make in organizing the settings of our lives, in particular, our architecture. It is as though we prefer to traipse in closed circles along well-trodden paths rather than embrace the open terrain of uncertainty and release, cosseting the security of predictable pleasures over the prospect of rapturous discovery. As such, secular culture seems to have surrounded itself with the comforting blanket of immanent reward as defense against exposure to a persistently beckoning horizon. In response, the impetus of my own work in print-making and collage has persistently set about discovering a communion with transcendent otherness, finding common ground with the stranger, so to speak, a dwelling together, a home.

Much of contemporary western culture pays little attention to what Eric Voegelin calls the 'unseen measure,' and what Paul Ricoeur calls the 'voice of the other.' We have forgotten, it seems, that human being-in-the-world is an 'horizontal' predicament, to which we used to respond by 'gesture' with *body*, *voice* and *matter*, that is, by a *mimetic* response of tracing out 'figures' of a reality whose full shape and disposition extends beyond the reach of each such gesture, a reality that cannot be 'immanentized,' that cannot be captured by the complete picture, cannot be held fully in the hand. Despite our incorrigible propensity for dance, song and artifact, we find that we cannot contort our limbs enough, sing penetratingly enough, or push and pull material fluently enough to present our human predicament without remainder. A sensed and singular whole is perceived through a plethora of parts, fragments, and particulars, implying their unity but incapable of offering it up as complete. It is the output of this mimetic activity issuing from our recognition of, and attempt to grasp, the transcendence of persistent horizons that constitutes, this paper contends, the continued impetus of the arts. As George Steiner states, in our response to the arts "we re-enact, within the limits of our own lesser creativity, the two defining motions of our existential presence in the world: that of the coming into being where nothing was, where nothing could have continued to be, and that of the enormity of death. But...the latter absolute is attenuated by the potential of survivance in art." Only in art work "is felt the configuration of a negation (however partial, however 'figurative' in the precise sense) of mortality."²



Reflecting upon several decades of my own creative inquiry it seems that the closeness of the world I study is inversely proportional to the increase in intellectual concepts I form about it. In other words, knowledge has gradually imposed a distance on my engagement with the world, diminishing familiarity, rather than engendering it as I had always been taught that it would. The world, it seems, turns the corner and scurries out of sight, just at the point at which I discover there is a corner there. It is the dilemma of Orpheus: when gazing upon what we desire, we see its unattainability, but we cannot resist looking, over and over; entranced by the play of revelation and concealment, much like the courtship of lovers. Gadamer reminds us of Heidegger's insight where the revelatory is always accompanied by the shrouded, that the celebration of life by the bringing into light that the art work promises, subsists upon the impenetrable darkness of human finitude.³

I maintain that art work betrays the realization that human beings and the worldly context we inhabit are cast from an interminable oneness, a singular substance, an integrated whole, one homogenous element, if you like, that is hurtling through time, a totality 'fully present but never fully revealed', the paradox of a cosmos that is 'all there' at every instant in the 'depth' of pre-reflective experience, as Merleau-Ponty would say, but where our human vantage point remains delimited by the horizons of space, the *here-there* dimension, always extending beyond the next ridge; and the horizons of time, the *before-after* dimension, always already underway, that can only be recollected or anticipated in the spontaneity of the imagination, triggered by intuition in the present.

At some point, along its temporal trajectory, this unitary element (the cosmos perhaps, or Being) has become differentiated into a community of fragments, splintered by a multitude of internal forces, unfolding interactions, and complex entanglements, all genetically related to each other and their common source. Gradually, inside this great muddle of fragments humans have come to recognize an outline of ourselves as a sub-community within the community of the whole, as a particular entanglement to which we have attached a linguistic figure, that is, the name: 'human'.

As far as we can tell, from the evidence at hand, manifest in the products of language, we humans are the only sub-community of fragments that has attached a name to anything, suggesting that we have a unique, and perhaps unnerving, capacity to reflect upon not only ourselves, but to crane our necks and look across at the other fragments hurtling along with us, to stretch an arm in gesture towards them, and what's more, perplexingly, to grab some of that other stuff and make new arrangements of it with our bodies, that we then further reflect upon. Why do we do this? Why make new figures out of the arrangements we encounter that are already formed, prefigured, so to speak?

Curiously, some of this material that we rearrange to accompany us on this journey through time has the inexplicable capacity to re-arrange us back during the process, or even later when we return to it having pushed it out there. It must be admitted that being re-arranged by another is an experience that comes with some rather special pleasure, profound pleasure in fact, yet distinct from say, the satisfaction of a good meal or good sex. It is a pleasure that we attach further names to, such as beauty, happiness, the loving, the good. It is, I contend, the pleasure of our encounter with art work. The former pleasures, though indeed sensuously gratifying, are nevertheless, all-used-up in the event of their

happening, they are 'appetitive' as Kant would say, they just do not last, they participate *in* time, are taken up by it, but fail to endure, they fail to *embody* time.

The proposal here is that the gestural enterprise of art work purports to be *of* time, as opposed to merely in it, art work references the whole trajectory, as opposed to one or other specific place along it, just as it, also, purports to be *of* space as opposed to merely in it. In both cases, which are, corporeally speaking, the same case, we have only the particularity of unfolding situations through which to gain fleeting access to the commonality that presses in upon them all. The gestural work of art signals *in the direction of* that singular element, the unitary progenitor of the multiplicity of fragments that we find ourselves amongst: the oneness that enables the many, or as Gadamer, says, art work becomes "*the invocation of the potentially whole, wherever it may be found,*"⁴ referencing the totality of the world open to experience and our ontological place in it. Above all, the gestural work engages our human finitude in light of that which transcends us, and brings this predicament to experience, attempting to make it in some way intelligible.

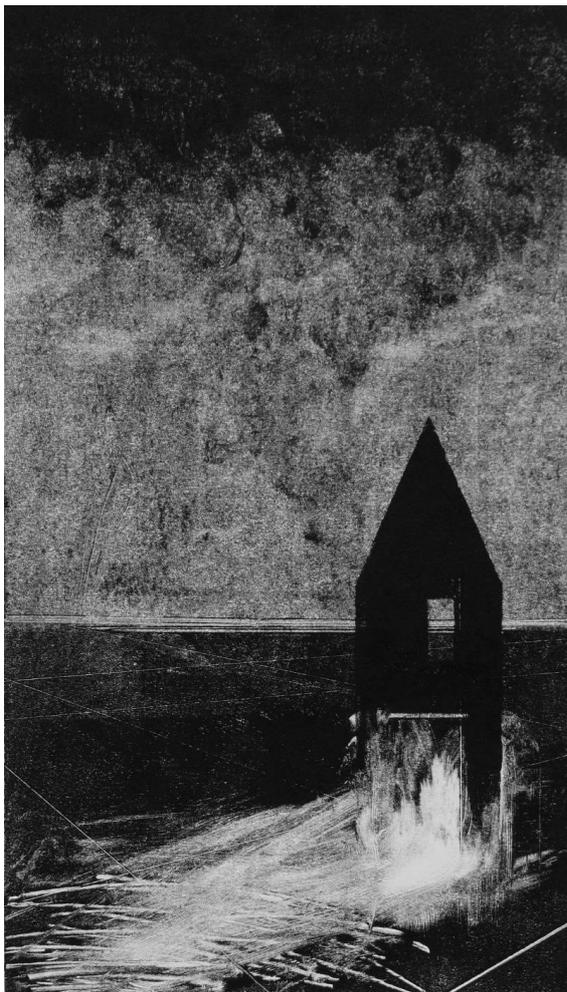


Figure 2: corpus-animus with horizon, monotype study



Marks and Impressions

“As translators, architects perform the all important function of bringing into the cosmopoetic spheres of architectural factures – drawings or buildings – aspects that often remain unknown. Cosmopoesis as an act of world-making always starts from worlds already in existence and the making is a remaking.... The mystery of architecture is in the divinatory nature of the worlds of drawing and building. The conjuring up of buildings is governed by back-telling translations (transformations of the lines of buildings in the lines of drawing) and foretelling translations (translations of the lines of drawings in the lines of buildings). Back-telling and foretelling form a speculative chiasmus, a hypogeal structure, on which every architectural project must be erected.” Marco Frascari⁵

Ironically, about a decade ago I made a decision for myself to move away from writing, the prevailing organ of academic scholarship that inevitably consumes the young academic. My hope was to pitch the questions that continue to form around the purpose and validity of human creative endeavor towards alternative embodiments, into ‘factures’, as Frascari would say. If there was something worth saying I needed to draw it out, not write it out, so you can imagine the irony, if not sheer contradiction, of finding myself, here, trying to put into words my reflection upon work that emerged somewhat in a gesture of defiance against them. Too much post-reflective sedimentation, and too much articulate versatility lay at hand in written language (though, of course, it doesn’t really lay ‘at hand’). My ambition to dig deeper into the pre-reflectivity of being-there demanded the enlistment of bodily intervention, of corporeal resistance, a wrestling from within rather than a contemplative distance; notwithstanding, of course, the call to carnality often acknowledged in the literary poet’s enterprise, characterized, for instance, as a ‘violence’ by both Octavio Paz and Wallace Stevens where the imagination presses back against the pressure of reality, and is a form of self-preservation, a matter of survival; or in Dylan Thomas’ aim “to treat words as a craftsman does his wood or stone... to hew, carve, mould, coil, polish and plane...”⁶

The work referred to here constitutes the vestigial evidence of animate passage, footprints left along the way, the marks of a collaborative history of body and building. They are literally and metaphorically impressions made over the last five years of monotype print-making activity issuing from *corpus-animus*, a studio constructed as a conspirator, as a partner in repeated acts of monstrative play between intervolved beings: my body and the bodies of plate, ink, brayer, paper, building, earth and sky. This predicament resonates with Merleau-Ponty’s notion of flesh in mutual reciprocity. The monotypes are born from a collaborative faith in what is possible when bodies engage, fluctuating between vulnerable openness to each other and struggling free, inhabiting the tension of these reciprocal tendencies, stretched out together in convulsive gesture. Through intentional acts of printmaking, the situation in which artist, in this case myself, and studio co-exist is reimagined over and over through a performance of multiple markings and pressings, in my attempt to remain ‘in touch’ with the possibility of meaningful elaborations of what it is to be human, right there, right then, in act. These prints are evidentiary outcomes of the fact of the act, a presentational residue, the precipitation of a participatory event where mutual relinquishment amongst participants is as important as directorial control. Cajoling each other, agonistically, through haptic enterprise, the fluidity of ink across the surface of the plate offers a capacity for open-ended play delimited, nevertheless, spatially by the edges of the plate, and temporally by the drying speed of the ink, but eventually pushed towards fixity by a very different gestural effort of pressing down: a microcosm in imitation of a macrocosm.



A modest two-story structure, *corpus-animus* rises vertically from the interior landscape of the contemporary city, an attic studio hovering atop a workshop, its profile a wedge joining earth and sky. The western gabled facade registers the passage of days into nights as its joints take on a mercurial glow illuminated by the setting sun, dissolving its singular, symmetrical body into irregular fragments that descend into the darkness of the night to emerge, reunited, each morning. Openings to the west are calibrated in scale and disposition in response to the upright human body and the terrestrial horizon, embodied in an asymmetrical pair of windows, and referencing the perpendicular relation of artist and work surface, the body crossed at the groin by tableaux. One other window faces east, its frame filled by the dense foliage of an evergreen tree close by. All other openings are skylights cut into the roof planes, three that receive the constancy of north light and one to the south enabling the diurnal transience of sunlight to penetrate and animate the studio interior with its temporal register. A single steep stair climbs to the raised workspace clasped between the steeply inclined planes of a double-pitch roof enclosure.



Figure 3: corpus-animus at sunset, built work



Figure 4: corpus-animus calibrated to the human body

The execution of all of the print works post-dates the conventional sense of completion of the building, a fact that aims to challenge the conclusive implication of this notion. The architectural project, as such, came into the world in a manner more akin to procreation and gestation, born and reared into place like a family member whose demeanor betrays the genealogical lineage of its co-creators (my wife and I), the first inspiration, inevitably, for the building's own linearities, manifest as described above, in specific physiognomy and posture.

As the paterfamilias, so to speak, my work *in* the studio is synonymous with the work *of* the studio, such that concrete, wooden studs, plywood, translucent sheeting, cedar strips, sheetrock, thresholds, apertures, work benches, implements, plates, ink, paper, light and air have partnered with my intentional body to maintain an openness to representational possibility through continued re-imaginings. As a musing on human situatedness, the 'building,' as such, remains but one constituent component of a broader field of exploratory output, augmented as each fresh monotype reconsiders that situatedness. Any hierarchy of representational effectiveness is resisted since there is no fixed or pre-determined datum against which one could be judged as truer than another, other than their degree of loyalty to the unfolding project of self-understanding. The studio setting acts as an axis mundi, a location lodged and re-lodged in the earth in continuity with my unfolding being, breathing along with me, energizing gestures poised between resistance and compliance, give and take, inhalation and exhalation, offering and receipt, gifting and gifted; reaching to feel out our common limits and simply pressing on.

"There is in one room in one day in one man's life, material for a lifetime." John O'Hara⁷



Endnotes

1. Octavio Paz, *The Bow and the Lyre* (Austin: University of Texas Press, 1973), p.116
2. George Steiner, *Real Presences* (Chicago: University of Chicago Press), pp.209-10
3. Hans-Georg Gadamer, *The Relevance of the Beautiful and Other Essays* (Cambridge: Cambridge University Press, 1986) p.34
4. *ibid*
5. Marco Frascari, *Eleven Exercises in the Art of Architectural Drawing* (London: Routledge 2011) pp.94-5
6. Dylan Thomas "Notes on the Art of Poetry" in James Scully (ed.) *Modern Poetics* (New York: McGraw-Hill, 1965) p.187
7. The writer John O'Hara quoted by Marianne Moore, "Idiosyncrasy and Technique," *Modern Poetics*, p.116

Illustrations

Figure 1: corpus-animus with cardinal axes, monotype study by author

Figure 2: corpus-animus with horizon, monotype study by author

Figure 3: corpus-animus at sunset, built work, photograph by author

Figure 4: corpus-animus calibrated to the human body, monotype study by author



Miroslav Šik: Analogue Drawing as Architecture

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Abstract

Miroslav Šik, who was a senior assistant at the chair of Professor Fabio Reinhart at the ETH Zurich in the 1980s, evolved a teaching method that has entered the recent history of architecture in Switzerland as „Analogue Architecture“. This method culminated in the eponymous exhibition which was first staged in the Zurich Architecture Forum in 1987 and was shown in different institutions across Europe between 1987 and 1991. A publication accompanying the exhibition is still the most important testament of the Analogue's. An analysis of images from the exhibition catalog is the starting point for reflection on drawings within this radical movement.

Fabio Reinhart and Miroslav Šik

Fabio Reinhart, an emerging star on the architecture horizon of the late 1970s, maintains together with Bruno Reichlin an architectural office in Ticino, where, "in contrast to the rest of Switzerland - architecture is considered a state religion".¹ Between the rational architecture of Ticino *Tendenza* and the Italian *Rationalism* of Rossi, he sees the fundamentals of architecture as "history as an expression of 'memoria', of cultural and collective knowledge".² It was this sense of the tradition that the former employee of Aldo Rossi built on later in his teaching at the ETH in Zurich: "Three key words characterize my teaching at the ETH Zurich: autodidact (the didactic aim), atelier (the didactic instrument), and analogy (the designing instrument). The aim was to link my (...) teaching experience with the Russian orthodoxy".³

In 1983 Reinhart, a new Professor at the ETH, hired (apart from Luca Ortelletti and Santiago Calatrava) as his assistant the young architect Miroslav Šik. Šik graduated from the ETH in 1979 and researched (in addition to his work as an architect) between 1980 and 1983 together with colleague Marcel Meili on moderate Swiss architecture in the 1940s at the Institute for the History and Theory at the ETHZ.⁴ At the chair, Šik soon took the intellectual leadership and developed in the following years a design and teaching method for which the term "analogy" is especially important. This method includes work on "references", which have been increasingly alienated in the course of design. The priorities in the selection of exemplars, as evidenced afterwards, were in the first phase, notably the "classics", the

¹ Cf. with the article by Fabio Reinhart, "Viele Mythen, ein Maestro: Kommentare zur Zürcher Lehrtätigkeit von Aldo Rossi, Teil II", *Werk, Bauen + Wohnen* 85 (1998)

² Ibid.

³ Ibid.

⁴ Research about the cantonal hospital in Zurich by M.E. Haefeli, W-M. Moser, and R. Steiger (1938-1951); cf. with following publications: "Rudolf Steiger 4.10.1900-24.6.1982", with Marcel Meili, *Archithese* 5.1982; "M.E. Haefeli – Wohnraum im Haus Heberlein, Wattwill 1940/41", *Archithese* 1 (1983)



representatives of the heroic modernism which Šik considers intensively in the early 1980s.¹ Later the focus shifted to "regionalism": In this phase, the models are *Reform Architecture* around 1900, the buildings of the *Stuttgart School* or of the first *Werkbund* generation.² During the first phase, which had not yet been rooted in the urban context, in the further development of the analogue teaching method, attention was paid to the references as well as increasingly on the specific context of the contemporary city. During this time the "periphery" gained importance, which culminated in the travelling exhibition in 1987.

Exhibition and Catalogue

The travelling exhibition "Analogue Architecture", which started in the Zurich Architecture Forum in Oktober 1987, was staged throughout Europe in various institutions between 1987 and 1991. The accompanying publication was characterized by an uncommon design in the form of a "cassette" with 56 individual project sheets and two introductory texts by Fabio Reinhart and Miroslav Šik – the manifesto of this radical movement.

Central to the exhibition were the large-scale student perspectives and Šik's competition drawings as represented in the exhibition catalogue. These student projects presented in the catalogue were designed from 1983 to 1987 (indeed, most of the projects were produced in 1986 and 1987). The subjects were "lower-middle-class or industrial plots in Zurich" rather than "postmodern places" such as "the historical city center, vacant lots or block perimeter development".³ Designs ranged from the planning of a car dealership in Zurich Oerlikon (1987), and an eye clinic in Zurich-Riesbach (1986/87), to a fire station in Zurich (1986) or a residential and commercial building (1985-86). Several large external and internal perspectives on each of the sheets were complemented by postage stamp-sized plans and sections. The relation of plans to images points once again to the fact that these drawings are much more than a pure visualization of architectural concepts.

Holistic Images

The language of these relatively homogeneous images had been developed and perfected in the studio in previous years. According to Šik, the key word was thereby a 'mood'. The drawing was not an abstract representation "reducing the concrete spatial experience to a spatial concept" but an entity of sensory experience, which was understood by Šik as "poetic realism".⁴ However, these dramatic images that built up to the "official expression" of the Analogues, were preceded by a development of a language of drawings that began with the line perspectives in earlier designs. The initial ink perspectives hardly differ from the common architecture representations at ETH Zurich at this time.

But the importance of representation grows together with the clarification of "higher order" questions. The perspective evolves from an agent of the abstract representation of a design project to the ultimate object of the design work. This working method is reflected in drawing technique. In several steps, selected references, such as Gunnar Asplund's buildings, or the architecture of the 1930's, become alienated. Starting from a collage, an "architecturisation" of the first images transforms the initial idea into a concrete architectural project.

¹ Cf. with Miroslav Šik, "The Kremlin's Constructivist Cathedral. Ivan Leonidov's Design for the Steel Industry's Commissariat", *Lotus* 45 (1985)

² Cf. with essay by Kenneth Frampton "Towards a Critical Regionalism" from 1983

³ Benedikt Loderer, "Der wertkonservative Rebell", *Hochparterre*, 1-2 (1992): 17

⁴ *Ibid.*



The presentation technique, established around 1986, with perspectives drawn with brownish Jaxon chalk on rough paper did not allow detailed elaboration of the project, according to Šik. Some of the selected design projects were redrawn by the students for the catalogue. Although the original images were not always monochromatic, monochrome induced by the printing technology called for an adjustment of the drawings: for example, in the project for the Consulate of Germany in Zurich by Andreas Hild from the academic year 1985-86.

A dramatic atmosphere in the drawings was created by being depicted either at dawn or just before a storm. Rather than conveying the reality, refer to a reality within the image. Šik emphasized later: "There were no constructed, but only drawn design projects. The building was replaced by the building of images."¹

he Analogues rejected utopia in the spirit of the realist tradition. The world could not be saved by architecture, "but it can be improved by architecture. Evolutionarily, moderately, gradually".² Analogues images were an artistic expression of an intellectual movement that was indeed a temporary phenomenon and ended with the departure of Fabio Reinhart from ETH Zurich; but at the same time it is still relevant to the architectural discourse in Switzerland. Many of the former AAs such as Christian Kerez, Quintus Miller and Paola Maranta or Valerio Olgiati, and many others who were at that time amongst the most faithful "analogue scholars" have since become some of the most important architects both in Switzerland and internationally.

Aldo Rossi and Analogies

To better understand analogue thinking, one has to keep in mind the influence Aldo Rossi has had, since he taught at the ETH Zurich between 1972 and 1978. Two books, *Architecture of the City* (1966) and *Scientific Autobiography* (1988), indicate a movement from autonomous architecture of the early days to the poetic subjectivity of the later years. During this period, while he taught in Zurich, there was a shift in emphasis from "types" in the direction of "analogies". One interesting example was the collage with the title "La città Analoga" that Rossi produced in 1976 together with his Zurich assistants, Eraldo Consolascio, Bruno Reichlin and Fabio Reinhart, for the Architecture Biennale in Venice. The collage for its part refers to the eponymous image by Arduino Cantaforo presented at the XV Triennale di Milano 1973.

Following C.G. Jung's concept of analogy: "'Analogical' thought is sensed yet unreal, imagined yet silent: it is not a discourse but rather a meditation on themes of the past (...) Analogical thought is archaic, unexpressed, and practically inexpressible in words."³ Rossi's use of "analogies" as a design approach proves henceforth to be essential to the development of contemporary Swiss architecture.

The everyday is grey

Sheds, anonymous infrastructures, and industrial warehouses, but also the world of commerce and mass culture were models for the Analogue Architecture in addition to reform architecture or modest modernism. While the exterior representations were characterized by the creation of an overall mood, rather than by facade details or tectonic structure, one sees in the internal perspectives that they arouse associations with sacred spaces, industrial halls or with the film sets for Star Wars.

¹ Cf. with the interview of Miroslav Šik with Hubertus Adam and Elena Kossovskaja, S AM Magazin 10 (2013): 166-171

² Benedikt Loderer, "Der wertkonservative Rebell", p. 18

³ Cit. from the article by Aldo Rossi, "An Analogical Architecture", A+U 5(1976): 74



The monochrome of the drawings stands in deliberate contrast to the colorfulness of the late 1980s. It was not the loud sounds and bright colors of postmodernism, but rather the everyday world was in the focus of the Analogue Architecture, since the contemporary city is shaped by everyday and ordinary life, and "everyday life is grey."¹

Everyday life as a resource for artistic work can be observed since the 1960s in works of Pop Art. Works such as *Twentysix Gasoline Stations* (1963) or *Every Building on the Sunset Strip* (1965) by Edward Ruscha served Robert Venturi and Denise Scott Brown as models for the analysis of everyday architectures in Las Vegas. These pioneering theorists of everyday architecture quickly become well known in Switzerland, thanks to Stanislaus von Moos.² But, translated into built architecture, Venturi and Scott Brown did not seek "a mere duplication of the existing conventions of the built environment".³ Rather, an alienation takes place during the transformation of "ordinary" buildings. The symbolic character of the ordinary is to be generated in the process of "de-automatization of perception" (Shklovsky) because "when the whole of this complicated life passes by unconsciously for most people, then in a certain sense it was not a life at all."⁴

The "alienation of alienation" – by Pop Art or Hyperrealism – turned out to be a successful method of critical treatment of everyday life. Swiss artists Peter Fischli and David Weiss operated in a similar way in their photographic series *Siedlungen, Agglomerationen*, where they showed the dreary world of Swiss suburbs with the meticulousness of an external observer.⁵

However, these recipes for an alienated representation of reality also carry a risk in the eyes of Šik: "Regionalism alienates reality in the same way as hyperrealistic art. If the poetic treatment fails, regionalism sinks without trace in the gray sea of regional architecture."⁶

Reactionary Rebellion

The backward-looking language of the selected references influenced the imagery of AA perspectives. On the one hand, the "rough" images proved an amazing closeness to the monumental-looking, dark-toned perspective drawings of moderate modern architects of the 1920s.⁷ However, the monumentality of form in Analogue Architecture was not intended with reference to a "higher order". On the contrary, there are "unheroic" themes and motifs which are staged in the pictures as a protest against the present. But unlike 1968, 1980 was not the time for political protest. A decade later, the intellectuality of '68, in which new social forms were sought through theory, was not to be found. The song by the cult punk band TNT *Züri brännt* (En. *Zurich is on fire*) was the anthem of a new generation. However, Zurich was not burning because of protest, but "vor Langweil ab" (En. *because of boredom*).

The dreariness of the Swiss urban periphery is aestheticised in the monochrome images of the analogue protagonists. This provocation must be understood as a "reactionary rebellion"⁸ – as a final

¹ S AM Magazin 10 (2013): 166-171, p. 169

² Cf. with Archithese: Las Vegas etc. oder: Realismus in der Architektur, 13 (1975); Archithese: Venturi & Rauch: 25 öffentliche Bauten, 7-8 (1977)

³ Elena Kossovskaja, "Das Alltägliche und die Architektur der Schweiz", S AM 9 (2010)

⁴ Cf. with Wiktor Schklowski, *Kunst als Verfahren* (1916), cit. from Kossovskaja, "Das Alltägliche und die Architektur der Schweiz"

⁵ Peter Fischli, David Weiss, *Siedlungen, Agglomerationen*, (Zurich: Patrick Frey, 1993)

⁶ Ibid.

⁷ Cf. with the internal perspective by Werner Moser (1921) for his diploma "Markthalle Wiedikon" or with the drawings by Karl Egender and William Dunkel from the 1920s, source: gta archive ETH Zurich

⁸ Cf. with Robert Fischer, "Dinosaurier und fliegende Echsen", in Martin Heller and others, ed., *Anschläge* (Zurich: Museum für Gestaltung, 1988): 87



protest of the mechanical world against the emerging digital future. The "erosion of the familiar"¹ ends in a melancholy that can be felt in the pictures. Analogues categorically rejected postmodern irony of empty signs which refer to something that is not there anymore, to this very loss of reality. They appealed to a world of "things", a world characterized by the death of industry, just like the black and white photographic series of winding towers, gasometers or grain silos by Bernd and Hilla Becher are not only a "securing of evidence" of industrial culture, but also a valorisation of these buildings understood as the monuments of a bygone era.

The expression of the analogue images was so radical that it led to controversial discussions within the ETH in the 1980s. An accusation of neoconservatism was even addressed to Fabio Reinhart in a discussion between Reinhart, Dolf Schnebli, Mario Campi and Helmut Spieker about the teaching methods of the architecture department, published in a renowned Swiss architectural magazine *Werk*.² The analogue images oppose the progressiveness of modernity, appealing to the "unfinished project of modernity" (Habermas). This accusation cannot be entirely rejected: finally, the analogue method appears with the exhibition in 1987 as a manifesto for the preservation of "traditional values".

Not only the language of the analogue drawings, but also the architectural forms in the images recall the "anti-intellectual" and moderate Swiss modernism. In his programmatic text "A few buildings, many plans" Marcel Meili writes about "the forms, in which everyday life has deposited its meanings over time."³ Referring back to Rossi, Meili interpreted the world of the ordinary as a world of collective significance for Switzerland, in contrast to the "historical pathos of Latin rationalism" of Rossi. The intended starting point of the newer designs was not the historical architectural tradition, but the anonymity of traffic-facility constructions and industrial buildings. The "special mentality of the Swiss modernism" is of particular importance in this context, referring to a "critical approach to the mediocrity of the country by [Otto Rudolf] Salvisberg, the anti-intellectualism of [Karl] Egger or the cool discipline of Emil Roth, whose position creates a link between the visual perception of Switzerland and our own modern tradition."⁴

Third Way and Old-New

Ota Šik, the father of Miroslav Šik was not only a high-ranking politician in Czechoslovakia, but also the author of a political and economic reform program, which has gone down in history under the name the Prague Spring. After the failure of the Prague Spring, the whole family had to flee in fear of persecution. Thus, Miroslav Šik landed in 1968 at the age of sixteen – and against his will – in Switzerland.⁵ Ota Šik, as a professor of Economics at the University of St. Gallen, developed and deepened his theory over the next years, proposing a path between socialism and capitalism. In spite of the fundamental criticism towards the interpretation of Marx in the socialist countries, which he calls

¹ "Der wertkonservative Rebell", p. 18

² "Lehrmethoden und Lehrinhalte: ein Gespräch mit vier Lehrern der Architekturabteilung der ETH Zürich über die Diplomarbeiten", *Werk, Bauen und Wohnen*, 6 (1986)

³ Marcel Meili, "Ein paar Bauten, viele Pläne" (1984), in Peter Disch, ed., *Architektur in der Deutschen Schweiz 1980-1990* (Lugano: ADV Advertising Company, 1991)

⁴ *Ibid.*

⁵ Miroslav Šik tried twice to escape back to Prague in 1968, source: Interview with Miroslav Šik in Zurich (2015)



an "instruction manual", Šik at the same time designated operating instructions for a fair society based on principles on each side of the Iron Curtain¹ in his own theory of the Third Way².

Until the 1980s, the whole family hoped for a return back to Prague. The nostalgia and sorrow of a homeless Czech with Jewish roots who had grown up in a "Jewish-Catholic-communist" world, can be found later in the works of AA as well as in the self-staging of the Analogue Architecture group regarding the culture of the working class or the punk movement. The analogue drawings appeal to the construction of "homeland" understood as a middle ground between the extremes of postmodernism and modern functionalism.

This imagined "Third Way" to the "Old-New" architecture of Miroslav Šik – either as a search for the inner homeland through the Analogues or as a turning back to the lost world of things – remains a longing, which probably explains the melancholy expressed in the monumentalization of the past in the analogue drawings. This third way proves finally not to be a path between the extremes, but rather a dusty road, overladen by the triviality of life. Nothing can permanently retain its radicalism when the patina of everyday life envelops things: "The law of local and conventionality prevails inexorably. A portion of radicalism dissolves after the following conversions and renovations. Some utopias are going to be smashed by their own colorfulness, and the rest emerged after a decade of oblivion as friendly example of the style for the next nostalgia."³

¹ Cf. with Elena Kossovskaja, "Die Theorie des Dritten Weges", Arch+ 221 (2015)

² Cf. with Ota Šik, *Der Dritte Weg. Die marxistisch-leninistische Theorie und die moderne Industriegesellschaft* (Hamburg: Hoffmann und Campe, 1972); Ota Šik, *Humane Wirtschaftsdemokratie. Ein Dritter Weg* (Hamburg: Albrecht Knaus Verlag, 1979)

³ Miroslav Šik, "Altneu", Heinz Wirz, ed., *Altneu: Miroslav Šik mit Daniel Studer* (Luzern: Quart Verlag, 2000)



Sensorial Approach to Public Space

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Abstract

This article sets out to understand how and why we feel the way we do in our surroundings, particularly through a sensory approach to public space, focusing on the body experience and perception through space and the consequences it bears to the architectural/ artistic project and the recognition of a *collective image of the city*. Thus, the temporal and spatial practices that occur in it are crucial, because they affect one's behavior.

Therefore, it is also intended to explore the range of relationships that occur in urban space and how design and artistic interventions can enhance the experiential aspects of spaces, whilst looking into the relationship between the human experience and spatial design, as well as expressions of urban culture and, above all, signifying practices in public space which activate sensory dimensions of city engagement.

1. Sensing the city: experiencing the urban surroundings

Urban space, in the course of Human History, remains the scene for cultural and artistic events. Culture interrelates and interacts with the cities, transforming both spaces and cultural events, so much that contemporary cities have become an important material for art, both as the subject and as the platform support for intervention. The relationship between man and space, how he perceives, interacts and grants it meaning is one of the central issues of the problems faced by contemporary society, questioned to the extent that architects and artists seek to discuss the appropriation of these spaces, considering them highly rich in meanings.

Thus, this paper sets out to understand how and why we feel the way we do in our surroundings, particularly through a sensory approach to public space, investigating people's sensory engagement with designed urban spaces and interventions. The focus will inevitably relapse on artistic and architectural practices, that is, on the appropriation and subversion of common urban elements for the creation of artistic, social and political reflections on spaces. In that sense, body experience and perception through space will be of the uttermost importance, since they influence and bear consequences to the project design and the recognition of a collective image of the city.

1.1 human perception and environmental experience

The world is captured by the sensorial stimuli that arrive to the senses and this intermediation, which affects the whole body, assumes that the individual has an active role transforming reality into a



panoply of meanings. As Juhani Pallasmaa (1936-) wrote in *The eyes of the skin: architecture and the senses*: "I confront the city with my body; my legs measure the length of the arcade and the width of the square; my gaze unconsciously projects my body onto the facade of the cathedral (...) I experience myself in the city, and the city exists through my embodied experience. The city and my body supplement and define each other. I dwell in the city and the city dwells in me."¹ Thus, perception of the built environment is defined by the multiple ways the individual receives information from his surroundings and the way he organizes, identifies and interprets the world, which occurs through immediate sensory experience coupled with memories and experiences from a particular place in the city.

While the focus on sensory experience in the city is nothing new, there is a bifurcation, centered on the artistic and architectural experiments, done by both artists and designers, which have shed light on how we attach meaning to particular places and spaces. Thus, understanding how the senses make human environment legible sets a new perspective, meaning that sensory perception is mediated by different and shifting spatial and temporal practices.

Indeed, both Art and Architecture seek to give visibility to intimate experiences of *being-in-the-world*, because "Every touching experience of architecture is multi-sensory; qualities of space, matter and scale are measured equally by the ear, nose, skin, tongue, skeleton and muscle. Architecture strengthens the existential experience, one's sense of being in the world, and this is essentially a strengthened experience of self."²

In this sense, the focus on the dynamics of movement over static observation allow us to understand space, not only by the static scale of a body endowed with weight, but also through the dynamic skill of the same body, capable of walking and creating an event. Therefore, space is here understood as a matter for action, experienced in an operative way, either by direct contact with it, either in an evoked way, so much that "The body is not a mere physical entity: it is enriched by both memory and dream, past and future. (...) The world is reflected in the body, and the body is projected onto the world. We remember through our bodies as reflected in the body, and the body is projected onto the world. We remember through our bodies as much as through our nervous system and brain".

3

1.2 the urban experience

At the start of the twentieth century, writers such as Georg Simmel (1858-1918) and Walter Benjamin (1892-1940), among others, emphasized the importance of a sensory approach to urban space, as a way for understanding the intricate narrative of life in the fast-paced environment of the modern city. Urban planners Kevin Lynch (1918-1984) and Jan Gehl (1936-), and geographers such as Yi-Fu Tuan (1930-) and Paul Rodaway were also concerned in the way places obtained sensory and cultural meanings for the individuals. And lastly, the efforts of the Norwegian architect Christian Norberg-Schulz (1926-2000) that has developed an extensive body of theory concerning the phenomenological experience in architecture.

Kevin Lynch in *The image of the city*, first published in 1960, makes an interesting approach to the city and how people interpret it. The author conveys the idea that the city has the ability to translate itself into images, that when captured by its observers, transpose social, cultural and economic values, "The images of the environment are the result of a bilateral process between the observer and the



environment. The environment suggests distinctions and relations, and the observer - with great adaptation in the light of their own objectives - selects, organizes and gives meaning to what he sees." ⁴

The author questions the relationship between the perceptive individual, which moves and acts on the city, and among the favorable space for his participation and experience of the surroundings. Lynch reinforces that the construction of the image of the city is substantiated by four aspects: perception, memory of the experience, interpretation and action, guided by the immediate use of senses. In the design process of these spaces, the consideration of formal elements influence the image of the city, since they create geographical and territorial reference systems - both individually and collectively. Thus, by establishing a legible appropriation of space and by conforming intervention tactics in designed urban spaces, art incorporates a reflection on the construction, use and meaning of space, addressing to the same architectural endeavors, which reinforce the centrality of experience in the definition of social spaces and places.

In *Life Between Buildings: Using Public Space* (1987), like many other authors, Jan Gehl analyzes the physical properties of human senses (such as smell, hearing, seeing) and social distances, examining the relationship between patterns of space use, specifically outdoor activities, and the spatial properties of the physical environment and the correspondence between the dimension of a public space and a sense of place: "Familiarity with human senses – the way they function and the areas in which they function – is an important prerequisite for designing and dimensioning all forms of outdoor spaces and building layouts. (...) A knowledge of the senses is a necessary prerequisite also in relation to understanding all other forms of direct communication and the human perception of spatial conditions and dimensions." ⁵

In order to improve the legibility of urban form, Gehl promotes an approach that uses human dimension as the starting point for his analysis and measuring of the success of the urban surroundings, by systematically documenting the performance of urban spaces, negotiated by human contact and social interaction.

In parallel, Yi-Fu Tuan in *Space and Place: The Perspective Of Experience*, from 1977, argues that it is through temporal and spacial practices that we attach particular experiences and memories to certain places, mostly by smelling, touching, seeing, hearing and tasting that those places become familiar to us, such that the senses "constantly reinforce each other to provide the intricately ordered and emotion charged world in which we live", ⁶ withal Paul Rodaway in *Sensuous Geographies: body, sense and place* (1994) resumes in the same line of action, focusing on sensory experience to emphasize the importance of repeated and routine engagements with places, making an account of the multi-sensory nature of human experience of space.

Norberg -Schulz, in *Genius Loci: towards a phenomenology of architecture*, published in 1980, explores the character of places and their meanings for people, whereas Lynch ignored meanings and focused on structure, image and identity. He claims that place is more than a geographical location, because place is the concrete manifestation of human existence, composed by elements that convey meanings.

"Because man inhabits between two completely opposite worlds, the first being tangible and accessible; the second, non- tangible and inaccessible, to dwell means much more than shelter, dwelling is synonymous with what he calls *existential support*. Existential support (which according to him is the purpose of architecture) is granted to man through the establishment of a relationship between him and his environment, mediated by perception and symbolism: "Man dwells when he can orientate



himself within and identify himself with an environment, or, in short, when he experiences the environment as meaningful. Dwelling therefore implies something more than “shelter”. It implies that the spaces where life occurs are places, in the true sense of the word. A place is a space which has a different character. Since ancient times the *genius loci*, or “spirit of the place”, has been recognized as the concrete reality man has to face and come to terms with in his daily life. Architecture means to visualize the *genius loci*, and the task of the architect is to create meaningful places, whereby he helps man to dwell.”⁷

Although Norberg-Schulz’s approach may result in a place with identifiable character and symbolism, we argue that it is the people—individuals and society—that integrate these tangible and intangible features, through their value systems, to form a sense of place, paired with an interdependent quality which is the experiential value of the surroundings.

2. Correlations between Art & Architecture

From a historical perspective, the concerns of Art and Architecture have always been noticeable, due to a deep and extensive relationship that involves both fields. There’s a divided responsibility shared for centuries in the design and production of design works which consolidated a partnership that never completely individualized.

The common ground where both fields of knowledge coexist has undergone significant changes, more or less influential in their own spheres of action. As Josep Maria Montaner (1954-) refers “It is not possible to understand the evolution of architecture and modern urbanism without regard to their ongoing relationship with art.”⁸ Architecture often assumed the role of the work of art due to its complex sculptural and pictorial effect, on one hand. On the other hand, its formal, spatial and situational components (which compose urban relations) were often defined by the sculptural and pictorial plasticity they suggested as hierarchical elements of space definition, depending on their use: squares, towers, entrances, relations between spaces, among others.

This artistic presence in the building complemented and defined the character of the architectural work: there was a very strong symbiosis between function and aesthetics, thus maintaining a link, either by historical influences or the context of every era, there was always a common factor. Small elements that marked a style could be present in a pictorial design, sculptural, literary, performative and architectural work of the same era.

2.1 project design and sense of place

Both Art and Architecture take the city as their subject, composing project designs that define the scope of action of both disciplinary discourses: “The city provided materials, models of process, and a primitive aesthetic of juxtaposition – congruity forced by mixed needs and intentions.”⁹

Although there are other fields of knowledge, such as anthropology, history and geography, that accumulate reflections on the same matter, their focus is primarily on perception, production, use and meaning of urban spaces. In this sense, these efforts also add an expanded knowledge about the city and give way to new poetic narratives, sometimes parallel, other times converging with the architectural discourse, but which clearly differ from architecture in terms of purpose. To clarify this difference take for instance the close case of geography, which also deals with space and territory. But still, it remains



a descriptive discipline as explained by Vittorio Gregotti (1927-) in *The Territory of Architecture*¹⁰, since it "does not build propositions", while Art and Architecture, do. Thus, both fields share this propositional nature that implies not only the ability to reflect on the city but above all an intention to formalize, materialized in a project design that encloses and complies a transformation.

Moreover, Gregotti tackles this issue, recognizing architecture's purpose to rationally order the surrounding environment, in order to qualitatively improve the urban structure by establishing connections between the various elements and their functions of the physical environment. Both architectural and artistic interventions change the landscape and the modifications coming into contact with it constitute a new look that tends to bring out the social centrality of the city; as he assumes, architecture can be taken "as document for other disciplines". This affinity between fields is set by the conviction that the mutual questioning of the dialogue between the two is a crucial issue for the understanding of the contemporary world.

The experience of place supposes a direct involvement with it, thus opening multiple possibilities and being in permanent definition. Thus, the sensory stimuli that the individual experiences is largely arising from his intervention and interaction with the environment, as much as of his understanding of others. Indeed, "The sense of place, as the phrase suggests, does indeed emerge from the senses. The land, and even the spirit of the place, can be experienced kinetically, or kinesthetically, as well as visually. If one has been raised in a place, its textures and sensations, its smells and sounds, are recalled as they felt to a child's, adolescent's, adult's body. Even if one's history there is short, a place can still be felt as an extension of the body, especially the walking body, passing through and becoming part of the landscape."¹¹

But there is an important consideration to be made: place it's not a mere abstract allocation where events occur and things relate with each other, it is a totality of meanings which suppose a new look upon architecture, city space, culture and art, thus understanding that it is essential to the composition of a public space culture.

For Architecture, from a disciplinary view point, the notion of place (in its multiple meanings) had an essential role in the reconsideration of the postulates of the The Athens Charter and the functionalist town planning in the post-war decades, since place corresponded to an inhabited and lived type of space where the body represents the measure of subjectivity always imbued with memory, and where the emphasis was set on the reconsideration of the concept of place as tied to the abstract concept of modern space design (where place implies memory).

For Art, the concept of place charged an explicit importance in propositions in the sixties, especially those related to *Environmental Art*. Some landscape interventions began to indicate a change of direction, suggesting a change in the tradition of: *the object in place* - the monument, the sculpture placed in the public space – towards an emerging tradition, supported for example by *Land Art*, *Site-Specific* and *Earthworks*, where the object *became the place*. In these initiatives, the artist is no longer content to produce an object to place in the landscape; the artist wanted to put in motion a process of landscape reconstruction and invention.

These interventions establish a clear passage in which art ceases to be a product of materiality, a visible object, a tangible and noticeable piece of design to ally itself to a device that is placed onto a situational context, between the artistic work and the space that contains it.



2.2 manifestation of art and architecture as critical practices

Art and Architecture intersect in the contemporary world in a more intense and mutually inclusive manner: from the pavilion to the installation, from concept to context and from technology to plasticity. Thus, the migrations between these two discursive scopes of human culture acquired a positional and assertive character: artists have something to say about the built environment, about the isotropy of the territory and about the architectural experience of space and make it through appropriations, analogies, repetitions and review of architectural syntax. In turn, architects find in the polysemic topography and permanent recreation of the artistic field the opportunity for a contemplative pause, concerning what the other has to say about the similarity of the urban landscape and the marginal nature of architecture, what it has to say with gestures and habits in the commonplace, and the appropriation of space in urban areas.

Architects find it interesting to know how artists integrate space in their works, how they accentuate and intensify the lived dimension of built space. Knowing their performative techniques: how they represent and remake the world and apply in their work/ artistic operations the concepts of discontinuity, collage, assembly, use of different reality materialities (optical, tactile, olfactory, experiential) allows them to discuss about the common dialectics, ranging from norm to deviation, from truth to fiction, from utopia to dystopia, which is intrinsic to the human experience.

The deviations on architectural practice confronts us with increasingly pressing conjectures in the contemporary world, relating to space, time, memory and our own architectural exercise. The deviations and intersections of both practices have shed light to the (de)contextualizations and/ or (inter)relations within contemporary architecture, and thus allowing us to better understand the more complex issues of *site/place*, *subject/object* and dissecting the meaning of movement, flow and exchange, both physically and ideologically, as well as to establish and to build interlocutions with artistic practices that respond to common aspirations.

At the roundtable proposed by *Artforum* magazine, entitled "*Trading Spaces: a roundtable on Art and Architecture*"¹², and published in October 2012, the central theme was the interactions between Architecture and Art, which took a major role, referring to a contemporaneity that is aware of this approach and reunion between both fields, this is "If the interchange between these fields offers a host of new possibilities for structure, space, and experience, it also makes reflection on their status more urgent".¹³

In this tertiary and post -industrial era of globalization, ruled by convention, Art ceased to be merely represented space (this is, mimetic space that only includes us as spectators) to also become experienced space, crossed through, touched and felt.

The methodological distance that once set them apart, as well as the particularities of their ways of doing and being have decreased. Artistic interventions have depended, as much as an architectural design, in the intermediation of a project design with the interference of technical staff, different equipments and materials, close to those observable in construction sites. The internal issues: what it is, how it is done, for whom it is done, what materials and contents are being used, have won a common lexicon and poetics (let us not forget that the etymological origin of the word "*poetics*" comes from "*poien*" which in Greek means "*to build*") and the divergent lines began to cross in the same plane: "One



thing art and architecture can do together is to highlight the nonfits between old structure and new systems, the nonsynchronicities between our different modernities.”¹⁴

Therefore, it seems to be that what will actually convert these project designs into targets of critical interest is the challenge they set towards the reflections around space and time which express, ultimately, critical practices that tend to problematize the relationships between project design and place, revealing the affinities and the mechanisms set in motion to engage citizens in a critical, proactive and purposeful manner, as well as underline its transformative potential on the sociocultural dimension, in the possibility of stimulating the revitalization of the urban public space that supports them.

3. Approaching public space through Art & Architecture

“Those who say that architecture is impure if it must borrow its arguments from other disciplines not only forget the inevitable interferences of culture, economy and politics but also underestimate the ability of architecture by contributing to its polemic. As practice and theory, architecture must import and export”.¹⁵

Reflecting on the concept of public space means inscribe it in the space of contemporaneity. The approach to public spaces as support and substance of artistic intervention has been developed as a result of the approach to space as a separate and specific category of research, from the end of the fifties of the twentieth century. These interventions in public space have been developed with a process based on the prerogative of multi-sensory experience as a means of documenting the diverse place-making practices of societies, exploring the assumption whether architectural/ artistic actions could trigger the revitalization in the urban public space.

From the sixties until the seventies, Bernard Tschumi (1944-) argued that architecture is linked with urban issues, which are also the result of the social, economic and cultural forces. He claims that architecture, in addition to address its own concerns and intrinsic problems (how to design harmonic and pleasant spaces and at same time functional ones), architecture should also share concerns and problematics with other fields of knowledge, since artistic manifestations had potential to become instruments of social transformation, so much that both scopes should join forces. Thus, the theory of architecture should not be thought of as a materialization of form (as it commonly was) but as an opportunity for the architect to participate in the cultural debate. That meant to Tschumi to undertake architecture as a means of actively participating in the controversy present in the sphere of culture.

Within this broad context, Bernard Tschumi and Gordon Matta-Clark (1943-1978) sought to design models of non-functionalized spaces and unconditioned that could allow the occurrence of new forms of sociability. Therefore, the desire to intervene in the meanings attributed to the use of space and time proposed an aesthetic and cultural manifestation sought to adopt new meaningful actions to intervene in public spaces.

3.1 methods across disciplines: the “expanded field”

In the “expanded field” of contemporary culture, Art and Architecture increasingly share common issues. Hence, whether in relations of collaboration or confrontation, art and architecture dissolve their disciplinary boundaries to compose a powerful social and media framework, where meaning is essential for the understanding of the contemporary world.



In 1979, the plastic arts gained a fundamental contribution in their theoretical approach to architecture, set by the publication of the article "*Sculpture in the expanded field*" by Rosalind Krauss (1941-). The introduction of this "expanded field" in sculpture consisted on a shift in the boundaries between disciplines, establishing a new framework for the expansion of support and scale found in the *Site Specific* production done by *Land Art* and *Earthworks* artists, which extrapolated from the interiors of galleries and museums to take the world - natural or constructed - as an intervention substratum.

From her Klein diagram, Krauss identifies this expanding field of plastic arts in the transition from the neutral terrain of sculpture, something which is placed on the landscape or in an architectural construction to what cannot be named sculpture anymore, actions such as: the manipulation of the territory (not landscape/ landscape: *marked-sites*), e.g. Robert Smithson's *Spiral Jetty*; the construction of the territory (landscape/ architecture: *site-constructions*), e.g. Robert Smithson's *Observatory*; and interventions in the real space of architecture or architectural experience (not architecture/ architecture: *axiomatic-structures*).

"Because as we can see, sculpture is no longer the privileged middle term between two things that isn't. Sculpture is rather only one term on the periphery of a field in which there are other, differently structured possibilities."¹⁶

Krauss, while establishing those operating methods of transformation and reinterpretation of the site, makes an approach to the territoriality condition inherent in the architectural discipline. Thus, by approaching sculpture to the domain of architecture, Krauss opens up the opportunity to trace the reverse path of this intersection, that is, to recognize the utility of this expanded field of contributions, to identify the territory's processes of transformation in the poetic construction of place in architecture.

In order to explore these new frontiers in architectural paradigms, Krauss's "expanded field" was transposed into architecture by Anthony Vidler (1941-), in his article "*Architecture's expanded field*", published in *Artforum* Magazine in 2003. From the interweaving of the arts, and by lending the *axiomatic structures* (not architecture/ architecture) present in the Klein diagram, Vidler recognizes a recent expansion in the field of architecture, molded from the new relations established by the discipline with four unifying principles: landscape, biology, program expansion and internal development of architectural design, by introducing the use of diagrams resulting of new digital modeling and production platforms.

If Krauss's "expanded field" pointed to the dissolution of the expressive boundaries between the two spatial arts (sculpture and architecture), Vidler's proposition directs architecture elsewhere: as a way of rebuilding the fundamentals of architecture, in search of an ecological aesthetics to the discipline, able to respond to contemporary issues of human settlements that until then architecture has not been able to solve.

3.2 spaces of indeterminacy, spaces of opportunity

The interest of the present article is emphasized by recognizing in the current architectural production a growing concern at this narrowing relation of the building and its surroundings (either natural or urban), seeking an expansion of the phenomenological user experience. Perhaps this need to reconnect with human perception in the physical world is architecture's response to the growing dispersion in the world, which is increasingly virtual, intangible and generic.



This “expanded field” of common vocabulary and relational spectrum between Art and Architecture allows us to research further into the investigation of the tangible (materiality, scale, tectonics and construction) and intangible values (memory, light, color, senses, among others) of architectural intervention, allowing us to observe the phenomenological and symbolic repercussions they have in the inhabitant of space (either user or spectator).

The approach observed between *Land Art* experiences with those of a reflexive architecture, oriented towards place, is especially established by the compatibility of site transformation methods. The precise handling of all constitutive parts, the attention to the existent circumstances lead to subtle interventions, which carried new attachments of meaning. Therefore, this compatibility seems to legitimize a dynamic flow between disciplines to incorporate the “expanded field” proposed by Rosalind Krauss into the theoretical framework of the architectural project design. Thus enabling to restore the artistic dimension of the architectural work, not by formal mimesis, but for its symbolic potential and sensory significance of place.



Endnotes

- 1 Juhani Pallasmaa, *The eyes of the skin: architecture and the senses*, (West Sussex: John Wiley & Sons Ltd., 2005), p. 67-68.
- 2 Juhani Pallasmaa, *Ibidem*, p.41.
- 3 Juhani Pallasmaa, *Ibidem*, p.45.
- 4 Kevin Lynch, *A imagem da Cidade*, (Lisboa: Ed. Edições 70, 2008), p.14 (*portuguese edition – author's translation*). ORIG. *The Image of the City*, (Cambridge: MIT Press, 1960).
- 5 Jan Gehl, *Life Between Buildings: Using Public Space* (London: Island Press, 1987), p.65.
- 6 Yi-FuTuan , *Space and Place: The Perspective Of Experience*, (Minneapolis: Minnesota Press, 1977), p.11.
- 7 Christian Norberg-Schulz, *Genius Loci: towards a phenomenology of architecture*, (New York: Rizzoli, 1980), p. 5.
- 8 Josep Maria Montaner, *A Modernidade Superada: Arquitectura, Arte e Pensamento do Século XX*, (Barcelona: Editorial Gustavo Gili, 2001), (portuguese edition), p 149. TITLE TRANSL. *Surpassed Modernity: Architecture, Art and Thought of the Twentieth Century*.
- 9 Brian O'Doherty, *Inside de The White Cube*, (California: University of California Press, Ltd, 1999), p.44.
- 10 Furthermore: Vittorio Gregotti, *Il Territorio dell'Architettura*, (Milano: Feltrinelli, 1993), (*italian edition- author's translation*). TITLE TRANSL. *The Territory of Architecture*.
- 11 Lucy R. Lippard, *The Lure of the Local – Senses of Place in a Multicentered Society*, (New York: The New Press, 1997), p. 34.
- 12 "Trading Spaces: A roundtable on Art and Architecture" with the participation of Julien Rose, architect and american editor, moderator; Philippe Rahm (1967), swiss architect; Steven Holl (1947) american architect; Thomas Demand (1964) german sculptor and photographer; Dorit Margreiter (1967) austrian photographer and video-installation producer; Hal Foster (1955) american historian and art critic; Hilary Lloyd (1964) british artist; Sylvia Lavin professor of Architecture History & Theory at UCLA; Hans-Ulrich Obrist (1968) swiss curator, historian and art critic.
- 13 *In Artforum Internacional Magazine*, Issue October 2012 (2012), p. 201.
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- 15 Bernard Tschumi, *Architecture and disjunction*, (Cambridge: MIT Press, 1996), p. 17.
- 16 Rosalind Krauss, "Sculpture in the expanded Field", (*Cambridge: MIT PRESS, 1979*), p. 38, available online at:
<http://iris.nyit.edu/~rcody/Thesis/Readings/Krauss%20-%20Sculpture%20in%20the%20Expanded%20Field.pdf> (02-04-2016).



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Unveiling the Archetype. Redrawing the Triple Igloo by Mario Merz

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Abstract

The present abstract introduces certain investigation results on the Italian artist Mario Merz (1925-2003) and his Triple igloo (Untitled, 1984), which today can be seen as an item of the collection of the Museum of Art and Architecture of the XXI century (MAXXI), in Rome.

This survey is part of a wider research related to the relation between art and architecture, focusing on the double role of drawing: at first, as a tool for the genesis of a work of art in the hands of the artist and, at last, for the in-depth analysis of the researcher. Such inclusive exploration is supported by didactic experiences approached in a Drawing studio, where the main task is redrawing selected works realized by artists operating as architects. The Triple igloo is one of the selected case studies *.

Mario Merz realized a long series of works named or recognizable as “igloos”, since 1968 to 2002, when his installation Igloo Fountain for the renovation of the “railway link” of Turin was inaugurated. This kind of three-dimensional works of art can be considered as an actual concentration of architectural influences: the archetype of the shelter, the creative process based on the spiral, the space designed by neon lights, the Fibonacci series, the use of iron, glass, clay...

It is possible to recognize many examples of ancient and contemporary architectures revealing one of these suggestions in the main concept of the design, but in Merz’s work these topics co-exist all together in apparent absence of geometry.

While art historians investigate poetic and theoretical suggestions, the focus of this research is Drawing itself, as an instrument to recognize and re-trace the process of raising the installation, even if it was firstly built up without technical drawings. Furthermore, the main research aims to experiment a graphic method for documenting art installations. Drawings are organized following a precise method: 1- illustrating the concept; 2- offering technical and construction information; 3- analysing the user’s perceptions and interactions. Scale model is an essential instrument to understand and visualize three-dimensional projects; to be exhaustive, the inspected methodology can’t disregard the importance of the architectural maquette. The realized graphic analyses can work as prototypes for the design of a critical archive on existent and future works of art detected by diverse research experiences on art and its role on theory and practice of architecture.

* The report mainly presents the results accomplished by two students of the studio: Cristina Ciurlante and Giulia Cascioli.



Art as Exploration of Landscape in Hong Kong

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Abstract

The understanding of land and connection with the environment are supposedly natural instincts that humans have.

Being one of the densest cities in the World, Hong Kong's concrete forest (building blocks) has made its citizens dissociate from nature.

Employing the philosophies and approaches of early Land Art that emerged from 1960s, "Shaping the Landscape" is a program in Hong Kong aiming to engage people with the landscape through art creation.

Rather than understanding pure nature, art sites were chosen in Hong Kong where there are complex issues of relationships between human and nature, for participants to explore and investigate. This echoes the contemporary environmental issues faced globally, including Hong Kong, that nature no longer just carries the spiritual / religious connotation to the local people, but also turns into resources that people compete for, and victim to some of the human's act of development.

Since 2011, "Shaping the Landscape" has explored Hong Kong local sites including Lei Yue Mun abandoned quarry - an early granite quarry excavated by early settlers to make a living; the Hakka villages of Lam Tsuen and Lai Chi Wo - 400-year-old villages that retain the original feng shui configuration yet vulnerable to urban expansions; and the Pokfulam and Tai Tam Reservoir systems - two early British colonial waterworks of how the landscape of Hong Kong was altered for commodifying water for consumption.

A series of art works were done on-site, expressing and critiquing site issues at stake. Some of the art forms respond to the site-specific conditions, some approaches work with the site's natural cycles, some also use site materials to keep the art pieces authentic to the local environment.

This paper aims to illustrate how art creation in the landscape is used now used as an alternative means to discuss environmental issues in Hong Kong, whether it complements the development of how people here understands the environment, and whether it helps contextualize the complex human-nature inter-connected relationship in our dense Asian city.

"Shaping the Landscape" Link:

<http://fac.arch.hku.hk/la/shapingthelandscape/>



On Drawing

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Abstract

It is not easy for me to come up with an inclusive statement on what drawing has meant to me over the years, as a child, as a young adult and today, and how drawings has influenced my personality, professional skills and the creation and teaching of architecture. Drawing has definitely contributed to my ability to see, focus, comment and remember. It has always been a way to express my observations on people and places with a personal interpretation, and thus view architecture primarily as a stage for human interaction.

As a child and young adult the ability to draw and sketch has definitely contributed to my self-confidence and assurance, and in later years to understanding, evaluation, judgment and professional development.

I recall that upon graduating high school I was asked to present in drawings our learning and our school. Our literature teacher has asked me to draw murals on our studied literature, his comment on my drawings on Miguel de Cervantes' Don Quixote was that he surprised to see that I have focused on the horse and Sancho Pansa , a drawing which was in my head as we studied, portraying Don Quixote as always being led and never in control of situations he encountered. For the same happening I was asked to draw our teachers, there I got the floor to comment on twelve years of childhood and I was accused of being provocative, and some of the drawings were removed.

Committing myself to the studies of architecture I entered a "dark age", drawing became a tool to describe tasks and ideas, rather than living places, people and feelings. Only finding myself more at ease with architecture and confident with my professional skills, which is still not easy for me today, I have returned to sketching, which is my way to see, relate, interpret , recall memories and create for the last 30 years or more.

I do not regard drawings as an immediate tool to conceive architectural creations, I rather consider drawing as personal impressions, a depiction and representation n of accumulated experiences of situations bringing together people and places. In contrast to photography drawing has always required focusing, emphasis and / or exaggeration in scale and mood.

Travelling and being detached from daily personal chores and professional obligations, drawing has become a way to comprehend and connect people and places, creating a bulk of accumulated personal



arsenal which has always influenced my view on the essence of the making of architecture, as the celebration of people and their activities, places with their cultural and physical heritage all in view of time, honoring the past, addressing the present and looking forward into the future.

This insight is best exemplified by a sequence of different sketches of people and places representing un separated ensembles in life, some of temples and the bustling markets of India connected by an intensity of human activity and markets and tribe people in Vietnam, in contradiction to the austerity of Oxford's colleges, and bar culture in in resort town of Puerto Vallarta in Mexico. The representation of the expressive flow of Baroque architecture in Sicily a stage for festive celebrations, in contrast to minimal and austere Nabataea rock carved architecture in Petra, Jordan.

The design of the Rabbi Nachman Synagogue in Uman, Ukraine represent a design process which has been inclusively developed from personal impressions and drawings of places and landscapes, light and materiality in Ukraine and people in their activities celebrating pray and learning. These drawings together with sketches interpreting abstract ideas relating to Judaism and places of worship, led to a detailed design; form and structure of a building which I do not think I could have conceived of without sporadic personal impressions expressed in drawings.



Is the Architecture of the Architecture Profession Sustainable in an Era of (de)Professionalization?

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Abstract

Professions in the U.S. appear to be undergoing rapid de-stabilization and (de)professionalization. Are professions the new drosscapes of postindustrial society or are they just in a systolic phase awaiting the next diastole? What could this diastole look like? What about architecture, one of the oldest and most respected professions? What about its relationship to art and creative genius production? There have been many recent articles questioning the current relevance of the architectural profession indicating that that now may be the time for the profession to innovate and redefine what it can offer society. This study views the slow adaptation process in the architectural profession in the context of (de)professionalization or as professionalization in reverse (Abbott, 1988) and utilizes that view and other strategic frameworks to analyze current (de)professionalization pressures on the U.S. architecture profession. The primary interest of this paper is to achieve an understanding (*verstehen*) of the (de)professionalization pressures affecting the architectural profession and to flush out pivot points of opportunity for future innovation, and reorganization.

Introduction

In this paper I examine the specific domain of architecture, one of the oldest models of professionalization. The profession of architecture takes great pride in its legacy of being the mother of all arts. Its atelier based system of teaching and apprenticeship which emanated from the Ecole des Beaux-Arts in early 19th century Paris established a tradition of an arts based focus that in many ways, continues to this day. To many architects, it seems that today's emergent start-up and innovation culture is appropriating many things from this system of architectural education, things such as design thinking, studio culture, and charrettes; experiences that architects hold dear to heart, yet they do not financially benefit from. The problems of the architectural profession have been discussed widely. The profession has some of the highest barriers to entry of any profession, and the U.S. has the longest minimal time to licensure of any other country (ACSA, 2013). The average age an architect gets licensed is currently age 33 (NCARB, 2015) and the average starting salary for interns is about \$40,000 (Willis, 2013). Most think this is a much too low return on investment for the effort involved. Yet, it is frequently held up as one of the highest regarded professions but, at the same time, identified as one of the worst professions for job security and compensation. "Even though there is ample literature depicting the deficiencies, few offer practical solutions as to how to resolve them" (Tijerino, 2009). Due to its long history, the profession of architecture is fertile ground for the study of (de)professionalism and the



interplay of values and traditions in the search for jurisdictional innovation and change. This study will focus on the U.S. market.

Literature Review

To properly situate the architecture of the architecture profession in the (de)professionalization literature I will start within the context of existing theories of professionalization which will later be used to analyze some of the events currently taking place in the profession. In examining theoretical research on professions, the architecture profession appears to be the least examined and understood.

The trait and characteristic theories defining professions are not especially helpful in analyzing architecture. Abbott (1988) proposed a breakthrough when he asked that we consider a more synthetic definition of the way we institutionalize expertise, a structural and cultural form of jurisdictional control focused on the work. The work, in Abbott's model is comprised of tasks driven by objective and subjective problem definition, and the ability to define (or claim) a problem - a great source of power for professions (Abbott, 1988 p.137). In the work of addressing problems, jurisdiction is exercised in "3 acts of professional practice", 1) Diagnosis 2) Inference and 3) Treatment (Abbott, 1988 p.40), (Fig. 1).

Freidson (1986) explains that diagnosis is a process of taking in information through colligation (structuring a problem definition into a needs assessment or picture of the client separating relevant information from that which is irrelevant) and classification (mapping that picture to a dictionary of legitimate problems). The diagnostic classification system is constrained by the abstract foundation of professional knowledge maintained by academic professionals.

Inference is the only true professional act, it works by inclusion (the elimination of options) and construction (selection of an action), a heuristic process which takes place when the connection between diagnosis and treatment is obscure (Abbott, 1988 p.48-49). It is heavily reliant on the abstraction of knowledge. In referring to this abstraction process in architecture Abbott states:

"The chains of inference from a diagnosis....are long and involved". "Even though the elements of these chains are all logically subordinate to the design tasks, the chains transverse the jurisdictions of many other groups...these occupations takes its toll of the autonomy of architecture's inference, and in fact the architect often becomes a broker negotiating a general design through a maze dictated by others" (Abbott, 1988 p.50).

In continuing on about architecture, Abbott states that the minimization of inference results in routinization, visible in architecture as the preparation of working drawings, budgets, building code analysis, specifications etc., these procedures are often delegated to subordinates or targets for poaching by other professions and for (de)professionalization by the state (Abbott, 1988 p.51).



Treatment takes information out of the system; it is a claim to take action against the problem. It has many of the same steps as diagnosis including colligation and classification but if this step is delegated it also leads to (de)professionalization (Abbott, 1988 p.46). The pathway between diagnostic and treatment may not be one-way; it very well could be an iterative process. The link between diagnostic and treatment phase is often mysterious due to the abstraction of inference; everyday people are not able to understand the relationship and the profession is thus able to protect its professional claim of jurisdiction (Martin, 1998). This view point was earlier articulated by Hughes (1958) who talks about the intentional fabrication of mystique; what professions do and how they do it, for the purpose of protection.

Academic Knowledge is intimately tied to professional practice (diagnosis, inference, treatment). “A profession’s formal knowledge system is ordered by abstractions” and classification systems are “organized along logically consistent, rationally conceptualized dimensions”, thus the power and prestige in a profession is contingent on its academic knowledge, which empowers agency in exercising jurisdiction (Abbott, 1988 p.53). One of the most powerful jurisdictional boundary tools is abstraction. Little abstraction without formalization can make a profession seem weak and can be viewed as craft, while too much abstraction can make the profession appear esoteric (Abbott, 1998 p.103). The ability of professions to maintain their relevancy is based on the manipulation of an abstract knowledge radio dial type volume control (controlling too much or too little abstraction). Professional power is often dependent on this type of internal manipulation which can “generate or absorb system disturbances” (Abbott, 1988 p.117-118). As an example, Abbott goes on to describe the viewpoint that “professionals admire academics and consultants who work with knowledge alone; the public admires practitioners who work with clients”, a strategic radio dial type manipulation in response to jurisdictional pressures can be used to absorb “external disturbances” (Abbott, 1988, p.119). Professions need an arsenal of these types of response capabilities.

All of architecture takes great pride in its creative design ability. Csikszentmihalyi (1997) states that “a person who want to make a creative contribution not only must work within a creative system but ...must learn the rules and content of the domain” (Csikszentmihalyi, 1997 p. 47). Csikszentmihalyi views the creative individual-field-domain ecosystem as an integrated system facilitating “creative genius” production; this system must be conceptually navigated. The Freidson (1986) and Abbott (1988) model of professional work (Fig.1) is part of this navigation process in architecture. We can adapt this model to make it more architecture specific. Jones (1992) expands the Freidson (1986) and Abbott (1988) model inference act with a design-centric (convergence-transformation-convergence) view of the process (Fig. 2). Martin (2009) further informs the Jones (1992) design-centric process by layering in a design thinking transformation (mystery-heuristic-algorithm) conversion methodology (Fig. 3).

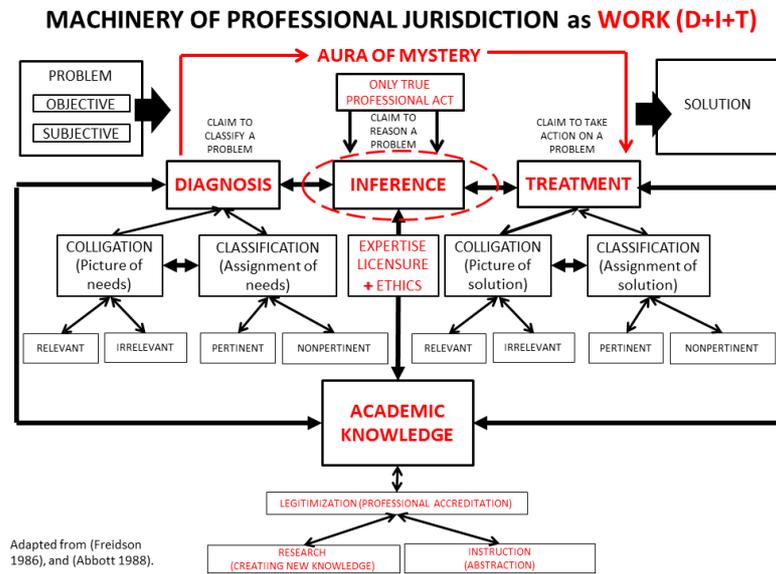


Figure 1. MOPJ-Work

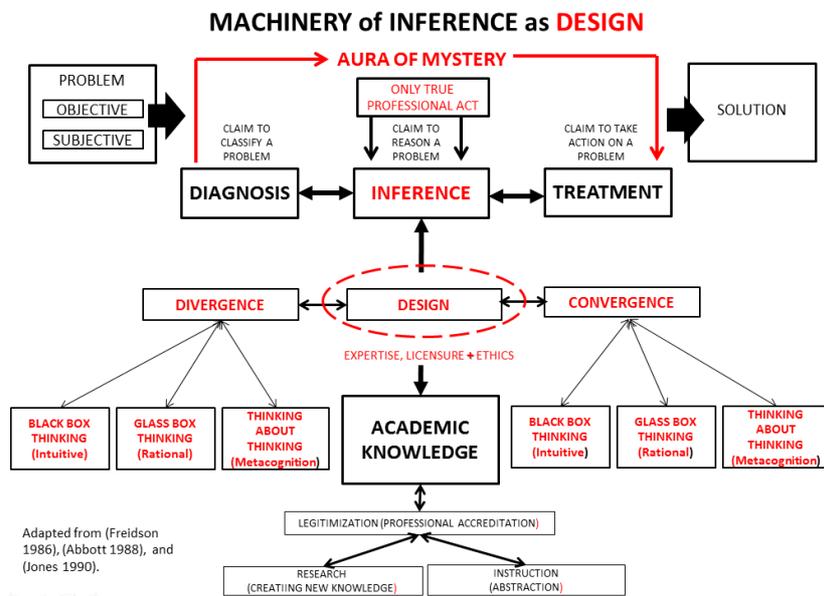


Figure 2. MOI-Design

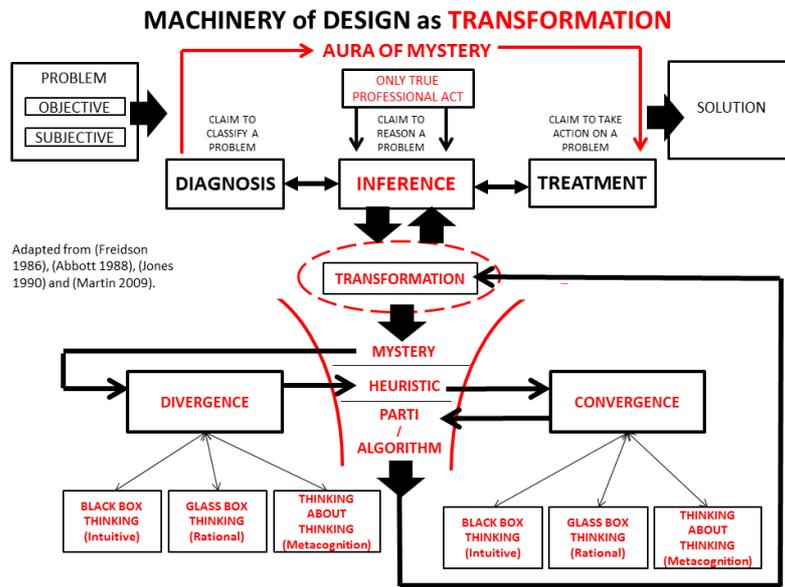


Figure 3. MOD-Transformation

Theorizing profession at the level of the work allows an intimate comparative historical basis for understanding change and disruption within the jurisdiction. The concepts of creativity and design are often not seen in peer professions where practices are more focused on organizational efficiency and profit. It is thus important to produce a hybrid jurisdictional model of work which incorporates architecture's creative design mystique and passion that can be used to identify pivot points of opportunity for future investigation. Design appears to be the main key and aura to sustainability of the architecture profession yet it typically demands approximately only 20% of the overall fee (Fig. 4).

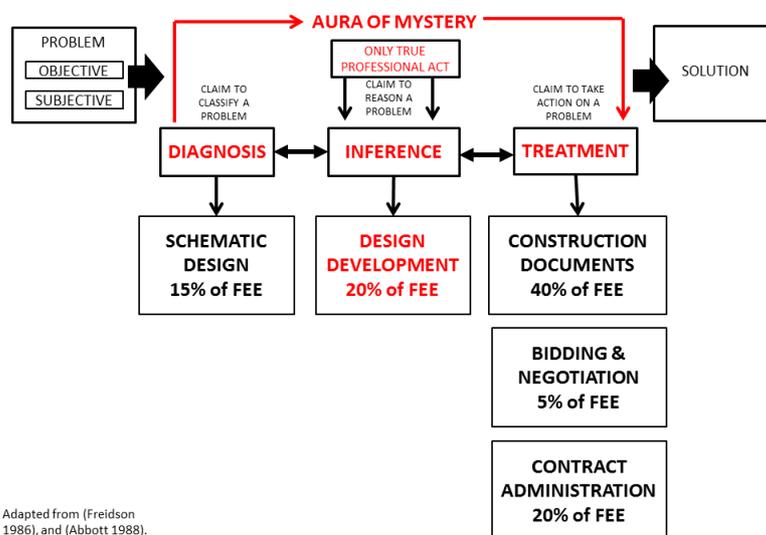


Figure 4. Architectural Basic Services

The aura of the mystery around design is the most important aspect of the architectural professional jurisdictional claim. Dreamer reinforces the creative/design orientation of the profession



stating that most academic [BARCH or MARCH] programs have half of the curriculum devoted to design (Dreamer, 2011). The diagnosis and treatment elements of the work are another story. Architects overtime have consciously allowed their [diagnosis and treatment] jurisdiction to shrink [(de)professionalize] in order to concentrate more centrally on the aesthetics of design (Gutman, 1988).

This Abbott centric literature review has made visible the possibility that professional jurisdiction is conceptually contingent on the claiming of work (diagnosis-inference-treatment), the claiming of work is contingent on the professions' power to claim and define a problem, the professional power of claiming and defining a problem is contingent on the ability to infer abstractions from a professional body of knowledge to uniquely address the problem, the perception of the value of that inference process is contingent on the public's perception of the value of the "aura of mystery" between diagnosis and treatment. The "aura of mystery" in architecture is intimately tied to design. Design is contingent on a divergence-transformation-convergence process. Divergence and convergence is contingent on intuitive-rational-metacognitive thinking. Transformation is contingent on a mystery-heuristic-algorithm transformation process. This possibility and all these contingencies and processes are contained within an ecosystem with other professionals who are constantly jockeying for position to also claim work. The only true professional act of architecture (design) may be the key to (re)jockeying and (re)professionalizing its position within that ecosystem.

Findings: (de)Professionalized Constellations

To answer the question of whether or not the profession of architecture is sustainable in an era of (de)professionalization we must first examine the (de)professionalization pressures within the context of the structure of the profession. Research was conducted on the organization of the architecture of the architecture profession, in an attempt to uncover the underlying structure. The current (de)professionalization pressures were examined in the context of this structure.

1.) The Individual

Abbott would say, in the architecture profession, design is the only truly professional act (Fig.2). Design and the communication of the relevance of that design appear to be a core competency (Pralhad & Hamel, 1990) of the architecture profession. The dissemination of the value of that core competency appears to be highly dependent on the cult of persona.

The Architectural profession is distinctive for its highly individualized, intrinsic creative dimension actualized via design. This creative dimension puts an entirely different spin on the color of the analysis. In architecture, design creativity often drives the conversation, subservient concerns are often functional and efficiency activities. Creativity is subjective and must be practiced in a domain and validated against a body of knowledge. Creativity often works in the space between multiple bodies of knowledge. Often, but not always, this other body of knowledge comes from the client's specific body of knowledge (finance, retail, medical, manufacturing, information technology etc.).

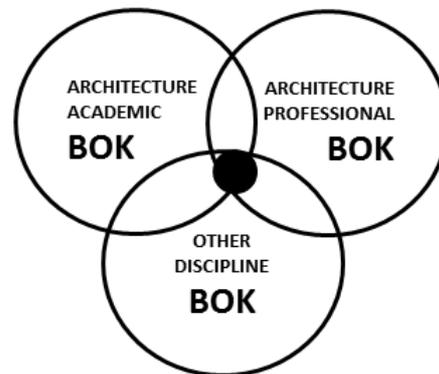


Figure 5 – Architecture’s Creative Sweet Spot

A creative system must be navigable via a conceptual map of the system. Navigation often involves understanding power dynamics. Power in the architecture profession has been, in most cases wielded via the individual (the persona). Csikszentmihalyi (1996) refers to this archetype as the “creative genius”. This aura of the “creative genius”, a.k.a. the persona of the architect, is what often draws people into the profession. This iconic persona is unique, valuable, and an a priori seduction technique. It differentiates architecture from the other professions. The passionate pursuit of “the creative genius” mystique often delegates to second place in the life of architects, things such as compensation, physical well-being and marriage. In other professions, firms become the persona. But with architecture the “creative genius” is all powerful. When you achieve the status of “creative genius” you have autonomy, you can select the clients you want, and you can focus on design and delegate the other aspects of practice. You can also influence the internal professional awards that you win, and can control your press by only giving access to your projects to those that offer favorable reviews of your work.

This “creative genius” archetype has been stereotyped via the ego driven Howard Roark, in a “staritect” role personified by Hollywood. It is a role that many aspiring architects would love to fill, or maybe not. Recently, there appears to be some backlash against this perception. Mitchell (2015), the 2025-2016 student president of the American Institute of Architecture Students stated:

“A gut rehab has to happen in our overall approach and mentality to architecture. Architecture must detach itself from the ego...the Howard Roark era of the architect is over and our profession must adjust in order to retain our relevance.”

Architectural journalists Bingler & Pedersen (2014) in the New York Times opinion page stated:



“While architects design a tiny percentage of all buildings, our powers of self-congratulation have never been greater. Although the term “starchitect” has become something of an insult, its currency within celebrity culture speaks to our profession’s broad but superficial reach. High-profile work has been swallowed into the great media maw, albeit as a cultural sideshow - occasionally diverting but not relevant to the everyday lives of most people” (Bingler & Pedersen, 2014).

Yale professor and architect Deamer (2014) in the New York Times, seconded, later with another opinion:

“It is not only the public that is fed up with this idea of the Architect, but also the profession itself. Having watched ourselves increasingly backed into the corner of aesthetic elitism, we are now more interested in models of practice that do away with the egos and the glamorous buildings they are associated with” (Deamer, 2014).

In January 2015 the Architizer.com blog summed up the above conversations with an article titled: ‘The State of the Union: Are We in the Midst of Architecture’s Greatest Crisis?’ (Architizer, 2015).

What caused all this? Most of the above could be viewed as partial reaction to what could be called the proverbial moment in the public acknowledgement of an individualized articulation of architecture’s (de)professionalizing status (in literal and figural terms). On October 24th 2014 The Guardian reported that “starchitect” Frank Gehry was at a press conference in Oviedo Spain to collect the Prince of Asturias prize, a very prestigious prize which the King Felipe of Spain was to award. The Guardian reported that in responding to journalist’s inquiries, Frank “has described 98% of modern architecture as “shit”” (Burgen, 2014).

It is clear from following the above press threads that individual “ego”, “elitism” and “power” is clearly an ever present self-referential area of debate in the profession, distinct sociological activities which you need to be qualified to participate in. As Magali Aarfatti Larson explains, “in architecture, discourse is not open to everyone” (Larson, 1977). Csikszentmihalyi (1996) believes that “when a field becomes too self-referential and cut off from reality, it runs the risk of becoming irrelevant.”

2.) The Field

In Csikszentmihalyi (1996) terms, the field of creativity is controlled by gatekeepers. These gatekeepers are the watch dogs who have the job of defending jurisdictional boundaries, protecting the domain, and thus, controlling access into the profession. In architecture these gatekeepers (mini jurisdictions) are called the 5 collateral organizations (ACSA, AIA, AIAA, NAAB and NCARB).



3.) The Domain (the structured settlement where individuals practice)

Csikszentmihalyi (1996) states: “It is often dissatisfaction with the rigidity of domains that makes great creative advances possible.” The (de)professionalization pressures in the field of architecture are not new and they are once again starting to apply pressure to the domain. The Boston Society of Architects issued a research grant titled ‘Reversing the Implosion’ which intended to address the following problems:

“The architectural profession is imploding. About 101,000 Americans currently hold NCARB licenses to practice architecture. Each year, about 3,500 of these licensed practitioners leave the profession through retirement, death, or to pursue other interests. Yet in recent years fewer than 1,500 new architects have become licensed each year across the United States, a number that has declined from about 4,000 a decade ago. The architectural profession is now shrinking at a rate of about 1.5 to 2% every year.” “Some licensed practitioners argue that producing fewer architects helps their business prospects. But this myopic view ignores the reality that the percentage of architectural involvement in designing and constructing the built environment has steadily declined to less than 20% of all work undertaken in America. Similarly, some architectural educators argue that the decline of graduates entering “traditional” practitioner paths merely acknowledges an increased multiplicity of positive alternative design career paths taken by design school graduates. Both practitioners and academics have argued at AIA national and Large Firm Roundtable conferences, and at ACSA and NCARB-sponsored meetings, that the current Intern Development Program (IDP) does little to encourage design school graduates to become licensed practitioners” (BSA, 2006).

The size of the group of licensed architects in the U.S. is about 107,581 (NCARB, 2015) members down 4.5% from 112,650 (NCARB, 2007) in 2007 (Table 1).

	2007	2008	2009	2010	2011	2012	2013	2014
# of Licensed Architects	112,650	104,126	101,673	105,312	104,371	105,596	105,847	107,581

Table 1- Licensed Architects in U.S. (NCARB, 2015)

Abbott believed that the true power of professions lay in their jurisdictional power in the ecosystem. The ecosystem for architecture is commonly called the AEC (Architecture – Engineering – Construction) industry. Players include contractors, engineers, architects, interior designers, and landscape architects. In this ecosystem, it is not surprising that architectural service and construction service billings tend to mirror each other (Appendix 1 & 2) as the economy swings back and forth.

In analyzing the AEC ecosystem we have to look at the entire “pie” of economic activity. In 2013 the revenues for this pie amounted to 1.1 trillion dollars. Architects specify the products for this market, which accounts for approximately 17% of the \$1.1 trillion dollars, “you would think that an industry with this kind of purchasing power would be showered with tools and conveniences to help make these choices, but we aren’t” explained the Architizer blog (2016). In 2013 the pie slices of economic output

related to the AEC industry was controlled by construction 81%, engineering 15%, architecture 2.5%, interior design 1% and landscape architecture less than 1% (Table 2 & 3).

Table 2 - Estimated Revenue by Tax Status for Employer Firms: 2007 Through 2013

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
NAICS															
Architectural Services	27,393	26,847	26,938	26,050	29,802	37,739	37,150	34,709	31,939	28,609	26,851	25,240	26,719	25,021	22,345
Landscape Architectural Services	3,057	2,827	2,974	3,058	3,385	4,365	4,365	5,018	4,575	-	-	-	-	-	-
Engineering Services	168,769	173,853	180,005	172,403	178,375	199,943	187,532	163,430	152,322	132,814	117,509	116,887	-	-	-
Interior Design Services	7,620	7,251	6,846	6,394	6,814	9,290	9,799	9,745	8,822	8,061	7,497	7,018	-	-	-
Construction	906,351	850,456	788,331	809,254	906,544	1,077,351	1,147,953	1,161,282	1,116,811	991,357	891,498	847,877	864,159	831,075	768,811
FUNDS AVAILABLE	1,113,190	1,061,234	1,005,114	1,017,159	1,124,920	1,328,708	1,386,799	1,376,184	1,314,669	1,160,841	1,043,355	997,022			

Table 2 – US Census Estimated Revenue by Tax Status

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Construction	81%	80%	78%	80%	81%	81%	83%	84%	85%	85%	85%	85%
Engineering Services	15%	16%	18%	17%	16%	15%	14%	12%	12%	11%	11%	12%
Architectural Services	2.5%	2.5%	2.7%	2.6%	2.6%	2.8%	2.7%	2.5%	2.4%	2.5%	2.6%	2.5%
Interior Design Services	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Landscape Architectural Services	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 3 – AEC Percentage of PIE

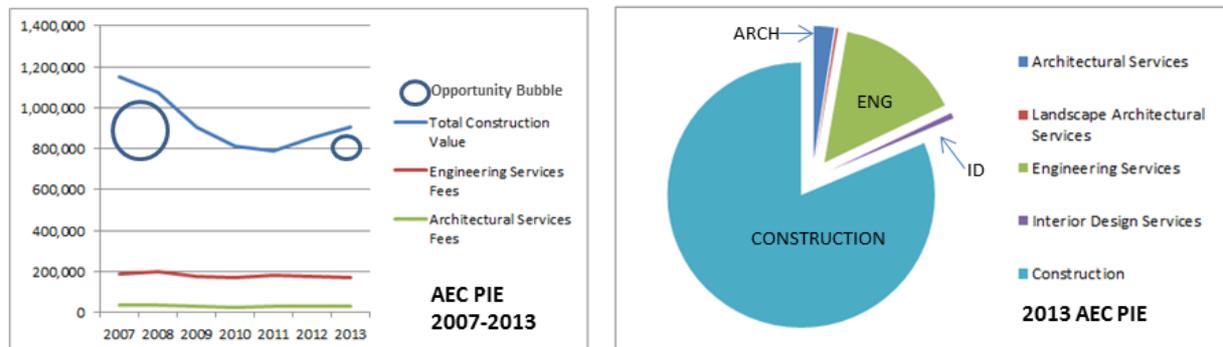


Figure 6 – AEC Pie (2007-2013)

In times when the economy booms, construction appears to get an even larger piece of the pie. A fundamental strategic question for the profession is: How can architecture grab a larger piece of the pie (Fig. 6)?

One such means may be by strategically stretching the “aura” of design over the entire work (diagnostic-inference-treatment) process and associating that entire process with integrated design intelligence.

Discussion: New Territories for Negotiation

Is the profession undergoing (de)professionalization? The profession is highly dependent on the ebbs and flows of the economy. In the current economic bubble of opportunity, we are seeing the number of licensed architects is still smaller than that in 2008. The profession has been seeing a



lessening of their piece of the AEC economic pie from 2.8% in 2008 to 2.5% in 2013 (Table 3), millennials are questioning the high barrier to entry for the profession and the high dropout rates and the low pay (ArchLobby, 2015). Schools of architecture are seeing drops in enrollments (NAAB, 2015). The gatekeepers are doing many tweaks (incremental changes) to the system but are expending tremendous resources on inter-jurisdictional positioning and consensus building in reaction to the (de)professionalization pressures.

Is the profession sustainable? Organizations have a propensity to do what is ever possible to ensure the long term sustainability of the organization. When the profession becomes a meta nesting of jurisdictions, (a jurisdiction within a jurisdiction) it could fall into the trap of shifting much of the effort of sustainability to the subservient jurisdictions. One can also question the professions high barriers to entry which can be viewed as a lead coated geodesic Bucky dome built around the profession. The mini jurisdictions act as watch dogs guarding the door. The long term sustainability question may be contingent on the ability to grow (open the door), or the ability to step out of the lead coated geodesic Bucky dome and reorganize to build a new bigger dome. The key to this bigger dome may be the use of the professions core competence of “expert design” to colonize new areas. Enzo Manzini states:

“In a connected world, and in a world in fast and deep change, everyone designs. In this framework, talking about design we must consider three kinds of design: the diffuse design (performed by everybody), the expert design (performed by those who have been trained as designers) and the co-design process in which the first two interact in order to get some results” (Manzini, 2009).

Architecture must grow to survive and the value based strategy of co-design may be one means of doing so even though Abbott (1988) warns about the (de)professionalization dangers of such. In a 1/4/16 Fast Design article edited by Suzanne LaBarre, Dave Miller states:

"Over the next five years, design as a profession will continue to evolve into a hybrid industry that is considered as much technical as it is creative"... they will push the industry to new heights of sophistication" (LaBarre & Miller, 2016).

Can architecture embrace this new world by strategically utilizing their expertise in design to become more hybrid and technically diverse? Can architecture expand the utilization of their expertise in design to draw from other bodies of knowledge to colonize new technologies, new markets, and new organizations?



Conclusion

The research looked at the profession of architecture from the Abbott (1988) viewpoint of work and its claim on jurisdiction. Abbott's model of work was embellished with other models to make the model more design specific. The research then looked at the architecture of the profession from the viewpoint of 1) its individuals (the creative persona of the architect) 2) its domain (the gatekeepers of the profession) and 3) the ecosystem of the overall AEC industry. (de)Professionalization pressures were highlighted throughout the analysis. It is clear from the research that the profession is currently experiencing (de)professionalization pressures. It is also clear that design (the only true professional act) is the core competency (Prahalad & Hamel, 1990) of the profession with architectural innovation (Henderson & Clark, 1990) as the expected outcome. The key to long term sustainability of the profession appears to hinge on the ritualized choreography of work. The research suggests that the profession can strategically use design to reclaim some of the jurisdictions it previously controlled and to stretch its jurisdiction into new territories. Head to toe integrated design intelligence can be a new form of strategic agency for the profession. To be successful it must be practiced and sold as the only real way to assure the optimization of quality and performance. The research also suggests that the types of in vitro design we perform in the schools perhaps can be expanded into other domain (BOK) specializations which can add value to the profession. New areas of specialization are critical for expansion but it cannot be into areas of low abstraction (craft). The navigation of these new territories of exploration must leverage "expert design" to retain its professional relevancy.

This paper took many new directions since its inception. The wide cast of the subject net limited depth into to many interesting areas of potential further research. One potential area is the effect of artificial intelligence on the diagnosis and treatment phases of professional work. We see this happening in the medical profession with companies such as Human DX (2016) which invented an open artificial intelligence enabled system to help humans diagnose health problems. In architecture we also see artificial intelligence enabled systems being used on the diagnosis side, such as SHOP Architect's patented computer-implemented system for determining zoning code compliance (Bleby, 2013) or on the treatment side with concepts such as Virtual Design and Construction (VDC), a design management process for implementing integrated multi-disciplinary performance models in construction. These examples demand further study. All of the above examples can be viewed as another means of fortifying the jurisdiction claim, by stretching design intelligence along the entire length of the value chain (Porter, 1985), to subsequently add value to the entire process. Or conversely, if done by others outside the profession, it can be viewed as just another example of (de)professionalization.

This research suggests the following pivot points for (re)professionalization: 1) (re)Position the profession to focus on economically increasing architecture's jurisdictional claim by strategically claiming, demarcating, and controlling (Santos & Eisenhardt, 2009) a larger piece of the A-E-C pie. 2) (re)Value some of its lost diagnostic and treatment claims by stretching its core competence (Prahalad, & Hamel, 1990) of design intelligence, all along the value chain (Porter, 1985). 3) (re)Conceptualize architecture's core competence (Prahalad & Hamel, 1990) as means to strategically exploit (March,



1991) new technologies, new markets, and new organizations (Hajek, Ventresca, Scriven, & Castro, 2011). 4) (re)Organize the 5 collateral resources to facilitate over-arching strategic management of the profession (this is very difficult with the current consensus driven processes dictated by a mini jurisdictional substructure, each infused with their own agendas), the AIA is in the best position to lead this effort. 5) (re)Think the brokering issue. If architects are content with the viewpoint that they are considered to be brokering the value chain, then they must find a way to own and monetize that brokering process leveraging the first mover advantage they have in the process. 6) (re)Construct a dignified emerging professional career tract which ensures and maintains the quality of the profession without the indentured servitude type internship requirement. Emerging professionals need to lead this effort. 7) (re)Focus on growth as a strategic mandate for the profession, a mandate driven by profession level goals and objectives, a mandate that necessitates building a bigger geodesic Bucky dome and more specialization.

It is interesting to note that the AIA Foresight report (2014) references a quote from Buckminster Fuller which reflects on the condition of the architecture profession: “We are called to be architects of the future, not its victims”. The profession can ensure it does not end up becoming victims of its own success by strategically applying what architects do best, design, to the profession itself. This can be a new (re)power source for the profession and a key to its long term sustainability.



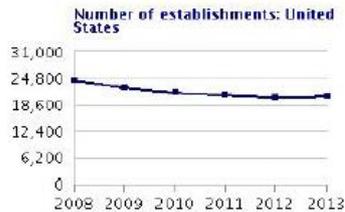
Appendix A

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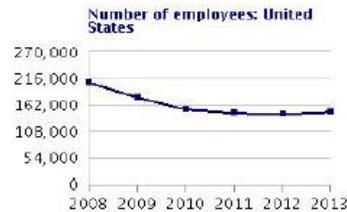
Architectural Services (NAICS 541310)

Employer establishments in United States: 2008-2013

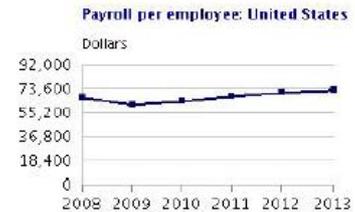
Source: 2008-2013 [County Business Patterns](#). (See [survey methodology](#) for details about these data.)



[View underlying table](#)



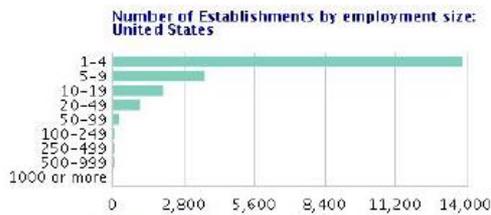
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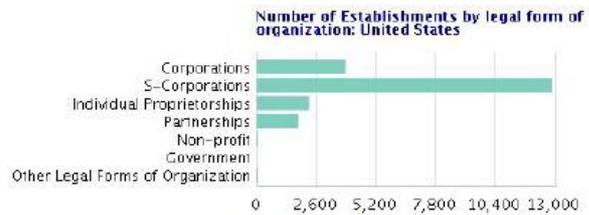
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Employment size and legal form of organization for establishments in United States with paid employees: 2013

Source: 2013 [County Business Patterns](#). (See [survey methodology](#) for details about these data.)



[View underlying table](#)



[View underlying table](#)

Nonemployer establishments in United States (establishments without paid employees): 2008 - 2013

Source: 2008-2013 [Nonemployer Statistics](#). (See [survey methodology](#) for details about these data.)

Graph not available for this data.

Graph not available for this data.

Graph not available for this data.



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Source: [Economic Census](#), [County Business Patterns](#), [Nonemployer Statistics](#), and [Population Estimates](#).

Notes: ▲ = Not available for graphing purposes.

All dollar figures are in current dollars for the period shown, and do not reflect changes in prices. For information on how these data are derived, see the Methodology text for each program.

For more statistics about this industry from other Census Bureau programs, see the [Industry Statistics Portal](#).

THE ECONOMIC CENSUS IS THE OFFICIAL 5-YEAR MEASURE OF AMERICAN BUSINESS
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Source: U.S. Census Bureau | Economic Census | Last Revised: April 23, 2015



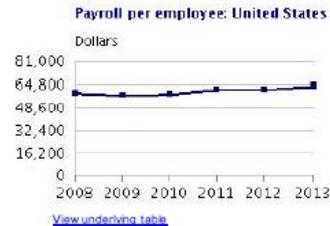
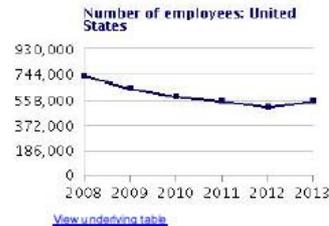
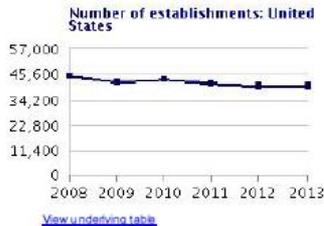
Appendix B

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Nonresidential Building Construction (NAICS 2362)

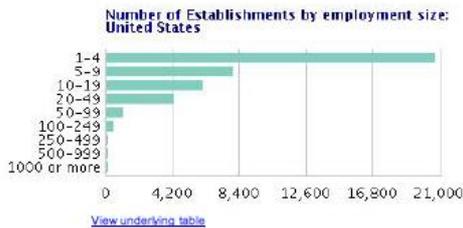
Employer establishments in United States: 2008-2013

Source: 2008-2013 [County Business Patterns](#). (See [survey methodology](#) for details about these data.)



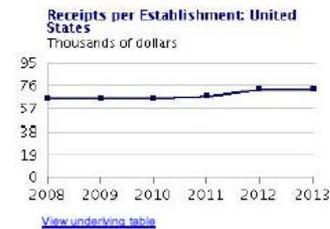
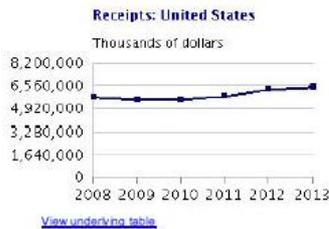
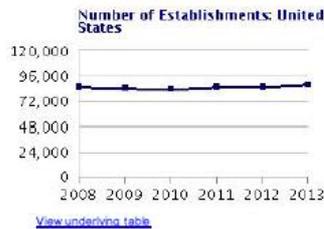
Employment size and legal form of organization for establishments in United States with paid employees: 2013

Source: 2013 [County Business Patterns](#). (See [survey methodology](#) for details about these data.)



Nonemployer establishments in United States (establishments without paid employees): 2008 - 2013

Source: 2008-2013 [Nonemployer Statistics](#). (See [survey methodology](#) for details about these data.)



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Source: [Economic Census](#), [County Business Patterns](#), [Nonemployer Statistics](#), and [Population Estimates](#).
 Notes: ▲ = Not available for graphing purposes.
 All dollar figures are in current dollars for the period shown, and do not reflect changes in prices. For information on how these data are derived, see the Methodology text for each program.
 For more statistics about this industry from other Census Bureau programs, see the [Industry Statistics Page](#).

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Source: U.S. Census Bureau | Economic Census | Last Revised: April 23, 2015



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Oscillations Between Art and Architecture

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Abstract

I describe myself as an artist and architect. In both dispositions I make creative work with a purpose and intent not only to answer questions, but also to form and reform questions as the work is made. It is a restless process, and it is often full of uncertainty. I take a lateral step – out of architecture and into art, and vice versa, in a knowing manoeuvre – to provoke, to agitate, and to catalyse. It is a deliberate and provocative shift from one position to another that results in creative works that occupy a space somewhere between art and architecture. Ross Gibson has written of this provocative shift as a kind of oscillation in which one compulsively moves between the *inside* and the *outside* in order to lay the ground for discovery-based creative research.¹ Gibson describes this space of productive vibration between opposing conditions as an *intelligent shimmer*.² It is the creative energy generated by two distinctive different but complementary parts.

In this paper I propose that art and architecture are opposing conditions that can be productively played out in a theatre of destabilisation that advances the programmes, expectations and possible outcomes of both disciplines. The tensions and conflicts that emerge in this theatre of destabilisation are examined through the particular practices of Junya Ishigami and Phillippe Rahm, whose trajectories away from established understandings of architecture are well-documented. I propose that it is through their willing forays into the methodologies of art, and their establishment of a foothold on the ‘outside’ of architecture, that they are able to affect the ‘inside’ despite their attention to ‘un-architectural’ aspects of intangibility and immateriality.

As further reflection, I will present three of my own creative works in which this destabilisation has been amplified and explored through collaborations with artists and architects. In *The Matter of Voids* (2014), a large floor work was painstakingly installed at Harry Seidler’s iconic Australia Square and then dissolved in a live performance by Kate Sherman and Ryuichi Fujimura. This act of dissolution called into question matters of authorship in architecture in relation to the role of the architect and the inhabitant. In *Breathing Buildings* (2015), a short immersive film responding to Kengo Kuma’s Z58 (Shanghai), *Conservatoire Darius Milhaud* (Aix-en-Provence) and the *Daiwa Ubiquitous Computing Research Building* (Tokyo), composer Kuba Dorabalski’s ‘breathing’ score necessarily altered the rhythm of the film and enabled a radical departure from formal architectural narrative. In a collaborative entry for the

¹ Gibson, R. (2010). The known world. *TEXT Special Issue 8, Creative and practice-led research—current status, future plans*.

Brien, D., Burr, S. and Webb, J. (Eds.). p 11.

² *Ibid*, p 9.



Inaugural Tapestry Design Prize for Architects (2015) with architects Panovscott, an extended dialogue and constructive process of making was ultimately worked backwards, resulting in an unraveled tapestry and a retrospective set of instructions. As examples of critical spatial practice, the attention to the oscillation between *inside* and *outside* is a central factor in the success of the works.

I describe myself as an artist and architect. In both dispositions I make creative work with a purpose and intent not only to answer questions, but also to form and reform questions as the work is made. It is a restless process, and it is often full of uncertainty. I take a lateral step – out of architecture and into art, and vice versa, in a knowing manoeuvre – to provoke, to agitate, and to catalyse. It is a deliberate and provocative shift from one position to another that results in creative works that occupy a space somewhere between art and architecture. Ross Gibson has written of this provocative shift as a kind of oscillation in which one compulsively moves between the *inside* and the *outside* in order to lay the ground for discovery-based creative research.¹ Gibson describes this space of productive vibration between opposing conditions as an *intelligent shimmer*.² It is the creative energy generated by two different but complementary parts.

On the surface it would seem that the practices of art and architecture have much in common. Yet the motivations and processes are entirely different and the priorities of each process are less aligned than it might appear. Philip Ursprung observes that although the relationship between artists and architects is frequently thought of as a dialogue, in reality the interaction between them more closely resembles a collision.³ The collision occurs because artists and architects often share similar concerns, but they are orbiting these concerns on different trajectories and are thus engaged in a complex pattern of approach, retreat and potential conflict. They speak similar languages, but within this similarity there is just enough difference to cause confusion within the illusion of sameness – this gap between the perception of similarity and the realization of difference, is both a fruitful and perplexing characteristic of relationships across art and architecture.

There is a clear contemporary tendency of architects extending their practices into the world of art, and in particular into that of contemporary installation. Jes Fernie observes that *the seepage of architecture into the art world is becoming ever more visible...*⁴ The inquiry underpinning these forays is essentially architectural – we can think of much contemporary installation by architects as prototypes for larger and more extensive architectural resolutions. The interesting question is whether by consciously relocating these practices into the world of installation art the architect is able to make genuine breakthroughs that would not be possible had the work been developed in the context of architecture from the outset. To consider this question further, I will share some examples of early installation work by Junya Ishigami and Philippe Rahm, and then offer some examples from my own practice.

¹ Gibson, R. (2010). The known world. *TEXT Special Issue 8, Creative and practice-led research—current status, future plans*. Brien, D., Burr, S. and Webb, J. (Eds.). p 11.

² Ibid, p 9.

³ Philip Ursprung, 'What Happened to the Gesamtkunstwerk? The Love-Hate Relationship between Art and Architecture'. In *Two Minds: Artists and Architects in Collaboration*. Ed Jes Fernie. Black Dog Publishing. London. 2006, p 18.

⁴ Jes Fernie, in *Two Minds: Artists and Architects in Collaboration*. Ed Jes Fernie. Black Dog Publishing. London. 2006, p 10.



In his book *Two Minds* Jes Fernie observes that architects are interested in creating form and artists are interested in creating an experience.¹ This is of course simplistic, as there are many factors that drive the interest of both architects and artists, but the contemporary practices of Junya Ishigami (Japan) and Philippe Rahm (France) indicate a position that is in direct contrast to Fernie's observation. Their movement away from a material, form-based architecture and their explorations in intangibility and climatic ephemera are well documented over the past fifteen years. The early work of both Ishigami and Rahm is installation-based, with both architects showing key works in the Biennale of Architecture in Venice in 2010 and 2002 respectively.² For both, the step into installation art is logical in consideration of the fact that an installation can easily be considered as a kind of prototype and the discipline of art as a kind of as a kind of laboratory to be temporarily exploited.

Perhaps, however, this disciplinary edge is becoming more complex by the day with what Phillippe Rahm identifies as a slippage of the 'real' and 'visible' forms of architecture towards invisible, microscopic, atmospheric, biological and meteorological atmospheres.³ His *Hormonorium* installation in 2002 pushed the boundaries of what could be understood as 'architecture' by virtue of the fact that it was an installation rather than a functional piece of architecture:

The Hormonorium is a proposal for the design of a new public space. It is based on the disappearance of the physical boundaries between space and the organism, as revealed by biology and the neurosciences. Going beyond visual and metric mediation, establishing a continuity between the living and the non-living, the Hormonorium opens up to the invisible, to electromagnetic and biological determinations. Understanding the physicochemical mechanisms that govern organisms brings about a change in how we understand space, and thus in the way we inhabit the environment. The Hormonorium is an "im-mediate" space, no longer resorting to semantic, cultural or plastic media for the making of architecture.⁴

The 'architecture' of the *Hormonorium* was not found its aesthetic form, its spatial narrative or its physical material – it was in the design of a system to alter the air pressure of the space to induce physiological responses of dizziness, breathlessness, and confusion owing to decreased levels of oxygen in the space. How could we have understood this as 'architecture' if it was not presented as installation art? How could this idea, this '*new model for a decontextualized, degeographized public space*'⁵ have gained any traction if it was not effectively removed from 'architecture' and located in an alternate terrain?

Similarly, Junya Ishigami's *Architecture as Air* installation at the 2010 Venice Biennale also reflected the slippage away from the 'real' and the 'visible' with an impossibly delicate and almost completely invisible structure that collapsed mid-show. The hand-written sign placed adjacent to it seemed to offer a

¹ Jes Fernie, *In Two Minds: Artists and Architects in Collaboration*. Ed Jes Fernie. Black Dog Publishing. London. 2006, p 14.

² Both architects have shown work at more than one Biennale – Ishigami in 2008 and 2010, and Rahm in 2002 and 2008.

³ Philippe Rahm, 'Meteorological Architecture', *Architectural Design Special Issue: Energies*. Volume 79, Issue 3, May/June 2009: 32.

⁴ www.philipperahm.com, accessed 04.04.16.

⁵ *Ibid.*



philosophical perspective on the apparent disaster – ‘*sorry, it’s broken*’ – but then the work went on to be awarded the Golden Lion for best project. Again, how could a ‘failure’ have been understood as successful architecture of the highest order unless this work had been relocated into the domain of installation art? In consciously relocating architectural inquiry outside architecture, architects are able to present ideas that have the power to radically reshape the discipline. In this domain adjacent to but beyond architecture, the failure of a structure is celebrated and the physiological distress of inhabitants is an acceptable affect of architecture. Architecture itself would never afford positions of such luxury.

In the work of both Ishigami and Rahm there is a destabilisation at work, through the loss of key characteristics that seemed to be fundamental to architecture. In Ishigami’s work we see the loss of substance, of weight, of visibility, and in Rahm’s work we see the loss of comfort, of control, and of demeanour. Is the loss of these characteristics, and thus the transformation of architectural concerns, enabled by the foray into installation art? I suggest that it is precisely through this relocation, and precisely through not having to think of it as ‘architecture’, that we are able to understand, accept and even embrace the propositions at play.

In my own practice, which oscillates between art and architecture, the loss of the architectural characteristics of form, visibility and substance are core to the architectural inquiry of the work. I work broadly with the idea of ‘dissolution’ and in each of my works there is a simultaneous and interdependent cycle of production and loss at work. It is only when the work has been laboriously constructed and subsequently dissolved that I consider it ‘complete’; the work is conceived not as a material object or experience, but as part of a cycle in which it appears and then disappears. The processes of making the work are extended into its simultaneous un-making; the limits of the material are pushed to the extent of loss, and the loss of the work then becomes a defining feature of it. ‘Dissolution’ is not a usual or desirable feature of architecture – yet in keeping the work firmly anchored in the realm of installation art I find myself able to properly and patiently formulate the the necessary critical questions.

The Matter of Voids (2014)

This work was a floor-based temporal installation that grew from a quiet obsession with the ceiling in the Australia Square foyer. The ceiling was understood as a repetitious pattern of solid and void. The installation questioned the stark solid-void duality and investigated the invisible or barely-perceived physical matter that occupies the void spaces. The voids were reconsidered as positive volumes that have the capacity to cast a ‘shadow’ upon the floor. Fine particulate matter, a tangible physical component of air and a standard indicator of air quality, was captured and arranged on the floor plane in an intricate geometric pattern that placed the floor in direct visual dialogue with the ceiling.



The installation was comprised of two parts separated by external glass wall – one part was inside the foyer, and the other part continued outside. Inside, the voids of the ceiling grid were referenced on the floor using areas of finely crushed glass arranged directly on the floor. The crushed glass is considered as particulate matter, a luminous representation of the invisible suspended matter of the air. Outside, the solids of the ceiling grid were hand cut out of water-soluble embroidery film to form a geometric ‘web’, which was interspersed with areas of black silica. During the evening, performers and the audience sprayed a fine mist of water on the film, slowly dissolving the work until it disappeared completely. In this work, solid and void were inverted, reversed and imaginatively multiplied across the horizontal planes of the building.

Breathing Buildings (2015)

In *Breathing Buildings*, I attempted to make work which preferred an instinctive response to architectural experience. In some senses this process was very much in tension with my own ingrained expectations of what architectural critique is or could be, but as I made the work I slowly understood that it was a form of critique, and potentially one with a unique communicative power. The work was built on quiet rebellion, disparity, even fracture in its early stages. It ignored all sense of architectural process and artefact in favour of experience. The initial premise was straightforward – I would visit a number of buildings by an architect in whose work I felt some interest. I would experience a series of spaces in some capacity based upon the circumstances of the day, and I would then form a response. I did not look at drawings, I did not look at models. I did not read about the buildings, nor talk to the architect. I simply went to a series of buildings and spent time there. I felt a position of this extremity was necessary in order to establish the ‘raw data’ of spatial experience.

The buildings I visited were designed by Japanese architect Kengo Kuma: *Z58* in Shanghai, China, completed in 2007; *Conservatoire Darius Milhaud* in Aix-en-Provence, France, completed in 2014, and the *Daiwa Ubiquitous Computing Research Building* at the University of Tokyo, Japan, completed in 2014.

I filmed aspects of the buildings instinctively, according to what made an impression on me. I purposefully disregarded any obligation I felt as an architect or critic to ‘explain’ the buildings and conceive them as complete spatial systems – I went in as a ‘user’ and allowed myself to be ‘moved’. This process involved the active suppression of parts of my architectural self, which naturally swayed toward wanting to ‘know’ the extent of the buildings in all their detail. I found it difficult to make a work that refrained from engaging in architectural narrative or that was somehow based upon the progressive sequence of spaces that linked one logical moment to another. I fought hard to resist the usual sequences of architectural commentary in terms of communicating the basic features of the architecture, and instead endeavoured to focus on the immediacy of experience and immersion.

Being thus immersed and extracted, involved yet also critically distanced, ill-disciplined and shifty but also disciplined and reflective – as in an artist’s studio – you stand a chance of knowing



*both the world and yourself more comprehensively, not only more intuitively but also... and there's no denying that this seems enigmatic and illogical... not only intuitively but also more analytically.*¹

I found this process of immersion was not, as I worried it might be, a process of evasion – but the act of immersion was actually *necessary* to understanding and subsequently communicating a situation of complexity. The critique of architectural space is necessarily complex because we can never remove ourselves from our present spatial situation, nor ignore the sensory registration of our environments. We are not spectators in the complicated entanglement of air, body, sense, thought – we *are* the entanglement.

*Given that most experts agree that complexity can be understood only by experiencing it directly, by imbibing and appreciating it from inside the systematics of its always-unfolding occurrence, then it follows logically that artists are specialists in this major aspect of contemporary life. In short, complexity needs to be investigated by means of a special, doubled mentality – a means of being fully attentive both inside and outside the unfolding phenomena – and artists are potential leaders of research concerning this paradoxical capability.*²

Inaugural Tapestry Design Prize for Architects (2015)

This work was a collaboration with a small architectural office to design a tapestry for the new Australian Pavilion in Venice. We found it difficult to feel anything for Denton Corker Marshall's alien black box of a building – it seemed to embody a kind of masculine architectural dominance, even hostility, that we struggled with. After many hours of circular discussion we decided to pursue an approach of instruction and response. Panovscott issued an instruction, and I responded (dis)obediently:

*'With a vertical loom establish 75 warp threads at 12 threads to the inch. Each thread is to be wool. Alternate each thread with three diameters, 20ply, 6ply, 12ply in the rondo pattern (abaca) starting with the 20ply to the left facing the finished surface. Each thread is to have a different colour which will mimic the visible light spectrum starting with violet to the left. The weft is to comprise 225 threads at 12 threads to the inch. All threads are to be 12ply and white in colour. In establishing the weft the weaver is to improvise such that the warp is revealed periodically in an elongated vertical manner.'*³

With the tapestry made, and in the contemplative zone of such laborious hand work, I was shocked when Panovscott instructed me to deconstruct the tapestry. So many hours, so much consideration, for

¹ Gibson, 2010, p 10.

² Gibson, 2010, p 7.

³ Panovscott, written instructions for the author to make the tapestry.



this! A loss! The prospect of destroying a ‘finished’ work, however, compelled me to think in great detail about how I would orchestrate the destruction, about what kinds of formal and informal patterns the destruction would follow, and of the temporal framework of the impending loss. All of which, ironically, became a constructive process – strangely architectural in its efforts to move in the opposite direction.

Through the discussion of these works, I’ve reflected upon how the opposing conditions of art and architecture can be productively played out in a theatre of destabilisation that advances the programmes, expectations and possible outcomes of both disciplines. Works that might in one sense be considered ‘unarchitectural’ because of the loss of key characteristics of form, visibility and substance, gain traction when presented as installation art. When returned to architecture, these works possess a rare potency that can – and does – radically transform our thinking in relation to our own discipline.



Art in the Hospital Space – a Comparative Visual Study

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Abstract

Recently, we observe numerous spatial renovations in hospitals, including the integration of environmental design and the visual art into the architecture of the place. In the last years, hospitals put emphasis on artwork such as sculptures, painting and art collections. Therefore, we should address the issue regarding the nature of art in a public space such as a hospital.

The current study examines the quality of art in the space of two medical centers: the Sheba Medical Center at Tel-Hashomer and the Rambam Health Care Campus in Haifa. Analysis and understanding of this rests on the theories of Henri Lefebvre and Michel de Certeau. A comparative study based on visual analysis method of Gillian Rose was conducted. The comparative study findings indicate identical narratives and similar aims both in the visual aspect of the art works and in the architecture of inner public spaces and design of the exterior environment.

A hospital, known today as a "Medical Center" or "Medical Campus," is perceived as a space of illness and healing, no different than other spaces in our world, and constituting an integral part of it. But in fact this is a space of illusion within the world of reality. Visitors, patients, and medical staff members entering the hospital gates move from an open space to a closed space, usually along pedestrian walkways that route them along paved paths surrounded by lawns and vegetation. During the transition from the outside into the walls of the emergency room, the hospitalization units, the clinics and the various departments, it is not possible to ignore the environmental design and the visual art that are integrated into the architecture of the place.

The question is: what is the nature of art in a public space such as a hospital? Is it intended to expand the awareness of those entering its gates, to make their stay more pleasant, and perhaps to distract them from the distress and pain and to excite them, or is its only purpose glorification of the hospital and an increase in its prestige?

Works of art, reproductions, collections, posters and spatial designs are defined as visual performance. Analysis and understanding of these rests on the theory of Henri Lefebvre as presented in his book "The Production of Space"¹ and on the theory of Michel de Certeau published in 1980 "The Practice of Everyday Life"². Lefebvre maps the different types of spaces, and notes the forces that create them, while de Certeau proposes a distinction between strategy and tactics in the creation of the public space which explains the balance of power therein. In light of these, the effect of visual literacy of art and the psychological influences resulting from presentation of art in a variety of spaces, in particular the medical center are here investigated. This is done with the help of the cyclic method of visual analysis



of Gillian Rose³, which proposes criteria for comparison between similar visual performances in hospital spaces.

Relying on Rose' method this study examines the quality of art in the space of two medical centers: the Sheba Medical Center at Tel-Hashomer and the Rambam Health Care Campus in Haifa. The comparative findings indicate identical narratives and similar aims both in the visual aspect of the art works and in the architecture of inner public spaces and design of the exterior environment.

In each of the medical centers examined in this work, visual art is presented with different emphases. In the Sheba Medical Center, an exterior sculpture garden, and inside the buildings original works and reproductions of local Israeli artists. In the Rambam Medical Campus today emphasis is placed on archaeological treasures and on interior design influenced by the reigning colors and textures of the Israeli natural environment. This research is a visual study of art works in the space of these medical centers. We will treat them at length in the chapter that deals with analysis of visual performances.

In Israel, as far as it was possible to discover, research in this subject is not sufficiently developed, and there are few academic publications on the influences of art within hospitals. In this work, I will show the viewpoint of an Israeli landscape architect who specializes in building restorative gardens in various hospital spaces in Israel. I will bring forth the central claims from a case study published in Scotland in 2010⁴, and I will present practical results of a study published in Manchester, UK in the year 2000⁵.

Methodology

In his book, "The Production of Space" in 1974, Henri Lefebvre asserted that "(social) space is a (social) product"⁶. Space is a product created and dictated according to clear rules of the wealthy capitalists, architects and technocrats. Social space affords the illusion that it is created naturally, but it is none other than a space created for the capitalist interests of the wealthy, and not for the good of the general public⁷.

Physical design of the space by those same technocrats ostensibly shows that nature remains there. Man has no intention of ruining it, but rather of designating nature for the purposes of the person standing therein, who purchases it or takes control of it in any way possible⁸. The social space has production representations, contains relations of power that revealed in social spaces such as form of buildings, monuments and art work⁹. The limitations and prohibitions in the social space are revealed and hidden¹⁰. These have visual performance translated into a system of signs and symbols – whether as graphic symbol or as a physical barrier within the space. Those that are hidden from the eye are those same prohibitions and limits that have been sent to penetrate the consumer's psychological consciousness by the dictators and designers of the space¹¹.

In 1980, Michel de Certeau published his book "The Practice of the Everyday Life," in which he divided power relations in space into strategy and tactics¹².



Strategy: This is manipulation of the power relationships that become possible the moment that a subject with will and of power can be isolated¹³. Strategists are bodies such as: the military, prisons, hospitals, factories and institutions. The strategist dictates and defines in advance the routes within its spaces¹⁴. The assumption is that there is a *proper* location that constitutes a basis for management of the relationships with those outside of it. His definition of the concept “Proper” means “triumph of place over time.”¹⁵. That is, the location of the basis is autonomic and enables its own control of time, and there exists a clear separation between that basis location and the world outside¹⁶.

Tactic: This is an operation carried out by someone who does not belong to the field of strategy, that is, someone who is in contact with or enters into the basic strategic field¹⁷. The tactic operates in this field in accordance with the space of control and of rules. In contrast to strategy, tactic lacks a clear plan, the tactic is flexible in accordance with the limitations enforced upon it, and so it must exploits opportunities and loopholes according to the non autonomous framework in which it operate¹⁸ (ibid).

An additional claim that is relevant to the subject of the research is the discussion of space of *incarceration*¹⁹: de Certeau claims that the space of incarceration is a space in which one can exist but it is filled with illusions and temporary. De Certeau illustrates this by the experience of train travel. This illusionary space has contact with psychological weak points. He who stays in a confining space behaves and experiences it in accordance with the limitations imposed on him²⁰ (ibid).

The theories of Lefebvre and de Certeau were published a decade apart. Lefebvre’s theory appears to constitute a basis for that of de Certeau. The latter, in bringing examples from everyday life, delves deep and contributes to our understanding of the visual performances discussed below.

In the next section research is presented that relates to the effects of healing of the visual performances and environmental design in the spaces of medical centers.

Gillian Rose's²¹ visual analysis method (Fig. 1) is based on the concept of sites and modalities. It is suggested there are three sites in which interpretation of visual images is conducted:

- Sites of Production
- Sites of Audiencing
- Site of Image itself

Simultaneously, to obtain a more comprehensive understanding of visuals, forms are also studied in each site, introduced by the concept of modalities²².

- Social Modality
- Compositional Modality
- Technological Modality



site modality	Production	Audiencing	Image itself
Social	Who? When? Who for? Why?	How interpreted? By whom? Why?	Visual meanings
Compositional	Genre?	Viewing position offered? Relation to other texts?	Composition?
Technological	How Made?	Transmission? Circulation? Display?	Visual effects?

Figure 1: Gillian Rose's visual analysis method:

Influence of environmental design – a short survey

Design of the environment and the landscape has great influence over those within it. One of the central approaches bases its claims on the biophilia hypothesis, which holds that man has an innate connection to nature and a natural tendency to be attracted to it²³. The main colors of nature are characterized by green and blue, and they have a very positive effect on the feelings of a person, in contrast to strong colors such as yellow and red. The aesthetic and designed environmental space of a hospital contributes to the healing process, benefits the patient and shortens his stay there²⁴.

In the 18th century, hospital buildings were planned so that there would be a direct connection between the building and the gardens, but this was forgotten somewhere in the beginning of the 20th century, with the increased momentum in industry and quick construction of large public buildings²⁵. The planners of that period did not take into account the importance of gardens and green spaces in hospitals, for the patients as well as the medical staff, who therefore treated it as insignificant²⁶. In our own day as well, one finds various medical institutions that are detached from nature. In another paper the author writes landscape should be taken into account while planning buildings in these institutions²⁷.

While there are still flaws in the external environment, how does visual art function in the internal spaces?

Throughout the world dedicated organizations operate with the aim of planning and designing medical environments that will facilitate patient recovery, will ensure a pleasant environment for the



staff, and will detach all of these from the everyday reality of illness. In Scotland a test case was carried out in three renovated hospitals, where in the planning stage, integration of visual art was taken into account. The research team examined the choice of visual performance and whether it benefited health conditions, and improved welfare of the patients, visitors and the medical staff²⁸. This study concluded that exposure of those staying in hospitals to environmental visual components that are pleasant to the eye, such as pictures of fields in nature, generated positive feelings, focused concentration and developed interest, and thus reduced disturbing and anxious feelings about the treatment. In addition it was found that environments without environmental components such as nature and art increased worries, fears and pain²⁹.

Exeter Healthcare Arts Project³⁰ is a study that was carried out in a hospital in northwest England. This study found that exhibition of visual art in hospital spaces met with a positive reception, and even that it raised morale primarily among hospital workers. In addition, a connection was found between the physical location of the art work and the attitudes of visitors. For example: in the waiting room of the radiology institute, people who were waiting there noticed the painting on the wall, as opposed to other visitors who barely noticed a painting on the wall of the hospital restaurant³¹.

The central findings in the study held in Scotland do not contradict the knowledge on which the studies were based. But with regard to the influence of visual performances, the opinions of the patients, the staff and the visitors were divided. For example: most of the pictures are framed, and are located mainly in waiting rooms, corridors and staff rooms³². Those to whom the pictures afford enjoyment and relaxation are the visitors and the medical staff present in most of these spaces, while patients are hardly even aware of art works in these halls³³. A good example of this is found in the study held in the New Victoria hospital³⁴, where the medical staff testified that they preferred to have text next to the art work. Another example is the public sculpture placed in the hospital yard. They claimed that the location of the sculpture serves as an aesthetic corner that is not useful, and so it aroused harsh social and economic criticism, although it was not financed by hospital funds³⁵.

In each of the medical centers examined in this work, visual art is presented with different emphases. In the Sheba Medical Center, there is a sculpture garden outside, and within its walls there are original art works and reproductions of work by local Israeli artists. In the Rambam Medical Campus emphasis is placed on archaeological treasures and on interior decoration inspired by ruling colors and textures from nature in Israel, such as blue, green, photographs of sea creatures, natural marble in shades of sea shores of sand dunes and of the archaeological treasures.

Understanding and defining the spaces

In the Sheba Medical Center the sculpture garden surrounds the exterior spaces, and within its walls there is a wealth of original works and reproductions by Israeli artists. This was clearly the result of thought and planning, at the invitation of the management, by a group of interior decorators and landscape designers, and curating activity is clearly evident throughout the hospital.

The Rambam Medical Campus is a hospital undergoing renovation. On its old building a mass of exposed cement can be seen, and the halls are crowded and dim with cold artificial light. The gardens

are small and internal, and the statues placed there are hidden between the plants. The renovation is primarily characterized by a new concept of space – towards an open space, one with flowing movement – flowering gardens surround and delimit land areas and road, and emphasis is placed on exterior and interior design, characterized by vivid naturalistic colors.

The visual performances I will examine are divided into two categories:

- Spaces defined for organized artistic exhibitions (carried out by curators)
- Spaces that are not defined for organized artistic exhibitions

Before beginning the analysis and comparing the visual performances, we must first understand the definition of the space:

In entering the spaces of the medical centers, which do we notice first? The space that is defined for us begins at the entrance gates. There are electric gates and security inspectors, and the electric gate does not open without authorization from the security inspector (Fig. 2).



Figure 2: Rambam Medical Campus entrance view, 2015. (Photography: Hilla Nadav).

Lefebvre explains about prohibitions and bans in his saying:³⁶

"Some would doubtless argue that the ultimate foundation of social space is prohibition, adducing in support of this thesis the unsaid in communication between the members of a society [...] and, lastly, the never fully achieved restoration of these relations in an 'environment' made up of a series of zones defined by interdictions and bans."

After our entrance has been authorized and we have passed through the various barriers, we must begin to act and to behave appropriately in the area. Where should we turn? There are road signs, various markings in the area such as large signs on the buildings denoting their names and purposes.



There are trajectories³⁷, maps and paths which guide us to the relevant building. The architect has paved for himself (or for us) a dedicated path, which will lead us exactly where we need to go. In this case, the strategist here is no other than the hospital, perhaps the management. In coming to the main building, for example, we must sharpen our eyes. We are liable to break the rules of the route if we do not see the instructions and signs placed before us (Fig. 3).



Figure 3: Rambam Medical Campus entrance and exit gates, 2015 (Photography: Hilla Nadav).

Spaces defined for organized exhibition

The Sheba Medical Center defines the spaces of the hospital as an open museum³⁸. The general manager of the Medical Center recognizes the importance of art for healing and relaxation, and therefore decided to establish and to produce a sculpture garden spread around the hospital, together with the "Artura" company run by curators Esti Drori and Doron Pollack. Famous artists there include Dani Karavan, Menashe Kadishman and David Gerstein (fig. 4).



Figure 4: Sheba Medical Center, Sculpture Garden. 2015 (Photography: Hilla Nadav)

Drori has a clear understanding of space and of the power of art over the community. She emphasizes that the sculpture garden was constructed in a spiral so that anyone could approach and view the statue from close up. She also says that the art work has importance in terms of its size as well as its color and its message³⁹ In contrast to the sculpture garden, in the corridors of the hospital tower we see reproductions printed on canvas by many Israeli artists (fig. 5).



Figure 5: Sheba Medical center, Charles Clore tower corridor. Various artists Canvas print reproductions, 2015 (photography: Hilla Nadav)



"We approach a great variety of people, and attempt to create an aesthetic environment and an optimistic, warm and cultured atmosphere, from the perception of the hospital as a friendly atmosphere."⁴⁰.

Therefore one can see that on the part of the organizers there is a desire to bring the art found in museums and galleries to the wider audience without any admission charge.

After intent observation of the sculpture garden it is nearly impossible to physically approach the statues. Thus, for example, a patient or a person in a wheelchair is unable to approach a statue, and can only view it from a reasonable distance. A number of statues are delimited in a circle or square by cement pavement and gravel, that afford the observer a feeling that it is permissible to look but that entrance is prohibited (fig. 6). There are statues located between the buildings that can not be approached at all. According to the theories of Lefebvre⁴¹ and de Certeau⁴², these are tangible examples of the prohibitions each one writes about. True, there is a circular form to the space and the statues are spread in a rhythm dictated by the designers, but we as tacticians are not obliged to walk according to that route. We may even not be aware of this, and from the outset we do not walk in the same preplanned spiral route.



Figure 6: An example for statues that are delimited – Sheba Medical Center, Tel-Ha Shomer, 2015. Scheinman, Daniella. *Survivel*. date not mentioned. mixed media installation. (Photography: Hilla Nadav)

"But paradoxically it is the silence of these things put at a distance, behind the windowpane, which, from a great distance, makes our memories speak or draws out of the shadows the dreams of our secrets"⁴³

The spaces defined for artistic exhibition are caged in the lobby, along the corridors, and in the large waiting rooms. Some of the visual performances are placed very high up and are not within arm's

reach. Some are framed and hang on the walls, some are placed close to the walls in order not to disturb the space, and others are behind glass windows. Locked glass cubes, impossible to open, are illuminated with the appropriate lighting to attract the eye and give pleasure. These attract those spending time in the medical centers and help them pass the time, whether it is the doctor's or nurse's break, or those waiting for their loved ones during medical treatment (figures. 7, 8).

Moreover, the visual performances are not just original works of art or reproductions, but also include photographs and posters that display the history of the hospital, alongside a collection of ancient medical objects.



Figure 7: Rambam Medical Campuse corridor, hospital's atmosphere exhibition mounted on the walls. 2015. (Photography: Hilla Nadav)



Figure 8: Sheba Medical center foyer, caged art works of various Israeli artists. 2015 (photography: Hilla Nadav)



Spaces that are not defined for organized artistic exhibition

In asking what spaces are **not** defined for exhibition, we must ask who is primarily present in these spaces, and what public use they serve. In both medical centers I found that the spaces that are not defined for organized artistic exhibition are usually waiting areas of the general hospitalization wards, as well as the wards themselves. In the emergency room, for example, there is not even one picture. As a rule these places serve only the hospital management and the medical staff, and are not available to visitors and patients.

These visual performances are in a direct dialogue with the visitor or patient, but they provide instructions, and they are the spokesmen of the strategist. For example – signs containing information regarding procedures and instructions generally appear at the entrances to the waiting rooms, as well as in their center, in order to avoid disruption of a structured strategic order. Bulletin boards with informational advertising by health services, for example, are placed primarily in waiting rooms, apparently with the intention of assuaging the worries of the visitors and providing them with aimless employment while they await answers. Art works, in contrast, appear as framed reproductions and their location has not necessarily been determined by a curator (fig 9).

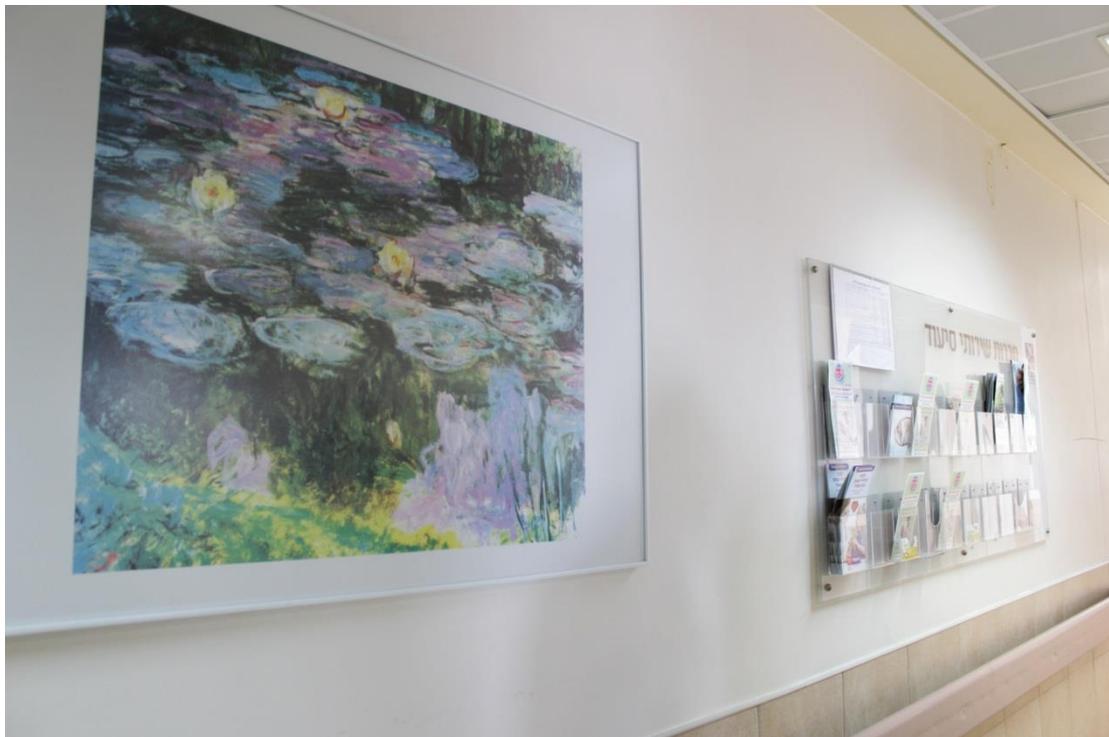


Figure 9: Non-Organized spaces – Reproduction picture and advertising Bulletin board of health care services in hospitalization department. 2015. (Photography: Hilla Nadav)

Comparative Visual Study - Joint visual performances

As discussed above, we have seen that spaces are divided into those that are defined for organized visual performance, and those that are not defined for organized visual performance. In both hospitals a joint narrative can be found, such as: works of art contributed by various families or private organizations, brass plaques on the walls with the names of donors to the various departments, and documentary pictures illustrating hospital atmosphere.

In this chapter, we have focused on visual performances of the historical story related to the hospitals. In the entrance halls of the central hospitalization buildings, both in the Sheba Center and in the Rambam Medical Campus, one can observe similar visual performances: a board with text describing the establishment of the hospital, alongside a window display illustrating the wonderful collections, with ancient tools from the dawn of the establishment of that same medical center (figures10-17).



Figure 10: Sheba Medical Center, Tel-Ha Shomer. Charles Clore tower Foyer. 2015. (Photography: Hilla Nadav)



Figure 11: Sheba Medical Center, Charles Clore Tower. Isidor Mamlock Memorial pharmacy collection. Donated by Yonatan Mamlock Family. 2015. (photography: Hilla Nadav)



Figure 12: Text board about the donors'. 2015. (photography: Hilla Nadav)



Figure 13: Exhibition of the collection and its installation in the foyer. 2015. (photography: Hilla Nadav).



Figure 14: The Rambam Medical Campus, Haifa. Sammy Ofer tower Foyer. 2015. (Photography: Hilla Nadav).



Figure 15: The Rambam Medical Campus. Sammy Ofer Tower, mounted Glass Display Cases showing the hospitals' treasury exhibition. 2015 (Photography: Hilla Nadav)



Figure 16: Exhibition of equipment preserved since the hospital establishment 2015 (Photography: Hilla Nadav)



Figure 17: Exhibition of archeological findings of medical instruments, on the left text boards about each item. 2015 (Photography: Hilla Nadav).

The visual performances have been narrated by Rose's method⁴⁴ as explained in the first chapter. Both hospitals have a similar modality, but it differs in the manner of extension and exhibition.

The table presents the analysis in details (Figure 18). Each site refers individually to the modality to which it is related, in the *Site of Production*, for instance, the approach of both hospitals is found to be identical, save for miniscule details related to hospital characteristics. The major differences are found in the manner of exhibition of each hospital. This is because each of them has different aims with regard to the stay of the visitor to the hospital.



Site (of) Modality	Production	Audiencing	The Image itself
Social	<p>At the foyers of main towers within the hospitals: At Sheba medical center Charles Clore tower and at the Rambam medical campus Sammy Ofer tower.</p> <p>Sheba: Memorial collection donated by the Mamlock Family.</p> <p>Rambam: Not mentioned.</p>	<p>Visitors and patients of the hospitals are the target audience.</p> <p>Hospitals' management along with architects, designers and curators are the planners of the space and its exhibitions.</p> <p>Observations were taken in both Hospitals. I concluded the exhibitions serve their goals, visitors and patients are looking at the display cases and showing their interest in what presented.</p>	<p>Printed informative text boards are clearly readable. Historical information regarding the artistic collection and hospital's history is delivered.</p>
Compositional	<p>Both hospitals exhibit historical collections of medical instruments.</p> <p><u>Sheba</u>: Antique medical and pharmacy equipment and vintage documents from the beginning of the 20th century until 1970.</p> <p><u>Rambam</u>: Various medical instruments, from ancient history to the 20th century, such as the Rambam's books, Roman history in Israel, and even equipment preserved since the hospital establishment.</p>	<p><u>Sheba</u>: Display case of medical instruments corresponds with another exhibition of Israeli artists collection also presented in glass display cases. The composition of all displays encompasses the sitting area of the foyer.</p> <p><u>Rambam</u>: The collection presented, corresponds with the female figures sculptures made of lumber, also placed in the foyer. The collection mounted on the wall as it</p>	<p><u>Sheba</u>: In the foyer, on the right to the entrance we can see the display case of the Mamlock collection. Adjacent to the wall there is a text board regarding the donors and their family member, the pioneer pharmacist Isidor Mamlock. Alongside the text board we see a photography reproduction of Isidor Mamlock and his pharmacy partners.</p> <p><u>Rambam</u>: Display cases are organized according to chronological era. In each</p>



		does not interfere with passengers passing by.	display case we see different collection. On the right a brief history about the hospital establishment, while in the middle the Rambam's ancient books and documents, and on left display we see archeological findings from the Roman era in Israel.
Technological	In both hospitals all items presented behind glass display cases, locked and unreachable to touch, as similar to museums standards.	At Sheba exhibition is placed where passengers can look and walk around it. While at Rambam, exhibition is displayed similarly to museum's collections. Direct spotlights on the exhibited items, as well as numbered items which their information can be found at the board next to each display case.	Both hospitals have aesthetic display which provides pleasant experience while looking at it to pass time. However, it does not allow any direct physical contact with the collection items.

Figure 18: Comparative Visual Analysis Table:

Conclusions

This work focuses on a visual study of the presentation of visual art in hospital spaces, but it does not only focus on visual art in itself, but extends to visual performances.

The hospital space is none other than a space of incarceration for purposes of healing and recuperation. After we have passed through the entrance gates, we enter into an illusional space whose intention is to soothe our anxieties by visual means that are pleasant to the eye. Art in hospitals provides access to culture that is unattainable in everyday life, and functions as a therapeutic tool and a means of passing time. The art in that space beautifies it and fills it with its power.

The visitor to a hospital is not always aware of the existence of art works in the hospital, and therefore when he enters the space, he is brought into contact with art even if he is not an art consumer. The presence of art works serves various interests. The hospital has great interest in informing the public of its prestige and uniqueness. This is done by visual means as well, and text plaques are hung alongside the art works. These may be objects belonging to a collection, or a gallery of illustrations of hospital life along the hallways and entranceways. A hospital is not a gallery and certainly not a museum, because the function of a hospital is not to serve as a center for preservation of culture and history.



The role of a hospital, then, is to preserve the person's health, to provide him with treatment, not for purposes of enjoyment. In order to allow us to enjoy the treatment, and in order to mitigate the suffering that is involved, hospitals make an effort to cultivate and to fill their spaces with art collections and art works for the benefit of visitors of all kinds.



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- 5) See in this article: Influence of environmental design – a short survey
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Figure 18: Comparative Visual Analysis Table



Architectonic Metaphorical Structure

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Abstract

My research on “architectonic metaphorical structure from linguistic metaphors to architectural imagery and creativity” shows how it leads to architectural imagination, artistic imagery, architectonic metaphors, conceptual thinking and artistic architectural creativity. Through this research, I reached an aspect of architecture that has not been emphasized as a source for creative thinking. This aspect develops creativity and allows a methodology for the formal artistic aspects of design based on sound conceptual ideas appropriate for the project. This methodology does not imitate or originate formal ideas peripherally related to concepts for the project, but allows the architect to come up with architectural artistic concepts to translate the concepts into forms. This model would allow, through brainstorming, to come up with imagery developed from linguistic metaphors that would then be transformed into architectonic metaphors. These architectonic metaphors would develop into a vocabulary of shapes and forms using basic architectonic elements and principles, but without losing the intended expression and meaning. Theories of metaphor are therefore basic for the translation of conceptual ideas into artistic architectonic forms.

I used case studies from my Architectural Design 4 students at Broward College in Ft. Lauderdale, and the metaphorical process students have followed in developing the linguistic metaphors that allows them to create architectonic metaphorical interpretations to give imagery to their design and a unique and appropriate concept for their projects. The process they followed and the creative results illustrates how conceptual ideas may be generated from linguistic interpretations of form to facilitate the development of creativity, unique and artistic solutions to architectural design problems that reach the level of architectonic artistic creation.

I also researched the metaphorical interpretations of two most poetic embodiments by Daniel Libeskind, the Holocaust Museum in Berlin, and his Contemporary Jewish Museum in San Francisco.



ARCHITECTURAL IMAGINATION

Conceptual thinking is an inspirational generator of organization, form and image. The transformation of abstract mental imagery into concrete interpretations through the use of imagination is the most important aspect in the process of conceptual thinking. Architectural conceptual design is achieved by transforming and developing this conceptual thinking into imagery obtained through different mediating steps from abstractness into concreteness. I have focused on the process of developing concepts into concrete interpretations through metaphorical language. The process starts with brainstorming for ideas related to the project, then goes through a process of interpretation through the use of metaphors and culminates with a metaphorical structure or construct that makes architectonic interpretations of these ideas forming a total concept as the vocabulary of forms and expression for the design of a building.

Conceptual Design and Metaphorical Representation

Conceptual design is about thinking in the realm of ideas or concepts and not merely thinking in a “preliminary” or “schematic” level of design. Concept is defined as “Something conceived in the mind: thought, notion. An abstract or generic idea generalized from particular instances” [adapted from Merriam-Webster Collegiate Dictionary (1977)]. The process of creation in architectural conceptual design goes from ideas expressed in words and images through an interpretation of these into the visual language of architecture, an architectonic language. An idea in architecture can have many inspirational starting points. It can start from individual or collective inspiration, from past experience, from imitation or from direct representation. The level of conceptual design from where creativity partly derives is a process of brainstorming in which the designer visualizes several ideas or concepts and starts developing an image for the building to express which is appropriate for the type of use of the building and for the locality of the project. These abstract ideas would be related to general aspects of the architectural program and general aspects of the locality and the site. Culture is a most important factor of the locality of a building.

Metaphorical Representation and the Development of Ideas

According to Susanne K. Langer in *Problems of Art* [adapted from Langer, Susanne. 1957. *Problems of Art* (Page 23). Charles Scribner's Sons. New York.]:

A metaphor is not language, it is an idea expressed by language, an idea that in its turn functions as a symbol to express something. It is not discursive and therefore does not really make a statement of the idea it conveys; but it formulates a new conception for our direct imaginative grasp.



The imagery developed conceptually is based on a process that starts with metaphorical interpretations based on language. Language establishes a direct link between thought and communication of thought through the use of pre-determined expressions. The use of metaphors, analogies, similes or parallel interpretations is one of the mediating steps towards the transformation of abstract thoughts into more concrete expressions. A metaphor is “the transfer of references from one object to another.” The definition of metaphor is “a figure of speech in which a word or phrase literally denoting one kind of object or idea is used in place of another to suggest a likeness or analogy between them (as in drowning in money): figurative language; compare to “SIMILE” [adapted from Merriam-Webster Collegiate Dictionary (1977)].

This process of transformation through metaphorical interpretations allows for a more abundant source of creativity. Metaphors are dependent on the experience and culture of the individual performing (the designer) or experiencing the interpretation (the percipient). The appropriate combination of metaphorical interpretations takes the concept or idea beyond its initial formulation. The process of development of the ideas or concepts through metaphors taps into matrices of interpretation that increases the complexity, depth and emotional intensity of the images being developed. It also taps into the essence of the individual human being, into the likes and dislikes, and turns it into a personal expression. It becomes a more holistic, organic approach.

Symbolism and Geometry

The primary representation of metaphors is through symbols. Symbolism allows for the visualization of the abstract into the visible realm. Symbols are formed through interpretation and can be expressed verbally or graphically. The metaphorical imagery is developed through symbols and graphic or pictorial representation as the mediating step. Since “geometry is the paradigm of symbolic representation” [adapted from Vesely, Dalibor. 2004. *Architecture in the Age of Divided Representation* (p.74). The MIT Press, Cambridge, Massachusetts.] then the normal sequence of development for the graphic interpretation is through geometry. Graphic interpretations communicate thru geometrical representations in two-dimensions. Geometry then is imbued in meaning representing the conceptual thinking intended. For example, a triangle would represent a triad of some sort, or a “balanced” stable figure if resting on one of its sides.

Graphic Representation and Three-Dimensional Architectonic Models

Geometrical interpretations are explored based on their conveyance of meaning to the percipient and



developed further from “two-dimensional” graphic representations into architectural single-view “three-dimensional” interpretations and representational drawings. The graphic representation would be done using shapes, or combination of shapes that would denote the intended meaning, e.g. a line with a half circle on top with radial lines coming off from it would be a primitive graphic representation of a sunset. This graphic interpretation could be used metaphorically to represent relaxation, as in travel, or romance, or in general an instance that we consider beautiful and enjoyable. This graphic representation is developed in three-dimensions through the application of basic architectonic elements that give a physical interpretation, i.e. three-dimensional, although abstract of the conceptual ideas or imagery. These interpretations are done by reading cues of emotions and reactions from the metaphorical imagery that correspond to specific architectonic principles that would communicate the imagery intended. The three-dimensional interpretation of relaxation would not be a sunset, as in the two-dimensional interpretation but a composition that would evoke in three-dimension relaxation or enjoyment by combining architectonic elements that would evoke this image just like the “cartoonish” two-dimensional sunset representation did. The mediating step at this level is architectonic models expressing thru forms that visually communicate the intended conceptual content and imagery.

An architectonically abstract interpretation would have a main shape surrounded by smaller shapes "subservient" to the larger one be it a centralized organization or a datum shape or form integrating the smaller shapes. This can be interpreted as unity, as integration, as parts being in repose due to the larger shape or form, which these architectonic interpretations can be projected.

Architectonic Language and Metaphorical Structure

Architectonic language is a visual language that communicates through the application of architectonic and compositional principles, and basic architectural elements. The architectonic principles that are applied to this visual language are brought forth from cues of the metaphorical imagery developed from the conceptual ideas. Let's take the principle of stability for example. It can be represented by a metaphor that communicates continuous repose or continuous equilibrium. As mentioned before, a triangle resting on one of its sides would be a geometrical representation of stability. In three-dimensions, the use of a pyramid would be a representation of stability through the use of a basic architectural element or solid. An image developed for the metaphorical structure preceding the building design would include a pyramidal form or a similar stable form. This pyramidal form could be solid, voidal, in outline or even implied.



METAPHORICAL APPROACH OF ARCHITECTS

Daniel Libeskind

Daniel Libeskind in both of his masterpieces, the Holocaust Museum in Berlin, Germany and in the Contemporary Jewish Museum in San Francisco shows a thorough understanding of the application of conceptual design ideas based on linguistic metaphors projected onto architectonic metaphorical interpretations. His buildings embody perfectly the application of this approach that enriches the design concept and gives the building a depth of meaning beyond the understanding of function, structure and space. It transforms spaces into dynamic projections of emotions onto the user, and it enhances the spatial experience beyond three-dimensions.

Contemporary Jewish Museum, San Francisco



Figure 3-1. The "Yud" Form outside with the original facade of the building. (Author's photo)



Figure 3-2. L'Chaim writing



Figure 3-3. L'Chaim building metaphor from above. (Author's photo)



In his Contemporary Jewish Museum in San Francisco he applied several linguistic metaphors and turned them into the main design themes of the building design. He used the Hebrew word "L'Chaim," meaning life, to celebrate the life and the culture of Judaism in the USA. He states [adapted from Wolf, Connie. 2008. Celebrating the Contemporary Jewish Museum (Page 5). Rizzoli International Publications, Inc., New York.]:

It was remarkable to work in San Francisco in a Jewish museum that is the celebration of Jewish life, and of San Francisco, and of America. That's why I based it on that very tradition and very ancient core of the Jewish spirit, L'Chaim, to life.

Libeskind takes the word "L'Chaim" and decomposes it into its letters "chet" and "yud". He takes the linguistic metaphor of "To Life" and interprets it as giving the old abandoned power substation where the museum was developed as being a building that first was "giving life" to San Francisco by providing energy for the whole city that is then metaphorically transformed into a Museum that is to be the celebration of life for the Jewish culture. He keeps the main exterior walls of the abandoned power substation and designs the new structure literally "emerging" from the old, therefore denoting metaphorically "new life" is emerging from the old and "celebrating new life." He transforms it into a metaphorical structure by taking the linguistic metaphor and transforming it into an architectonic metaphor. The "chet" becomes the longest volume of the whole composition of the building associating the contrast of the sizes of the letters chet and yud. The "yud" becomes a rotated cube resting on one of its tips coming to a peak at the top, 65 feet into the air, and being the "highest" part of the word "Chai." On the inside of the "Yud," Libeskind houses on the ground level, the Museum Store that metaphorically functions as the "sharing of the culture and life." On the second level, the "Yud" Gallery of Steve and Maribelle Leavitt becomes hierarchically the most important and largest space of the whole Museum, "the life center" of the Museum. Inside this gallery Libeskind placed 36 skylights. The "Chai" is associated Kabalistically to the number 18, the number 36 being twice 18, therefore double "chai."

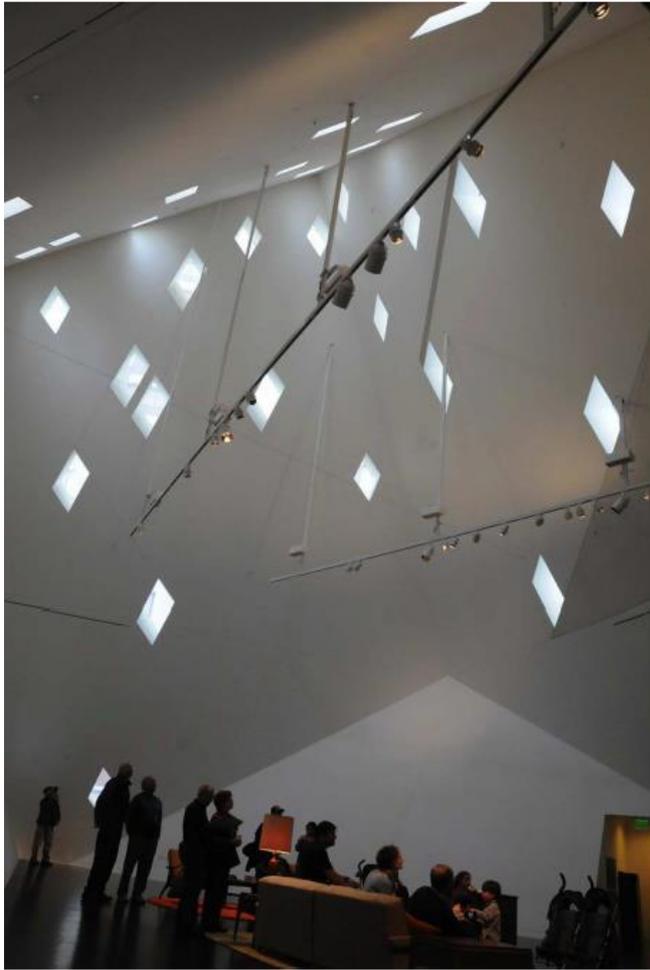


Figure 3-4. The "Yud" Gallery inside. (Author's photo)

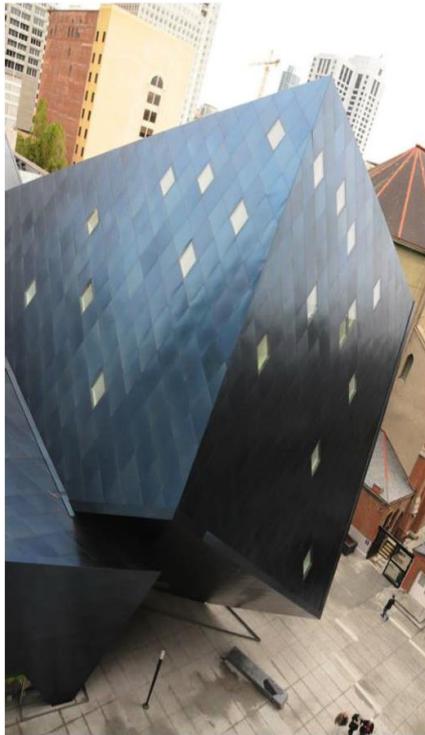


Figure 3-5. The "Yud" Form outside. (Author's photo)

On the entrance lobby, Libeskind projects more metaphorical interpretations into the design. He creates a "Pardes" wall that goes the full height and almost the full length of the lobby. This angled "Pardes" wall symbolically represents the "Pardes" garden in Kabbalistic



Figure 3-6. The "Pardes" wall at the lobby. (Author's photo)



Jewish tradition of mystical wisdom. The wall outlines from right to left, the letters "Pei, Reish, Dalet and Samekh" spelling the word "Pardes" in Hebrew. The words "Pshat, Remez, Drash,

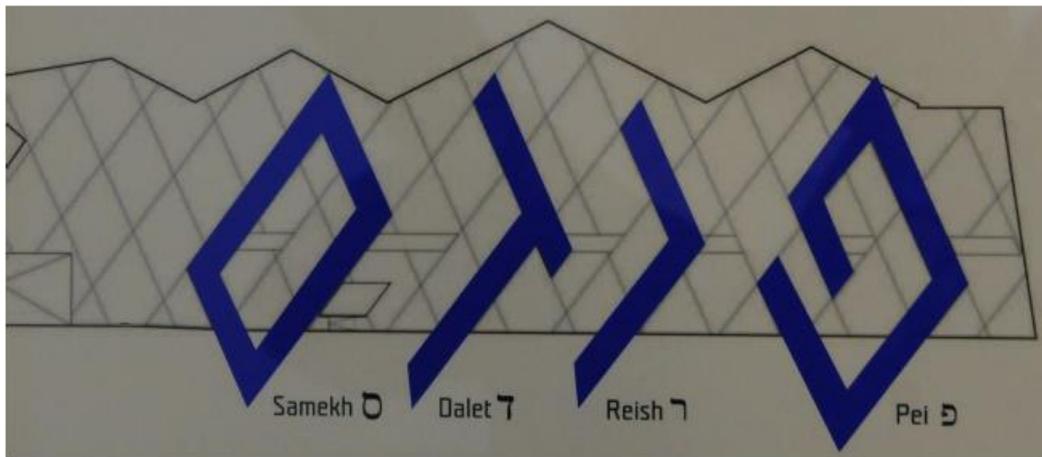


Figure 3-7. Drawing of the "Pardes" wall at the lobby. (Author's photo of Museum exhibit diagram)

and Sod" have the following linguistic meanings in the Kabbalistic interpretation of the scriptures. Libeskind interprets these meanings metaphorically into the architecture of the main entrance space, the lobby, prefacing what is in the museum spatially and displayed inside, turning the lobby into a "Pardes garden." "Pshat" means "plain" or literal meaning; "Remez" means "hints" or allegorical meaning; "Drash," which comes from the Hebrew word "darash" meaning to inquire or to seek, therefore it is the allusive or moral meaning; and the final word "Sod" meaning secret or mystical meaning. Therefore the word "Pardes" means "garden (or orchard) beyond," implying a "garden of meanings" or "multiple interpretations." This embodies symbolically the purpose of the museum. The Museum metaphorically is "embracing multiple interpretations and layers of meaning." The Museum has as a goal to encourage open-mindedness, to acknowledge diverse backgrounds and to create an opportunity for exploring multiple perspectives.



CASE STUDIES OF STUDENT WORK ON ARCHITECTONIC METAPHORICAL STRUCTURE

The Process of Metaphorical Interpretations



Figure 5-1. The mesh. (Author's photo)

The application of metaphorical structure in architecture design studio 4 has taken place in a series of projects that entailed the initial use of a model developed from a light translucent black fabric mesh (tulle, fine net of acetate, nylon, rayon or silk), that is transformed by folds, into a volumetric form or series of continuous forms that are architectonic and volumetric in nature. These interpretations are done by also analyzing the site and the purpose and function of the building.

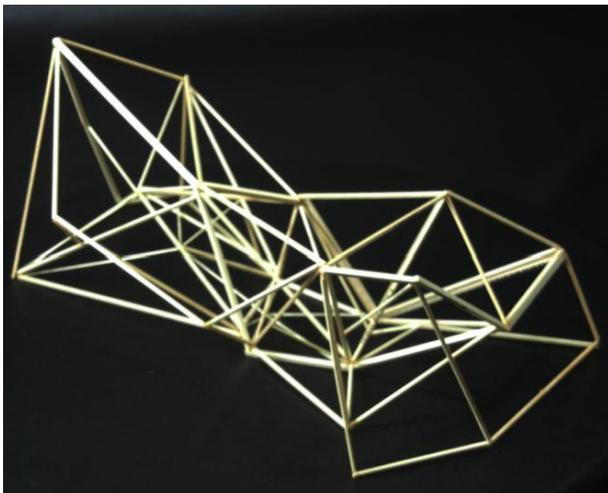


Figure 5-2. The linear interpretation. (Author's photo)



Several architectonic metaphorical and analogical interpretations may be projected onto these forms created with the folded fabric mesh. The first architectonic analogical interpretation the design student does, is to analyze and relate the forms, shapes and arrangements that are produced by happenstance in the folding of the mesh, to architectonic principles found by projecting metaphorically into the forms of the mesh. In this process, several architectonic principles are identified and analyzed. Among these architectonic principles the following are identified: density, transparency, layering, hierarchy of space and volume, dominant axis, dominant and secondary ridges, dominant direction, alignments, forms, shapes, symmetry, asymmetry, balance, datum, repetition, rhythm, edges, and parallelism. All of these interpretations of architectonic principles can be developed with other metaphorical interpretations into the final conceptual narrative of the design ideas based on an architectonic metaphorical structure.

The Extraction of Architectonic Systems



Figure 5-3. Analogical projections of vectors onto mesh. (Nadezda Tagashova electronic drawing)

Vectors

A series of dominant, secondary and tertiary vectors can be identified analogically into the mesh and interpreted as ridges. This projection of architectonic vectors with direction and length are interpreted into the development of a spatial system with a framework extracted from the irregularities of the mesh that analogically become elements of an architectonic spatial system transforming a simple folded tulle material into a series of architectonic instances. The main vector/ridge would lead to an interpretation of an ordering axis for the composition of spaces “found” or analogically projected to the mesh. This vector/axis can also be developed or metaphorically transformed into an organizing datum for the secondary spaces.



Hierarchy

In applying the architectonic principle of hierarchy to the analogy of space of the mesh, architectonically can be interpreted as an ordering principle ordering the series of spaces found analogically. This principle of hierarchy can be applied then to the development of the construct in the resolution of the function of these spaces that can be classified programmatically as having a hierarchy that can be matched analogically to the mesh interpretation and fully developed into an architectonic construct.

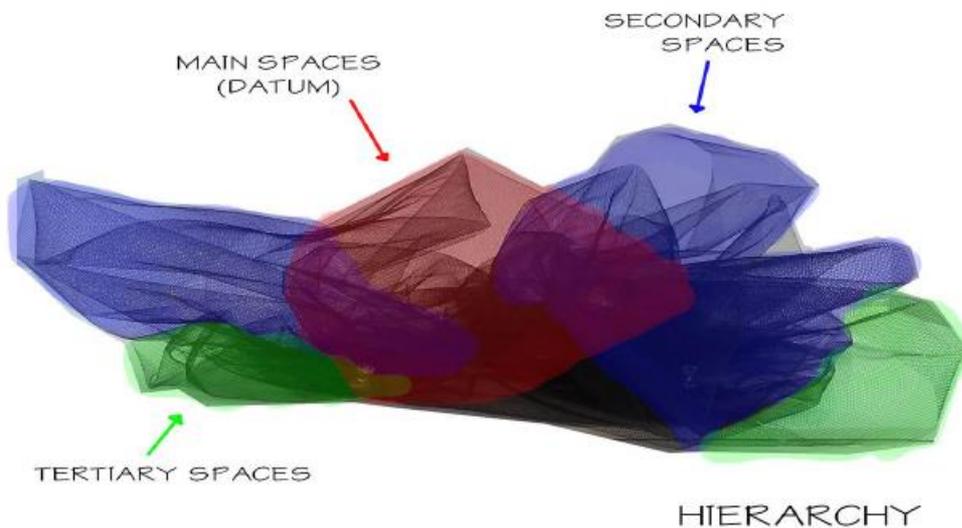


Figure 5-4. Analogical projections of hierarchy onto mesh. (Nadezda Tagashova electronic drawing)

Frameworks

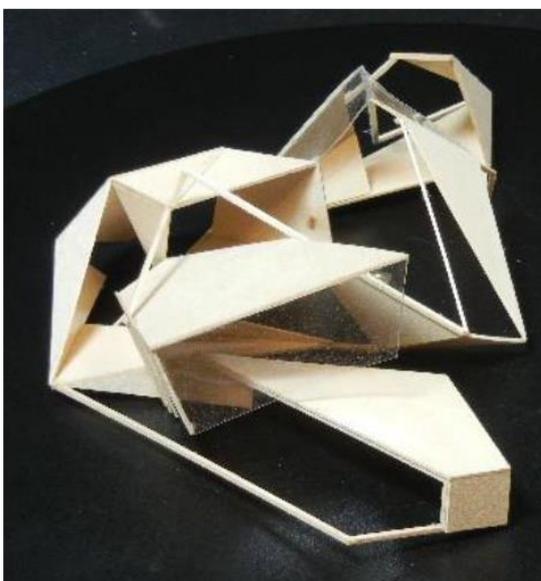


Figure 5-5. Development of spatial units from mesh. (Gary Joseph's project)



Figure 5-6. Development of spatial units from mesh. (Gary Joseph's project)

The analogical projections of space into the folds of the mesh can be re-interpreted into a set of lineal frameworks that delineate the spaces. Outlining space with linear elements is a way to apply a metaphorical architectonic interpretation to the mesh, turning forms into spaces that can be transformed into inhabitable thru developing and transforming them. The initial development of the linear vectors consists in creating spatial tension by outlining spatial forms. These forms can establish two systems, one to be primary and "exterior" by outlining the larger more dominant forms, the other is a secondary or "interior" set of spaces created by outlining the smaller forms contained within the larger folds of the mesh. Establishing both systems will allow a vocabulary of spatial forms to be integral to the whole. The relationship of the set of spaces to each other can be ordered by the other architectonic principles projected before.

After the linear exploration, an exploration combining linear and planar elements gives the spaces more definition. The folded planes define space in a more clear way than the linear elements. The folded planes introduce the aspect of enclosure to the architectonic composition. Spatial tension is clearer. The student starts realizing that spatial tension is created with basic architectural elements of line and plane that lead to defining volume or space. Space is the essence of the architectonic construct from which the inhabitability and correct adjacencies may be developed.

The Spatial Development of Architectonic Interpretations

The mesh model is then transformed into a series of spaces through the analogical re-interpretation of the "skin" or exterior surface of the mesh with linear and planar elements resembling or approximating the original volumes. These volumes are then interpreted through a fusion of the site principles from the analysis of the site and its conditions. Other architectonic principles are applied integrating the folded mesh spaces and the site including approach, thrust or main directionality of the site, and

parallelism of the context, slope, view, natural factors and cultural context.

A further transformation of the spaces derived from the metaphorical interpretations of the mesh is to develop the correct layout of spaces with activities corresponding to the space envelope and to the correct adjacencies analyzed through an adjacencies matrix. Aspects of the site, including slope are other variables that define the layout of spaces based on the activities of the program. The final transformation is based on the narrative of the architectonic metaphorical interpretations derived from the linguistic metaphors that correspond to the cultural aspects, purpose of the building, the locality, the site, and the resultant imagery developed for the project. These metaphorical interpretations allow the student to develop the construct appropriately to give a layer of meaning to the project that will take it into the conceptual level beyond the resolution of space-structure-function-site.

THE APPLICATION OF IMAGERY TO SPATIAL INTERPRETATIONS

Cherokee Cultural Research Center: Imagery of Cherokee Tombs

The following are studies of forms and shapes of actual Cherokee tombs in the ground and over the ground level. The sketches show the analysis of transformation of shapes and forms through tilting them, compressing or enlarging linear and planar elements.

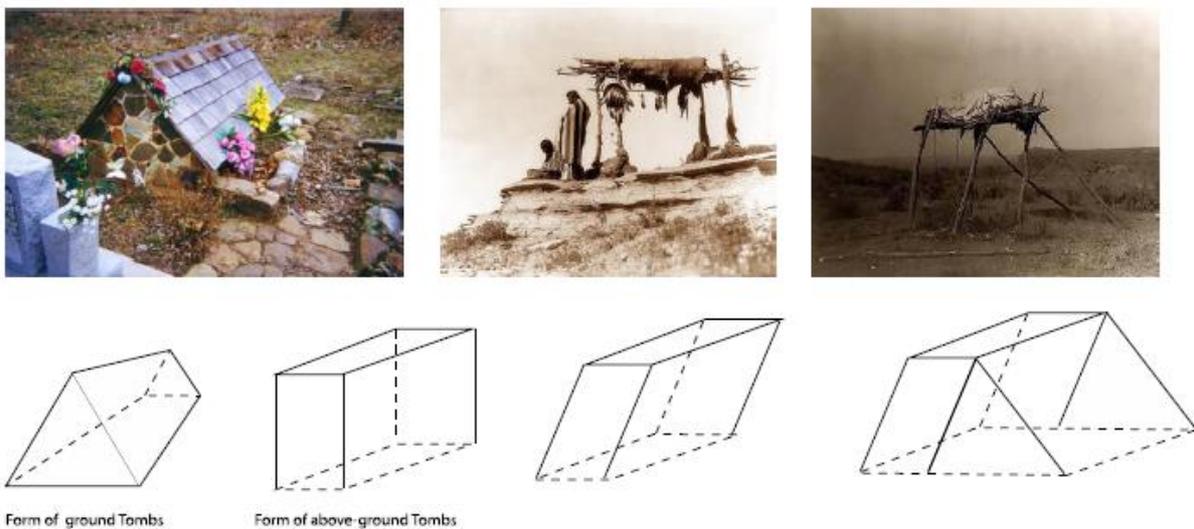


Figure 5-7. Cherokee traditional shapes and forms. (Elizabeth Alers Cornejo project)



The following diagrams are analyzing shapes and forms found in nature: flowers, tree branches, roots, and more.

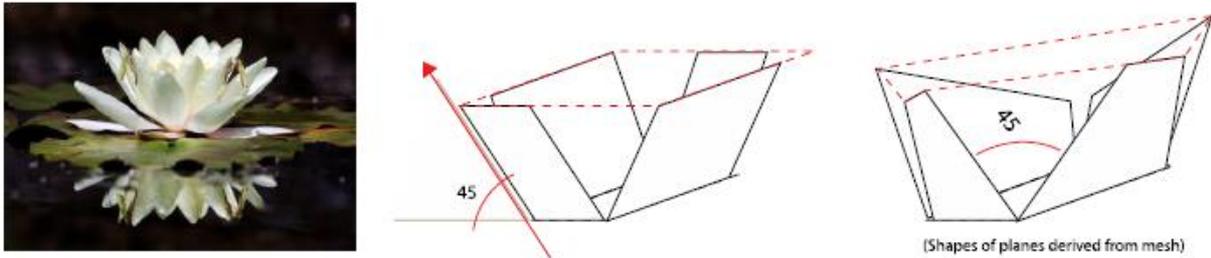


Figure 5-8. Organic imagery of the region. (Elizabeth Alers Cornejo project)

The following are metaphorical projections of architectonic principles found in the root of a plant and applied to the metaphorical structure: The root of the plant is thicker and more important hierarchically than any of the other parts of the plant. The subdivision of the main root starts as one large element that becomes many smaller elements. The main root becomes a "datum" to the other smaller roots and to the branches of the tree, unifying them all. The main vector/ridge of the construct creates a unifying datum connecting the lines and planes of all spaces.



Figure 5-9. Image of root. (Elizabeth Alers Cornejo project)

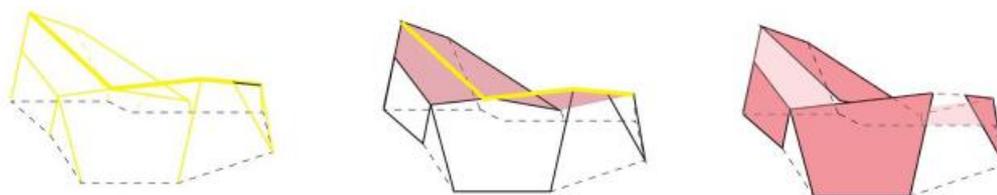


Figure 5-10. Shapes and forms derived from organic metaphorical interpretations. (Elizabeth Alers Cornejo project)

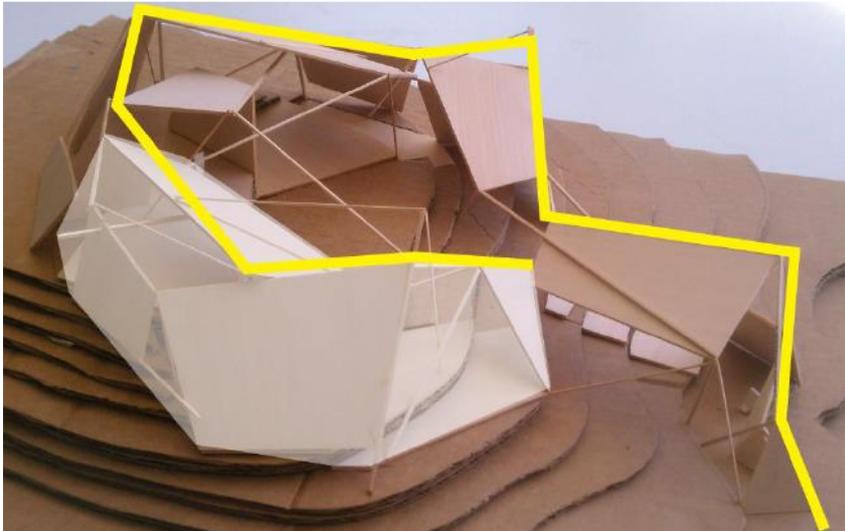


Figure 5-11. Linear analysis of the main vector/ridge. (Elizabeth Alers Cornejo project)

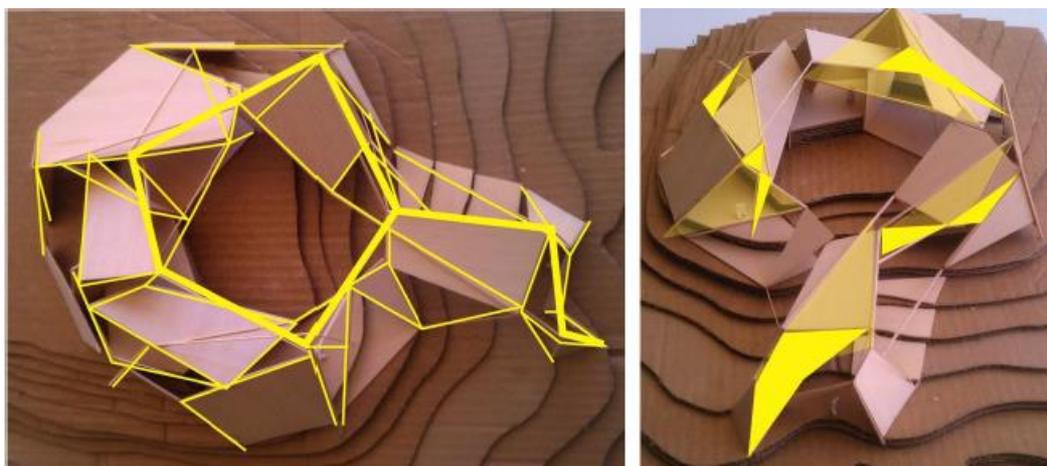


Figure 5-12. Linear analysis of the main and secondary vectors/ridges and planes. (Elizabeth Alers Cornejo project)

Symbolism Relating to Imagery

The number seven was of great importance to the Cherokee. The number seven is the number of clans of the Cherokee nation, and also symbolizes the following seven wonders to them: the bird, the deer, the wolf, the wild potato, dyes for paint, the color blue and long hair. They are represented in the shape of a regular heptagon, with the Sacred Fire in the middle being most important. The Sacred Fire at the center of the heptagon is a datum connecting all the other objects of their worship. In the construct design the public space is an open space located in the center, unifying the rest of the spaces. This center datum space organizes the main circulation throughout the construct and its different levels.

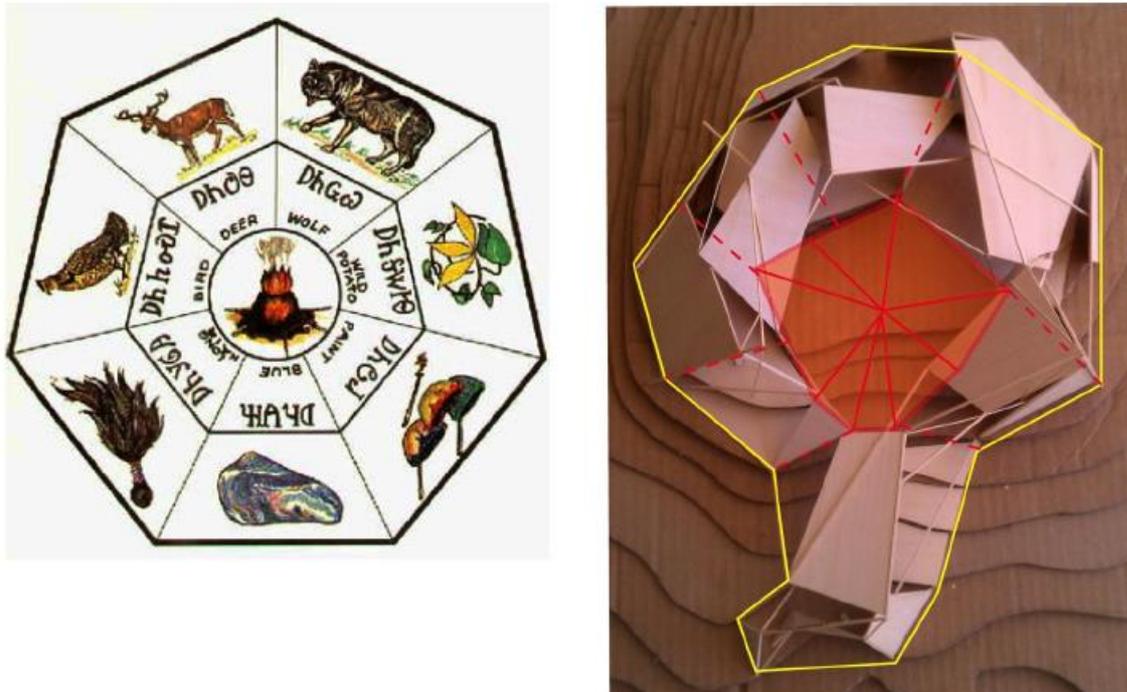


Figure 5-13. Heptagonal shape of Cherokee symbol and shape application. (Elizabeth Alers Cornejo project)

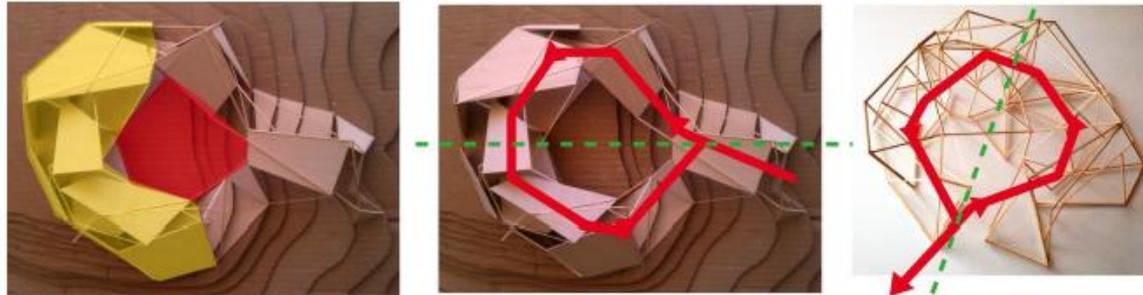


Figure 5-14. Architectonic metaphorical interpretations of Cherokee symbol. (Elizabeth Alers Cornejo project)

The Final Construct

The final metaphorical projection into the developing construct is derived from an amalgam of cultural context, the history of the site and locality, the history of the institution or owners of the project, the purpose of the project, the objective for the user and the imagery that the project is to portray, both inside the main spaces and from the outside. The same principles projected analogically into the mesh are then re-evaluated and re-interpreted to connect through metaphors, similes, symbolism, etc. to the cultural aspects of the project. The fusion of these three different metaphorical interpretations of mesh model, site and user/function produces the architectonic metaphorical structure for the project.

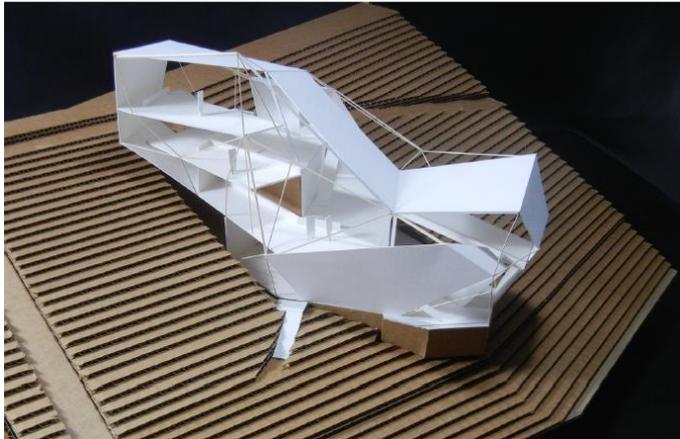


Figure 5-15. Final Construct for Un-Wed Mothers Home in Cuzco, Peru. (Elizabeth Alers Cornejo project)

The metaphorical process students have followed in developing the linguistic metaphors that allow them to create architectonic metaphorical interpretations to give imagery to their design and a unique and appropriate concept for their projects has resulted in more unique designs rather than the traditional "boxes" stacking on top of each other from before applying the metaphorical structure. The process they followed and the creative results illustrates how conceptual ideas may be generated from linguistic interpretations of form to facilitate the development of creativity and unique solutions to architectural design problems, making very unique and expressive projects that reflect the advantages of applying this metaphorical process.



Poetically Speaking: Art and the Public Space

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Abstract

Art intervention is a general term for actions, situations or installations undertaken with the intention of intervening in and influencing the public space. It is characterized by a number of variables, whose behavior cannot be predicted (the structure of the piece, duration, public response, reactions of the authorities, etc.). This is a situation of uncertainty that contains, inter alia, unknown participants and unforeseen developments. Every component is relative, having an indefinite value. The space of the art intervention (lobby, auditorium, avenue, square, public garden)¹ is relational, in that it constructs relationships between the participants. Therefore, how it is used stimulates interpersonal interactions and generates a real-time event.

Formal urban environments differ from informal urban situations that are a result, inter alia, of artistic interventions. Constructed spaces represent a formal, ordered, predictable, and controllable process, whereas artistic intervention within a public space represents an informal process, whose course and development cannot be dictated a priori.

Artist and social activist Matan Israeli built a staircase connecting his neighborhood, Musrara, with Jerusalem's Old City, where his girlfriend, Chiara, worked. *Chiara's Stairs* (2009) was an appropriate response to a social and political problem, which expressed and reflected the physical conditions of the space: Musrara is surrounded by a stone wall meant to prevent the entrance of Arab residents of East Jerusalem into the neighborhood. Various traffic arteries (two roads, a tunnel and train tracks) run along the eastern side of the wall. From this we can surmise that the intent was to create a physical partition between the western and eastern parts of the city. Israeli recognized the need to build steps, by which the wall could be scaled and the two sides of the city connected. His achievement was twofold: changing traffic routes to make the city center accessible, especially for residents of East Jerusalem, and on a symbolic level, unifying the city at the point where planners erected a separation wall.² This is an example of how informal intervention changes the "rules of the game," and actually undermines an existing spatial situation. One can lay

¹ All the above examples are related to urban public spaces. Needless to say, art intervention can and does occur in a variety of environmental contexts, including natural, ecological, etc.

² The original plan included openings in the wall surrounding Musrara. As a result of pressure from the residents, the municipality closed these openings, and created, de facto, a separation wall. It should be noted that about two years after they were constructed the



down the rules, but, as this example shows, one cannot direct or predict how an intervention process will develop.

The metaphorical basis underpinning the act of intervention differs categorically from spatial design practices. This difference can be elucidated through the antithetical contrast that exists between image and reality. As John Huizinga pointed out in his text *Homo Ludens (Playing Man, 1938)*, art, like play, offers a position/commentary/criticism of reality. Its main tool is its image of reality. It is a dynamic tool, based on the language of the action. The syntax of the artistic act is built upon the principle of disruption, which is achieved through contextual de-familiarization: the imagined and the simulated are derived from different content fields. For example, the artist Tali Keren invited the cantor Dov Heller to sing *New Jerusalem* at a celebratory session of the Jerusalem City Council. The libretto the artist chose was the full text of the *Jerusalem 2000* outline scheme, and it was sung as if it were an ecstatic prayer.³ Apparently, there is rhetorical conflict here between a pair of concepts that cannot co-exist – cantorship and urban planning. Also the spatial context – the city council auditorium – is incompatible with Jewish Liturgical Music. Keren's intervention, as a performative act, could have been performed in any public space, but the charged political impact connected to the status (political, religious and cultural) of Jerusalem and the makeup of its city council (which includes a significant percentage of Haredi council members) would have been weakened had the piece been performed in a synagogue or a concert hall. The contextual de-familiarization enabled a critical reading of the outline scheme in relation to the urban reality, as it incorporated the hegemony into the ceremony. City representatives became participants in a situation in which an administrative text was given a metaphorical dimension. The secular and mundane were bestowed with sacred connotations. The administrative and political space became symbolic and lost, at least for a while, its authority and hegemonic representation.

Not every public space is suitable for art intervention. There are almost no examples of art intervention in areas characterized by suburban construction, which conveys an overall sense of a planned and orderly zone. Anthropologically and geographically, Tamar Berger describes the Israeli suburb as follows: "forenoon, I slowly drive on a suburban street with its accessories: Ackerstein,⁴ a gray metal gate, a ceramics company sign, a bird-of-paradise plant, yellowish walls, sloping roofs, and all the rest. Uniformity, order, the new, the expected."⁵ Orderly, planned and designed spaces do not leave room for deviation or informal behavior. Another example is actually found within the inner city of Holon, south-east of Tel Aviv. The municipality of Holon initiated the building of 38 "Story Gardens," devoted to famous and beloved children's books; the gardens were designed by landscape architects and sculptors, and are well maintained. Is it only coincidental that no intervention has ever

stairs were dismantled by security forces fearing uprisings during Operation *Cast Lead*. A month later, a new staircase was constructed by Matan Israeli and Mohammed Nabulsi, using iron. This was dismantled by municipal inspectors claiming that the staircase had been built without following safety standard and the necessary permits.

³ Composer: Elie Yaffa, curators: Hilla Schneiderman and Gili Karzevski, *City Artist Project*, 2014

⁴ Ackerstein Industries Ltd is a well known Israeli brand of paving stones that has become a fixture of pedestrian walkways and decorative construction projects.

⁵ Tamar Berger, *Autopia – Suburban In-Between Space in Israel*, The Unified Kibbutz, Tel Aviv, 2015, p. 311



taken place in these gardens?⁶ Interventions occur, for the most part, in functionally irregular urban spaces. Artists identify environments and situations of instability and conflict, reflected in abandoned or neglected buildings, transitional spaces, borderline areas on the seams, and neighborhoods with disadvantaged and often marginalized populations. Interventions also occur in public spaces, including public institutions, which have polarizing characteristics: political imbalances (as in the example of Jerusalem's city council), geographic (like Chiara's Stairs), social (large concentrations of immigrants), economic (governmental and financial centers), cultural, historical and linguistic. An example of intervention addressing linguistic imbalance is *Parrhesia*, a group engaged in the development of a civil communication language to protest the exclusion of Arabic from Israeli public spaces. Within the framework of their 2006 project *Through Language (Derch Ha Safa)*, they painted graffiti on walls and objects (writing street and place names as well as definitions in Arabic with Hebrew translations), particularly in cities with a history of national dispossession or linguistic exclusion, such as Jaffa and Jerusalem.⁷

Is it possible to design an urban space as a designated activism zone? Not really. The intervention act is a response to deprivation or wrongdoing. Planners and architects are entrusted with creating the conditions necessary to establish a dynamic and pluralistic city. To ensure this, a flexible and open-ended plan, which leaves room for a variety of options and usages, is needed. Such planning should be at one and the same time designed and not (overly) designed. Having a range of possibilities and potential uses means, as we shall see, giving up control, as it is, precisely, within this uncontrolled and unordered area that the artist can fulfill the potential for intervention and bring about change at some future point. This is a twilight zone of uncertainty and ambiguity, in other words, a space that is not fully planned, and contains the potential for a programmatic change. In this collaboration between planner, designer and an artist lies a seemingly dangerous mechanism of self-destruction, in which the space is designed to accommodate the altering of its purpose.

Such a relationship exists within each and every one of us. This process is called evolution: DNA molecules contain genetic material that enable spontaneous mutations, in order to strengthen the genetic mechanism. The process of mutation (–or, in our case, artistic intervention) is built into the design that allows the living being (public space) to adapt to the changing environmental circumstances.

British artist and critic Liam Gillick posited the existence of a collaboration between planner and artist in spaces that are, by definition, neither private nor public and purposely in a state of crisis, in order to allow within them artistic action. Gillick likens such cooperation to a conspiracy between the planner/architect and artist.⁸ This claim diverges from the idea of open cooperation between them. By positing a corresponding relationship between the planner, designer and artist, Gillick undermines the immanence of each of these three practices. Architectural design and engaged art

⁶ The Center for Digital Art operates out of the Jesse Cohen neighborhood in Holon. The center is committed to an agenda of socially-engaged art, and as a result dozens of artistic activities have taken place there. However, none of them took place in the Story Gardens.

⁷ Emek Refaim St., German Colony, Jerusalem (2006); Ajami neighborhood, Jaffa (2007)

⁸ Liam Gillick (2007), *Proxemics - Selected Writings (1988-2004)*, JRP Ringier, Zurich, pp. 135- 6



are not objects that can withstand independent examination, they are rather an expression of the relationship, of spatial practice employed within a space for its development (evolution).

There is a subtle connection between the planned open-ended space and the relinquishing of control and supervision by the authorities. The public sphere, represents the omnipresent governmental and political order which is present in every aspect of our daily reality: spatial organization, permitted usages, ordering, maintenance, municipal supervision, etc. – all these point to how the public domain is reflected in the public sphere. From this it is possible to infer the ability of the space to accommodate subversive and anti-establishment artistic activities.

For the subject of our discussion – art in public space – there are two other elements in play. They are the public and the public sphere. It is incumbent upon us to examine architecture and artistic function in connection to these partners. Architecture, in the public domain, finds its main source of authority in the authority of the outline schemes, regulations, and municipal bylaws, the municipality's institutional resources and administration, which function as an extension of the central government.⁹ In contrast, art intervention espouses functional autonomy. Even when artists collaborate with local institutions (museums, cultural centers, the municipality's cultural department, etc.), they are consciously collaborating with representatives of the municipality. Artists adopt unique operational tactics; they simultaneously work from the inside – for cooperation and budget purposes – and from the outside – working independently and in open opposition to planning and supervision mechanisms in place. Also on a spatial level, the space they operate in is a temporary autonomous zone,¹⁰ whose borders expand and contract depending on the event and conduct of the participants (the public) of the artistic situation, and are not contingent upon the dimensions and physical attributes of the space. It is thus possible to describe it as a space within a space.

The element of transience shows that the artistic space is not necessarily ontological, but conceptual. As evidence, the artistic action is not accompanied by any claims on the space. It tends to function in what Smets defined as “unclaimed space.”¹¹ it is possible to function within this space, because the authorities do not exercise their control or ownership upon it. This is an anonymous and multifaceted space, and seems to be as much everybody's land as it is nobody's land. Even Seth Kim-Cohen views this definition of space as a characteristic of art intervention.¹² In this there is an activist message, and sometimes a clear call for explicit protest, such as, for example, in the takeover or occupying of abandoned buildings/complexes. Within Israel's contemporary artistic scene the interventions of the Jerusalemite *Empty House* group are prominent. The group invades and renovates abandoned buildings in Jerusalem, and operates limited-run cultural activities out of them. They intentionally renovate the structures using makeshift materials to clearly signal that they do not intend to colonize the structure

⁹ Eran Razin, *Local Government Reform in Israel: Between Centralization and Decentralization, Between Traditionalism and Modernity* (Hebrew edition), The Floersheimer Institute for Policy Studies, Jerusalem, 2003, p. 27

¹⁰ Hakim Bey, *Temporary Autonomous Zone* (Hebrew edition), Resling, Tel Aviv, 2008, p. 22`
<https://taitcoles.files.wordpress.com/2013/05/taz.pdf>, p. 54

¹¹ Unclaimed space, see: Rafi Segal and Els Verbakel (editors), *Architecture and Dispersal – Discussion*, AD, Princeton, New Jersey, pp. 102-107



The vacant is filled without making a claim of ownership or control over the structure or property. This introduces into the public consciousness the activist message that public space is ours – the public's – and under our control. It is possible to view the group's actions as protesting the political and economic system in which frozen assets are a common phenomenon in the urban landscape, as result of the financial interest of investors and developers, or because of bureaucratic and administrative reasons that fall under the responsibility of the municipality. One can also view this action as a communal work of art, since at the end of the intervention, the building/complex is symbolically turned over to the community to be used and cared for.

Art intervention operates in a fragmented space, and is not interested in the narratives and memories that the constructed environment has curated. The characterization of intervention as a fragmentation of the space, with no obligation to the environment or towards spatial continuity is similar to the relationship that exists between a drawn line and the white page upon which it lies. The composition of the drawing on the page is significant, but the eye of the beholder follows the movement of the line in a manner that is disconnected from its background. The artistic medium allows for the artificial transferring from the fragment to the whole, from a confined and autonomous maneuvering space into the public one, from the realm of the poetic to reality. *The Green Line* (2004)¹³ is a poetic act performed within a politically charged space, by Francis Alÿs, a Belgium-born, Mexican artist. Alÿs walked along 24 miles of the Green Line – the border separating East and West Jerusalem and its nearby villages – holding a leaking paint can. The green paint dripped along the path he walked. Alÿs used 58 liters of paint to symbolically reproduce the demarcation line. *The Green Line* – the pre-1967 armistice line between Israel and Jordan – was traced with a green pencil on a topographical map, in 1948, by Moshe Dyan, who at the time led the Israeli forces in the area, and Abdullah al-Tal, the commander of the Transjordanian Arab Legion. The armistice line is a visual simile that has become the colloquial name marking the border. Alÿs' *Green Line* is an ironic reversal of the political made manifest in a foreign object upon the landscape, amplifying the absurdity of conflict and the division of the landscape. I bring this as an example to illustrate, once more, the relationship between the poetic image and the reality in which it operates, regardless of the fact that this was a solo performance, lacking a dimension of public participation.

The relationship between art and public space is always complex, always political. Each of the participants of this illicit relationship perceives the other's function differently: the residents view the artists as foreign elements who have invaded their territory and community, and softening tactics are required to create trust and promote cooperation. For the curatorial body (art institutions), the artist is an essential resource, the *raison d'être* for its existence. For the municipality, artists are agents acting on behalf of the art institution, its executive branch. For the architect, the artist animates the constructed environment. For the artist, a good architect is one who does not over design and leaves space within which to maneuver and a range of possible uses.

¹² *ibid.*, p. 105

¹³ <https://vimeo.com/132929393>



Among architects a change in approach is required to fulfill Liam Gillick's collaborative argument regarding the hidden and complementary connection between the actions of the artist and the architect. An echo of this can be seen (1) in Richard Sennett's call to architects to establish open practices and design unfinished objects and buildings: "[...] asserting the value of incomplete form is a political act architects should perform in the public realm. This means asserting not only the beauty of unfinished objects but also their practicality;"¹⁴ and in the words of the architect and theoretician, Stan Allen (2), on the role of the architect as mediating between the designed and the open, flowing space: "[...] the job of the architect becomes calibrating the right mix between specificity, imagining and projecting potential uses unto the space, creating the right measure, understanding flow and access, while always leaving some noise in the system, a degree of 'play', that allows for the unexpected. The architect's job is to create spaces with potential. That potential is in turn activated by the way in which the space is put to use - put into play - by the public itself."¹⁵

With "a degree of 'play'," Allen is referring to the gap between image and reality. The play is an image of daily reality. The participants seriously play, but, at the same time, are conscious of the fact that the play is an imagined situation. This situation involves ambiguity. Moreover, each given image is subject to numerous interpretative readings, and is therefore ambiguous. This is a positive form of ambiguity, which expresses a connection - and connections to the world are never one-dimensional.

The two levels of activity - the poetic and the politic¹⁶ - are related, and most probably dependent on each other, just as art has always been dependent on the establishment's centers of power. However, they are not interchangeable. Francis Alÿs coined the saying: "Sometimes doing something poetic can become political and sometimes doing something political can become poetic."¹⁷ I believe that sometimes reality can be poetic, but the poetic can never become reality. Reality needs the poetic, like the moral needs the fable.

¹⁴ Richard Sennett, (2016), The Public Realm,
<http://www.richardsennett.com/site/senn/templates/general2.aspx?pageid=16&cc=gb>

¹⁵ Segal and Verbakel, 2008: 103

¹⁶ This is the political in connection the public sphere as opposed to the public space.

¹⁷ Seth Kim-Cohen. (2007), Worldmaking, Worldmarking, Wordmaking: The Heteromediaality of Francis Alÿs, European Summer School in Cultural Studies, Germany, [http://www.kim-cohen.com/Assets/Texts/Kim-Cohen_Al%FFs%20\(2007\).pd](http://www.kim-cohen.com/Assets/Texts/Kim-Cohen_Al%FFs%20(2007).pd)



A Work of "Total" Art. Phenomenology of the Italian Memorial in Auschwitz

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Abstract

In 1978 the Italian Association ANED (national association of people formerly deported to nazi camps) starts the design and implementation of a Memorial, to tell the story of the Italian deportation, shaping it with respect to the inner space of one of the existing blocks on the site of the extermination camp in Auschwitz (Block 21).

From the first project idea, the art potentiality was assumed as the most suitable instrument for the construction of memory. The Memorial was configured, in fact, as a true work of total art, coincidence of intention and perfect synthesis of the various arts in compliance with the same program: a choral work, a work of artists and intellectuals who, each according to his own jurisdiction, had composed it like an "organic" system in a deep sharing of the ultimate meaning of the thinking and doing.

In 1978 the Italian Association ANED (national association of people formerly deported to nazi camps) starts the design and implementation of a *Memorial*,¹ to tell the story of the Italian deportation, shaping it with respect to the inner space of one of the existing blocks on the site of the extermination camp in Auschwitz (Block 21).

From the first project idea, the art potentiality was assumed as the most suitable instrument for the construction of memory, through which the direct experience of the victims could be expressed and transmitted in a vision of effective and engaging synthesis. The difficulty of reconciling the singularity of personal dramas with the generality of the tragedy and the ability to communicate the essence to hand down the consciousness, it was a clear problem to the architect Lodovico Belgioioso, who commented on the difficult design process through these words: "... setting the architectural study of the memorial on one hand has been facilitated by my personal experience of imprisonment and deportation to the concentration camp of Mauthausen [...]. On the other hand, however, it has been made more difficult and complex, from the requirement I felt to depersonalize certain individual aspects of the aggregation of memories to achieve a vision of synthesis, more effectively communicated to the new generations coming from countries so

¹ Memorial in honor of the Italian fallen in the Nazi death camps.



different from ours. The problem to illustrate by visual media the facts to be documented, required a deep meditation to grasp the essentials of the moment”.¹

The comparison between the subjective experience (experienced by some of the artists and intellectuals involved) and the universal synthesis (which was to be seen, by anyone, through the memorial) well expresses the core of a creative process, which was attributable to the method work experienced at the “BBPR studio”² and that, as evidenced by Ernesto Nathan Rogers, resided “... in trying to grasp the deeper reality and translate it into poetical acts”.³

The artistic work is however, always, by its nature, a matter of synthesis, but in this specific case the synthesis was formed and conducted through a multiple, open and very rich contribution, that comes from different directions, converging toward the only target.

The goal is shared, highly motivating but at the same time so dense of horror to be able to lead the single expressive medium to an initial sense of inadequacy.⁴

The Memorial was configured, in fact, as a true work of total art,⁵ coincidence of intention and perfect synthesis of the various arts in compliance with the same program: a choral work, a work of artists and intellectuals who, each according to his own jurisdiction, had composed it like an “organic” system in a deep sharing of the ultimate meaning of the thinking and doing.

In this operation some of the biggest names in Italian culture of the twentieth century were involved: under the direction of Nelo Risi and from a text written by Primo Levi, the architectural firm BBPR (in the person of Ludovico Belgioioso) the painter “Pupino” Samonà and the composer Luigi Nono found themselves working together.

¹ Lodovico Belgioioso, *Mai più*, dossier by ANED, edited for the inauguration of the memorial in honor of the Italian fallen in the Nazi death camps (April 1980). Cf. Matteo Cavalieri, “Auschwitz, il blocco 21 e la pensabilità del secolo”, in *Il memoriale italiano di Auschwitz e il cantiere blocco 21. Un patrimonio materiale da salvare*, (Firenze: Alinea, 2009), p. 6.

² The architectural firm “BBPR”, formed in 1932, was one of the most prestigious architectural firms in Italy. The “studio” was composed of the architects Gian Luigi Banfi, Lodovico Barbiano di Belgioioso, Enrico Peressutti and Ernesto Nathan Rogers.

³ Ernesto Nathan Rogers, *Esperienza dell’architettura* (Milano: Einaudi, 1958).

⁴ See, to that effect, the testimony of Pupino Samonà: “When I was asked by Nelo Risi to study some pictorial solution [...] I thought that given my sense of horror for all forms of bullying and abuse and, given my political commitment, it would not be difficult to solve the problem. It happened just the opposite. I made contact with the documentation of the time (depositions, testimonies, photographs) and I was appalled for the inadequacy of the means of expression available to me”. Cf. Matteo Cavalieri, “Auschwitz, il blocco 21 e la pensabilità del secolo”, in *Il memoriale italiano di Auschwitz e il cantiere blocco 21. Un patrimonio materiale da salvare*, (Firenze: Alinea, 2009), p. 9.

⁵ Work of total art, in German *Gesamtkunstwerk*, is a term coined by Richard Wagner as the highest expression of his idea of the union between opera and drama, in which the individual arts are subordinate in a unique way. This ideal of theater would see the convergence of music, drama, art of dancing, poetry, visual arts, in order to achieve a perfect synthesis of the different arts that, on the one hand would have constituted the deepest expression of the soul of a people, from another would be projected in a context of universality.



Starting from these premises, this work, in its design and realization, takes upon itself a powerful symbolic and emotional charge and, from the point of view of the “phenomenon” (that is deliberately partial and emotional), it may suggest further spaces for reflection on the verdict of “outdating”, that someone has recently attributed to it, and that was unexpectedly used as an opportunity to motivate the removal and transfer to another place different from Auschwitz site which it was designed for.¹

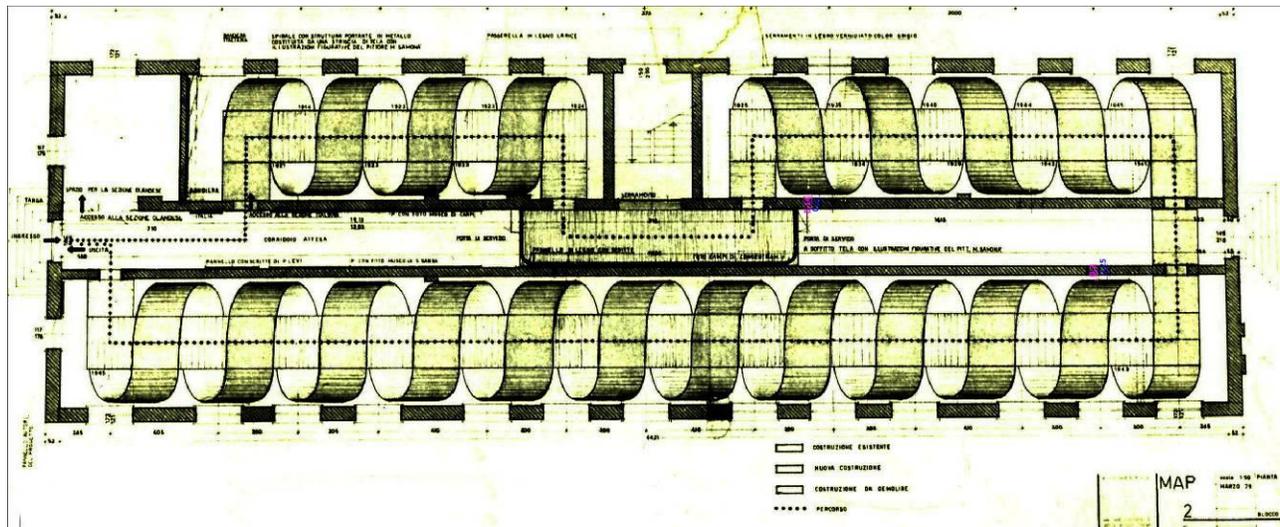


Fig. 1: Plan of the Memorial in honor of the Italian fallen in the Nazi death camps, project BBPR, 1979, Archive ANED, Milano

The task of founding a memory and building awareness of a dramatic phase of the past through a story (which has as its theme the history of Italy from 1919 to the end of the Second World War) is here entrusted to the emotional and didactic power of the art.

The Memorial is in fact thought as “... a place of meditation and remembrance”,² it is a narrative space of deep interiority, where it implements an initiatory path that leads to the understanding of the drama. It is a

¹ In July 2011, the memorial was closed by the direction of the Auschwitz Museum, because judged educationally inadequate, as a work of “art for art’s sake”. This has demonstrated the total lack of understanding of the Monument and the current contradictory management of the camp.

In May 2015, the memorial was dismantled and then removed from the original site, to insert it in Italy, in a hall of Gavignana, near Florence. It has thus implemented the total decontextualization of a work so “site specific”, designed and conceived for the Auschwitz camp.

² Minutes of CMO of 24 January 1979, p.1, Cf. E. Ruffini, Elisabetta Ruffini, “Lavoro di squadra, intelligenza e fantasia: storia del memoriale italiano ad Auschwitz”, in *Il memoriale italiano di Auschwitz e il cantiere blocco 21. Un patrimonio materiale da salvare*, (Firenze: Alinea, 2009), p. 18.



metaphorical space, the understanding of which requires an active and committed participation by the user and that simultaneously leverages a full sensory perception and an emotion that opens to all the senses.

The experience which the memorial invites us to is a dense experience, mental and bodily, integral and essential.

Entering the block from the access corridor, across a gap on the left, the spiral there suddenly appears showing us a side and starting to wind around the path that, from now on, will be indicated by the wooden walkway. This, several times, will turn peremptorily ninety degrees, changing the spatial use conditions and generating disorientation. Above and below are confused ... we are in an envelope of space-time; so you will come to the right, in a narrow and compressed intermediate dark space, that you leave with two other deviations in the path to resume the initial direction and then again twice to the right, to turn into the compartment in which the spiral is spread throughout the length of the block. Only then a stronger natural light coming through a window at the bottom will indicate, symbolically (perhaps as a sign of hope), the direction of exit from the tunnel of the tragic historical facts. There is not a special place of rest, there is scope for the walk only. We are in front of a labyrinth with no options, an inlet and a single output.¹ The supplier may not choose alternatives to the route marked and, as in any labyrinth, only at the end of the path (which is a path of initiation and purification) can hope to reach the goal (we could also say salvation, understanding, emotion ...). Although forced to travel a fixed direction (the one marked by the railway sleepers of the original idea) thanks to the enfolding spiral we are still in a no-prospective and multidirectional space. It is therefore necessary a multiplicity of visions, from different observation points, to recognize the path as a whole,² following a visual and cognitive process for which is essential a careful direction. Thus the theme of lasting (mental last) of the reading time of the work emerges (which, for example, is typical of the work of Le Corbusier, with its promenades). Only in the mind of who makes the experience and through the physical sensations, observing and reflecting, it's possible to form a meaningful synthesis of images (physical and mental) recognized and recomposed.

¹ The labyrinth, archetype of the experience in general and of that initiatory in particular, is here understood according to the meaning of the classic one-way maze, in which the only two possibilities are to arrive at the destination or to find themselves at the entrance, again to start point.

² Suggesting an analogy between music and architecture



Fig. 2: View of the inside of the memorial, in its original location in "Block 21", Auschwitz

The painted figures are deformed, they follow the elliptical curvature of the spiral and produce a swirling motion of shapes and colors. The rhythmic backbone is conferred by the narrative fields by Samonà, while the only suggested visual continuity is the same spiral that, enveloping the viewer, symbolically (and deceptively) looks as if it were itself to support the linear path of the walkway, passing below and then lifting it together with the observer-user, detaching from the container space.¹

The site of the walkway stands as a real stage space where, with a striking similarity compared to some of the most modern theatrical experiments, the scene is released from its traditional role and becomes organism, allowing you to feel like a single system the walls, the floor and the ceiling.²

¹ "... The people will walk onto a deck consisting of railway sleepers juxtaposed ... give the impression that the tape of the spiral also passes under the same sleepers ... it will be realized as an optical continuity between the various segments of the spiral that rise along the walls and touch the ceiling to descend along the opposite wall ... a "history" of the contemporary iconography on the subject of Italian deportation of his previous history and of the facts, that still have connections with those events, and a testimony of the interest and the contribution of Italian culture to the issue of deportation ... ". Project drawn up on headed paper of the "architects study BBPR", dated August 1975, AFMD, ANED Fund, Eventi Memorial – Progetti, A03, 05, 10/4, Cf. Elisabetta Ruffini, "Lavoro di squadra, intelligenza e fantasia: storia del memoriale italiano ad Auschwitz", in *Il memoriale italiano di Auschwitz e il cantiere blocco 21. Un patrimonio materiale da salvare*, (Firenze: Alinea, 2009), pp. 14-15.

² "... The theater scene is a energetic material that is constantly changing and the audience are a part of this matter. They have the ability to perceive the same scene in different ways and times and then to interact via sensory, expanding cognitive skills and creative sensibility". Cf. Nadja Perilli, *Corpo Teatrale*, in Orazio Carpenzano, Lucia Latour, ed. "Physico. Fusione danza-architettura", (Torino: testo&immagine, 2003), p. 31.



The emotion of feeling our own steps on the rough wooden footbridge at 30 cm from the ground, and feeling along with the creaking of wooden planks the sharp sounds or the silences of the music by Luigi Nono,¹ also coming from below, merge as a chilling guide to the path,² it had to appear as a unique and unrepeatable experience. At the same time, our hand, sliding along the shaped wooden of the essential parapet, would have searched in that item the only physical support as a relief to disorientation and temporary loss of balance inexorably induced by whirlwind of sounds, lights, colors and images.³

The elliptical shape of the spiral section is conditioned by the internal dimensions of the block and its ratio between height and width (in another place it would have had a different form),⁴ but the elliptical shape itself also refers to a visual and bodily movement, pointing out the role of the body as a place of perception, thought and conscience,⁵ where the tactility and unfocused peripheral vision constitute the very essence of the experience.⁶

We can certainly say that we are in a space of relationship, a topological space, fluid and without boundaries, where container and contents, the work of art and the user of the same influence each other in an inseparable relationship between mind and body.⁷ In the tunnel-fresco that envelops us, appearing as a spiral stair in horizontal, the experiences of horizontality and verticality, materiality, gravity and weight blend together... making it appear as possible the transformation of critical judgment in the creative experience and making it perceive as the task of work of art is also to reveal and manifest.

Container and contents in the Memorial deliberately separate themselves physically, but they retain their essence and presence, strongly interacting in the reconstruction of a unified sense, complex and deliberately unfinished. The regular sequence of beams and windows on the walls of block 21 creates a relationship between different rhythms, staggered and not overlapping, in comparison with the wide open spaces

¹ It is the composition of Luigi Nono: "Remember what they did to you in Auschwitz" (1966).

² Resonating in a different way and alternately, if absorbed by curves painted canvas or reflections, echoing, on hard walls or ceiling of the block.

³ The experimentation on sharing between the different modes of artistic expression has, among others, an important precedent (although very different in approach and purpose) in the realization (1956-58) of the Philips Pavilion in the Brussels International Exhibition, a collaboration between Le Corbusier, Iannis Xenakis and Edgard Varèse. In the Philips Pavilion, to be sought above all was the synergy and a "condensation" between music and architecture, sound, space, light and images by leveraging capabilities provided by the new technological means of projection and sound diffusion. Cf. Amedeo Pettrilli, *Acustica e architettura. Spazio, suono, armonia in Le Corbusier*, (Venezia: Marsilio, 2001).

⁴ Further reflection that confirms the absurdity of this work transfer to another place.

⁵ Juhani Pallasmaa, *The Eyes of the Skin. Architecture and the Senses* (Chichester: John Wiley & Sons Ltd, 2005).

⁶ "My body is the true navel of my world, not in the sense of the central perspective point of view, but as a true place of reference, memory, imagination and integration ... the architecture, if meaningful, allows us to experience ourselves as fully corporeal and spiritual beings". Ibid.

⁷ Cf. Emilia Barile, *Dare corpo alla mente. La relazione mente/corpo alla luce delle emozioni e dell'esperienza del sentire*, (Milano: Bruno Mondadori, 2007).



between the rings of the spiral, the strip painting overlaps perceptually, “in transparency”,¹ with the structure (also rhythmic) of the building.

So Between figure and background are generated ambiguous relationships, further accentuated if to the background, defined by the walls and the ceiling of the block, we add the further visual plan provided by the Auschwitz camp, that was perceptible outside, through the open windows. So container and contents were living each other and now the spiral, mutilated of its box and without the outside place where it was located, loses much of its foundations and its ultimate meaning.

The distance between the coils, its outer but always internal space, refers to an idea of fragmentation, an idea of fracture not recomposed, in wounds, lacerating cuts in history. We find in the memorial stereometria and fluidity, hardness and lightness, static and dynamic, matter and void (a void that is also presence). The full fields of the spiral become a threshold of initiation for the understanding of its empty, underlined by the rhythm of artificial light projecting upward and through which the viewer's gaze meets the real places of the narrated event. The not hidden structure of the pavilion, rhythmically marked by the presence of the beams on the ceiling, correspond to an almost total lightness of the spiral membrane, which cancels any reference of a static nature. It is form without structure, skin seemingly without meat or skeleton; it is a highly permeable envelope, fragile, and the harsh dramatically functional presence of the building that contains it contributes greatly to build the experience.

Inside this virtual envelope, in an attempt to make visible what is invisible, the gaze is channeled along the main directions and mentally reconstructs what the eye can not perceive, research a possible order, which is only suggested and that, therefore, it needs an effort, an attitude not passive, necessary for the understanding. It is just that effort that does not seem to be anymore required by the Auschwitz museum managers, indeed it is completely abhorred by comparison with the logic of the “lazy” easy multimedia effect on which was based one of the fiercest allegations in support of the alleged outdateness of the memorial.

We understand even more to be in front of a complex work, full of highlighted contradictions and tending towards the “difficult unity” that would certainly have attracted Robert Venturi,² a work that manages to remind us that “an architectural work is great because of the conflicting and contradictory intentions and allusions that manages to blend together” and that “a tension between conscious intention and unconscious drives is necessary because the work induces the observer to open up to an emotional involvement”.³

¹ We refers to the concept of “transparency” as defined by Gyorgy Kepes, then taken up by Colin Rowe and Robert Slutzky: “... Transparency means simultaneous perception of different spatial situations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figures has equivocal meaning because we see each figure now as the closer, now as the farthest “. Cf, Bruno Reichlin: “... you have” transparency “when two or more figures that partially overlap each claim as his own the overlapping part in common, with no mutual optical destruction”. Bruno Reichlin, Jeanneret-Le Corbusier, pittore architetto, in Flaminia Bardati and Anna Rosellini, ed., *Arte e architettura. Le cornici della storia* (Milano: Bruno Mondadori, 2007): p. 190.

² Robert Venturi, *Complexity and contraddiction in architecture*, (New York: The Museum of Modern Art, 1966).

³ Juhani Pallasmaa, *The Eyes of the Skin. Architecture and the Senses* (Chichester: John Wiley & Sons Ltd, 2005).



The memorial tends to talk simultaneously to all the senses, and must be perceived as a whole which aims to achieve what Merleau-Ponty (who, in his philosophy, put the human body as the center of the experiential world) defined as a osmotic and simultaneous relationship to every sense of the self and the world.¹ Inweave this report of participation is essential to produce identification and participation (or projection) mechanisms, that introduce an empathetic approach in engaging with the work. Relying on the exclusive primacy of the visual fact would tend instead, in this sense, to separate from the world, where the other senses would lead to merge.

Lights, colors, images, words, rhythms, sounds compose each other in a disturbing rough and precarious: way, the few and poignant words of the short piece of Primo Levi introduce the memorial and recur along the canvases by Pupino Samonà; the minimalist architecture of the “BBPR” study, implemented with very limited means and materials, is able to configure an extremely complex system; the use of color performed by Samonà, reduced to black, to red, white and yellow,² relying on the power of the symbol for structuring the sense of the work; the reduction of the notes and the instruments in the music of Luigi Nono marks a “return to the sound before it becomes note ...”³ emphasizing the experiential training of music making.

This attitude of reduction that permeates the whole work, leading it to a very few gestures, a few signs (tending to a single enveloping gesture), sees the essentiality as the meeting point between the speakable and the unspeakable and it looks for a primordial space that, if you will, expresses the state of poverty and deprivation of the deported, but that is mainly the sign of a strict approach and a shrewd direction, where only to the necessary is allowed to find a place⁴ by showing that, even from this point of view, how this memorial deserves a special consideration among the most significant products of the art, of the architecture

¹ “My perception is therefore not a sum of visual, tactile, auditory, I perceive in an undivided way with my whole being, I take a unique structure of things, one way to exist, that simultaneously speaks to all the senses”. Maurice Merleau-Ponty, *Il cinema e la nuova psicologia*, in Id., *Senso e Non Senso*, (Milano: Il Saggiatore, 1962), p. 71.

² “[The] ... black of fascism (...) the red of socialism, the [white and yellow of the Catholic movement which refers to the Jewish world through the claim of that color with which you want to despise him]”. Sandro Scarrocchia, *Il memorial: un’opera d’arte da difendere e conservare*, in *Il memoriale italiano di Auschwitz e il cantiere blocco 21. Un patrimonio materiale da salvare*, (Firenze: Alinea, 2009), p. 28.

³ “The silence surrounding the nascent sound resembles an experience of limitation, it is as if the language appear in the moment that disappear: into silence the language is lost and finds itself, but it finds itself different, because it has in it the experience of the lost ... This the belief of Nono: write what writing is looming, with participation “. Cf. Renzo Cresti, *Strutturalismo nascosto e suono nascente. Strutturalismo nascosto e impegno ideologico*, in *Orfeo nella rete*, www.orneonellarete.it/rubriche/articoli.php?idart=00026.

⁴ And that seems totally alien to the “background noise” that often comes from the hyperbolic application of the latest digital techniques. It should also be stressed that all the research of experiential depths of which we have so far treated, is in stark contrast to the “obsession with appearances, surfaces and instant impacts that have no long-lasting”. Cf. David Harvey, *La crisi della modernità*, (Milano: Il Saggiatore, 1993), p. 78. This obsession for the appearances, unfortunately, impregnates a certain modernity and it is pervasive in the approach in museology that relies on the immediacy of persuasion and on the phantasmagoria of the effect and to which, in Auschwitz, the direction of the museum seems to adapt with removing the memorial of the block 21.



and of the contemporary thought: a work of art which no one should afford to underestimate the value and effectiveness as it is clear, on the contrary, from the sad recent story of his removal from the site which it was designed for.

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Fig. 2: View of the inside of the memorial, in its original location in "Block 21", Auschwitz



ART and Perceptual ARTifices

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Abstract

The essay proposes some reflections about the different relationships and types of relation that happen among works of art and architectures, where the latter plays the protagonist representation instead of being the place where the artwork exhibits itself or the experience where it's hard to distinguish the border between arts and architecture. Many are the examples and moments of osmosis between the two worlds, when one is able to welcome the possible expressive ways of the other. History offers us several experiences, even belonging to the past centuries, which are characterized by different languages and communicative tools: but it's possible for these last to identify similarities, to trace a fil rouge that sees the realization and individuation of a common character that governs them in the perceptual artifices and the utilization of perspective illusions.

The itinerary here mentioned starts with remote instances, by describing places and frescos with a specific reference to *Quadrature*, artworks in which the perspective artifices are able to multiply spaces, leading the observer to the discovery of other dimensions.

The relationships growing in places that were projected to be characterised by surfaces totally covered by frescos, revoke aesthetic considerations or others related to the taste and the fashion of the time, rather than references to the favourite expressive instrument. Those invoked in this range are some experiences where the surface loses its being a limit, becoming an intangible membrane giving life to real architectural machines which lives in continuity with the real architectures ones that welcome them. Examples in which perspective rules generate and control spaces from the easiest ones to those characterized by difficult compositions where perspective is pushed to the limits of projection's principles. In these representations the position of the observer assumes a fundamental role.

Through an ideal travel among centuries and cultures we do find, since the most ancient eras, spaces where a fusion of virtual and actual places happen. Since the Roman parietal paintings already, we participate in illusionary compositions' realisation which, covering the whole surface of the walls, decorate, beautify and give birth to representations suggesting three-dimensionality.

There are several examples in Pompei, where the paintings realised between the start of 1° century b.C and 79 a.C tell the stories of places populated by architecture, columns, arcades, cornices and architraves, temples and areas that were open towards external spaces, projecting immeasurable dimensions.

These are the paintings that the archaeologist August Mau defines of Second Style, the same ones which will see an evolution in those of Fourth Style, marked by fine and thin shapes. Here, unreal compositions make up great "scenic designs", stage-places of mythological tales. Architectural elements mix themselves to



define fantastic structures that find their reason to realise in something that's only possible in painting's unreal dimension.

Perspectives are pushed to the limit of structural collapse. The illusions that generate are those of creating (in tiny areas such as *cubicola* or in major ones as *triclinia*) perspectival artifices aimed to the illusion. There was no rule governing the composition's realisation which was the result of multiple perspectives, anticipating, in this manner, that the observer was not static but dynamic. The researches and the studies made on several frescos, both of second and fourth style, have allowed to elaborate figurative hypothesis of the spaces imagined by the *pictor*. Through these polls, areas of virtual reality have been analysed: the places where emotional feelings of the observer happen.

Starting from operations of perspective restitutions, the processes have led to the configurative elaboration of the places. *Architettura picta*'s reconstruction are analysed and put in relation with the actual areas that welcome them. This allows, through interpretation and hypothesis, to elaborate other possible perceptions, visualizing the artifice in a different way. In this range the results of the studies made on meaningful examples will be presented. The first ones regard the Second Style paintings rediscovered in the House VI,17,41 of Pompei's *Insula Occidentalis*, followed by Fourth Style paintings of Casa della Caccia Antica, always in Pompei.

The relations that create between the arts for architecture and architecture for arts establish a double way of reading. One expresses itself through the other one, it realises itself in the other dimension, making possible multiple exchanges.

The maximum expression of such a language will be reached with the aware use of perspectival rules and artifices. What will be developed is a genre which is showing itself in 16th century, consolidating its expressive terms in the 17th, even reaching the following century. These are the centuries when quadraturisti painters will give life to surprising decorative setup. In this context the results of researches made on painting cycles' examples (present on the Neapolitan territory) will be presented and remembered. The favourable circumstance which wants the identification in Vesuvio's coast as privileged place for the realisation of nobiliar residence (both of Bourbon and French sovereigns, with the relative courts) will allow to find areas with spectacular paintings. Starting with the Royal Palace of Portici, all of the new aristocratic residences became stages where they could create suggestive compositions which, without solution of continuity, cover walls and vaults. On the contrary, the ones that already existed simply adeguated with the taste and the fashion of the time.

The survey among the actual spaces of architecture and the virtual ones of painted architecture refer to private places, as the salons with frescos of Villa Campolieto in Ercolano, destined to a close and privileged class or to vast salons (as in Castel Capuano in Naples) whose communicative power was addressed to a major public.

Erected by the Normans in XII century and residence of the sovereigns until the XIII century, the Castle has been used in 1540 as seat of Neapolitan courthouses (as wanted by the viceroy Don Pedro de Toledo), a function lasted for the next five centuries thanks to a long tradition.

The identity of the place is very strong, it's a symbol of city's historical memory, where everything revokes the solemnity of the area: a place to renew the knowledge of rights and keeper of artistic, architectural peculiarities sadly ignored by many.



The study has regarded the paintings realised for the two salons of the first floor: the Sommaria Salon and the following Saloncino dei Busti. The fresco decoration of these places belongs to the iconographic programme which affected the palace in XVIII century: illusionary architectures in perspective, columns and fake recesses welcome allegorical figures belonging to the juridical tradition of the place.

Geometry, the instrument aimed to reveal the spatial potentialities, relations and connections among elements figurating the *architettura picta*, is felt as science of the space and as mean to investigate the actual areas' complexity. Here the observer, beneficiary of virtual and real spaces, is involved with other dynamics in the scene realised on the high, long walls.

The role of the observer acquires a major meaning in perspective's applications, which see an intriguing expressive moment in the mixing of *anamorphic* compositions.

Since the 16th century the artists who spread their own artistic expression through this artifice, based on a wise game among projection's geometry principles and the ones of perceptual psychology, give a meaningful importance to the observer.

The story and the considerations here proposed move through artistic installations that make of the perspective artifice the instrument of brilliant and singular perspective inventions.

The artistic expressions which assume this instrument as a vehicle and which link the experience imagined by the artist and the architecture, realise themselves in several contemporary installations. Parts of edifices rather than parts of city become the objects where the installation has to be built. Installations realised in the respect of the places that contribute to their existence. It's in this panorama that the works of Felice Varini are included. Him makes of the architecture the place to achieve his inventions, an active place "canvas" of suggestions. What is the limit among artwork, installation and the substrate in which it shows itself?

How to divide and separate the elements? Essential geometries, clear lines and forms model and mix themselves. Circles, concentric circumferences, ellipses, single or multiplied forms are materialized with brilliant colors, in order to offer several perceptive experiences.

His works want the observer to enjoy the installation from different perspectives, moving in representation's place and relishing of the work that changes.

If for Varini the research of the privileged point, "*potential starting point*", represents just one of the possible perceptual suggestions that the work gives back, the moment of the surprise is the only moment and place possible in other artistic experiences. That's what happens for Georges Rousse. The areas and the artifices that are at the base of his installation always regard elaborations without a form. The work of art's product is a photographic image which stops and gives back the re-composed image, the concept of the idea elaborated through illusionary, paradoxal plays, and read by the only point of view that's possible.

The story travels among instances of architecture's projects, public spaces which realize themselves through anamorphic works offering multiple perceptual experiences.

There's also, in this narration, the projectual/artistic experience of Karim Rashid for the Neapolitan Underground of Arts, going from vast considerations on the important and meaningful program realized in the Neapolitan city to the installations of the Anglo-Egyptian designer for the University Station. Here also, the common denominator is the game of perceptions.



From figuration of pictures of Dante and Beatrice, proposed on ladder's steps of access to the first basement floor, to the works realized with the technology lenticular print 3D which offer, to the moving observer, suggestive and multiple experiences.

Still in this place we do assist to new events where the border between arts and architecture becomes fragile. The entrance of the station is marked by the presence of four columns covered by DuPont Corian, in the colour Nocturne, two of whom represent the work *Conversational profile*, generated by the 360° rotation of a human profile. These strongly empathic works belong to the "*Mental Project*" created by Karim Rashid, which represents the concept of work/project.

What is wanted to be proposed in this essay is a diagonal travel between arts and architecture, two worlds that are often linked, two worlds whose languages mix. Places where the value and the suggestions are born from the close relation existing between the architecture and the arts, which nourish from the latter.



J. Navarro Baldeweg's "The Table": The Aesthetic of Statism

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Abstract

This case study refers to a specific work of art of contemporary Spanish architect J. Navarro Baldeweg (1939). "The table", as it is named, is composed of thirty-one little sculptures over a large wood table and was created during the period of time between 1974 and 2005, forming since 2010 part of Reina Sofía's National Museum in Madrid.

The 31 artistic objects are static aphorisms. Each one deals with an equilibrium problem and solves it unstably, challenging the gravity conditions. All of them consist of the conjunction of different basic forms, made up of distinct materials, which are positioned together, one above the other, in an apparently improper way, without artificial connections. Visual unbalance, or at least visual tension, is granted by static equilibrium at its limits.

So that, (un)equilibrium and (un)gravity are the notions that underlie these artistic compositions. The different formal systems, all together, create a sort of city plan made up of structural thoughts or static follies, which are, in certain manner, a reflection on some of his architectural works.

Evidently, architecture cannot avoid physical equilibrium, but during the last century it is obvious that there have been recurrent attempts to generate visual unbalances with the help of determined architectural artefacts or following new compositional strategies. We will try to recognise this kind of operations, focusing on the ideas of (un)equilibrium and (un)gravity, in some specific buildings designed by this architect, establishing diverse parallelisms.

The most clear and representative are those in which one or several big massive volumes appear lightly floating in the air. For instance, the domes in the restoration of the Hydraulic Mills of Segura river in Murcia (1984-88) or in the Conference Centre in Salamanca (1991), or also the volumes articulation in the front elevation of Canal's Theatre in Madrid (2008).

In his domes, the type paradigm and its way of construction change: they do not work compressed and charging over the edge. Even, they are built over the ground and are afterwards elevated with pulleys and hydraulic jacks.



The visual impact generated by the volumes presence of the Canal's Theatre are due to the long beams apparently in cantilever with an extraordinary length but actually suspended from above near the free end in order to make it technically feasible.

The appearance of the emptiness between the different parts that constitute the building and the light entrance are the consequences of these operations. But, undoubtedly, the causes, or better, the means, are very similar to the strategies followed for the sculptures of "The Table". Of course, the language, the scale or the function are not strictly comparable, but that does not imply that they could not be linked metaphorically.



Sketches as Vital Precondition for Architect's Creativity

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Abstract

Visuality is essential and inevitable for the architect's creative work. Sketches and drawings fills the daily routine of architectural design. In some periods architecture was even reduced to the picture, denying its spatial nature and pragmatic purpose (A.Ch. Boulle, C.N. Ledoux, L. Woods). Since New Ages the artistic creation increasingly claimed a higher inspiration, sought to personalise it, and the principles of modernity promoted visionary provisions and architectural manifestations and constantly activated architect's imagination.

The global world that produces and uses the infinite number of images raises the awkward task for the architect to create constantly new and original objects. The imperative of innovation brings the dilemma for architect where and how to gain more new images.

The images primary were considered as aspect of architecture as a material or intellectual practice, they were operative or projective representations that used conventional languages to express and transmit ideas or meanings. The role of the imaging in architects' activity can be summarised in such a consequence: originating, b) testing, c) persuading, d) instructing, e) promoting, f) explaining and g) recording (Richens). This article mainly focusses on the original, even unique images, and how they emerge, act and affect the architect's creative life. The earliest architect's drawings and the first conceptual sketches will be the research object there.

In the history of architectural theory the topic of thought and matter have already been discussed (Vitruvius, Alberti, Leonardo...), and since the 15th century the drawing is not only the graphic artist's tool, but as a place where the imagination is designed and recorded, and the field where the idea is improved. The drawing becomes a great tool for generating knowledge and simply "the truth".

The researches, that studied the visuality (Schon, Lawson, Herbert, Robbins, Milani ...) states that drawing is the field for dialog, thinking, consideration, clarification and development of idea. The neurologists talk about images as the media of consciousness and such approach leads to the purified key message - I image, therefore I think. The insights of the great architects (Le Corbusier, A.Rossi, S. Holl, Z. Hadid, W. Alsop ...) support, expand and clarify the purpose and significance of drawing for architect's creativity.

As the drawing have cognitive value, potency of discovery, it is the great tool for generating knowledge. The emergence of novelty implies the drawing as creative laboratory and consider it as main area, measure and



tool for architect's creativity. The early conceptual drawings preserve personal dimension and the new idea there appear as germ of the future architecture, but its expression and representation is unique and original. In this regard Frascari have aptly noted, that drawing is like "slow food for architect's imagination".



FFF 21th century: Form Frees Function

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Abstract

Conceptual spaces hold the opportunity to deepen and examine the quality of the architectural act, and to be implemented and improve the world of practical and functional design. The architectural installation serves as a powerful and expressive instrument to examine architectural experience and human reaction to it, in pure spaces: spaces free of functional intentions, characterized by forms and compositions that hold the essence of functional motivations. The potential of architecture can be revealed through art – especially through the establishment and placement of forms, structures, templates, and patterns in the design process – and reawaken the architectural thought. This more artistic approach towards architecture is elementary and fundamental for planning authentic, pure and quality spaces. Conceptual spaces give clean overview for the wide potential use, which is sometimes versatile and dynamic, rich with functions and human interactions within them. The installation allows and constitutes a place for functions with different characteristics than functional spaces: a space for contemplation, a place to pause, communication between people, etc.

If we treat the architectural installation as an extension of the concept of function, we will understand that we have the opportunity to consider the interpretation, the meaning and the complexity of ideas and spatial relations as its primary goal.

Architecture is spaces in which human activity and motion take place. The architectural installation medium is an explorative utilization for the relationship between three key elements: body; space; action. The first element familiar to us is our body, and the second element is the space. The third element, the action, is the physical and spiritual reaction when body and space meet. It is the outcome of the connection and the relationship between the two. The nature of the activity, the sense of space, the relation to it and the potential of body movements stem from the architectural qualities of the place: height, width, accessibility, and so on. People conduct naturally and in an obvious manner in functional spaces, and identify the appropriate course of action dictated by the space. If there is a corridor – we walk through, if there is a window – we stop to look through it, and if the space is big enough – we congregate. Through the body we comprehend the world, the space. A high quality architectural space provides varied opportunities for human situations and physical motion.

By entering an architectural installation, we may test the body-space relationship in an extreme and raw situation.



"Sensing Spaces" was an architecture exhibition at the galleries of the Royal Academy of Arts, London, in 2014. A series of site-specific installations were designed to explore the most fundamental elements of architectural space. As Kate Goodwin, the curator, described: "Unlike almost any other art form, architecture is part of our everyday life, but its ability to dramatically affect the way we think, feel and interact with one another is often overlooked."

From the education guide of "Sensing Spaces" exhibition: ¹*Architecture Reimagined will experience a new type of architecture exhibition. Described as an approach that highlights not the functional but the experiential aspects of architecture, it features the work of seven of the world's leading contemporary architectural practices. Conceived as an experiment to challenge the conventions of traditional art and architecture exhibitions, it sets out to awaken and recalibrate our sensibilities to the spaces that surround us. As such, it is part demonstration and part experiment, which in the spirit of enquiry requires interaction and participation from its audience. Visitors to the Royal Academy's Main Galleries are invited to observe, move through and around, touch, adapt and occupy a series of specially commissioned architectural installations.*

Presenting the work of the international architects, Grafton Architects (Ireland), Diébédo Francis Kéré (Burkina Faso and Berlin), Kengo Kuma (Japan), Li Xiaodong (China), Pezo von Ellrichshausen (Chile), Álvaro Siza and Eduardo Souto de Moura (Portugal), the exhibition not only focuses on the essential elements of architecture (space, proportion, light and materials) overlaid with the subtle presence of cultural nuance, but also, with visitor engagement, on how we perceive these elements through our senses and associative memory – making the experience both personal and collective. As the art form that most directly affects our day-to-day life, the ever-present background to our days, architecture is nothing without the people who occupy and use it. In response to this, Sensing Spaces takes delight in and heightens our awareness of the essential architectural interactions that exist all around us.

*Through this exhibition, the RA hopes that people will become familiar with a new way of engaging with architecture. Conceived by Kate Goodwin, Drue Heinz Curator of Architecture at the Royal Academy of Arts, the exhibition creates, above all else, an essential interaction between three factors: the nature and quality of physical spaces, how we perceive them, and their resulting evocative power." *See implementation of these ideas in the chapter of "Body – Space – Action" - installation course at 'The NB Haifa School of Design' following this text.*

Diébédo Francis Kéré is one of the architects who participated in the "Sensing Spaces" exhibition. His installation ²*Described as a room within a room, this installation interrupts the Academy's enfilade of rectangular rooms with a curvaceous wineglass-shaped form that links two galleries and funnels people together into a more intimate cave-like space. Forming an arch made up of a matrix of 60mm thick honeycomb plastic panels, Kéré's construction extends his interest in working with ready to hand and adapted material. In this instance, he finds new potential in perforated plastic sheets from Germany, typically used in construction, but hidden within doors and walls as fillers. Kéré's specification of this material provides a mechanism for interaction and adaptation,*

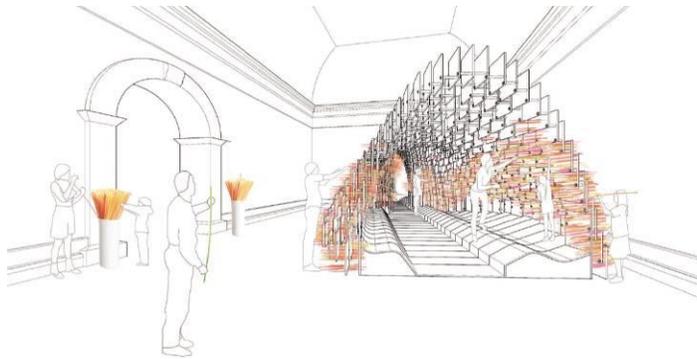
¹ Sensing Spaces: Architecture Reimagined. P.1

² Sensing Spaces: Architecture Reimagined. P.18



with visitors being offered brightly coloured plastic straws to thread through holes in the honeycomb structure and thereby adorn the otherwise monochromatic cocoon with an ever-changing cloak of colour.

For an architect who places community at the heart of his work, and whose role often extends to that of activist, fundraiser and builder, it comes as little surprise that Kéré's installation relies on the engagement, interaction and contribution of the gallery visitors. Often working with communities that have experienced particular hardship, Kéré adheres to the belief that architecture has the potential to genuinely inspire change. Recognising the need that exists in everyone to have buildings that enhance their creativity, Kéré states that his main aim is to create comfortable spaces for informal gatherings, and to help communities build their own inspiration. To this end, he has created a structure that is both object and context; object in the sense that the structure is an autonomous form that creates a new focus within the gallery setting, and context in how that form does much more than serve its own end. He has created at its heart a new place to meet, to sit, and most crucially a place that becomes a focus of interaction and adaptation, as each visitor is invited to leave their mark both as an individual and collectively”.



Pic 1: Diébédo Francis Kéré concept image of environment



Pict 2: Diébédo Francis Kéré installation – before and after



Out of understanding the importance of practical experience with planning pure compositions, forms and space as part of the architect's training, architecture faculties worldwide include in their curriculum "installation studios", realized with projects by the students in 1:1 scale. This understanding is essential in a world where design becomes more and more parametric and computer-based (for a review of parametric design see: Kostas Terzidis "Expressive Form: A Conceptual Approach to Computational Design", spon press, 2003). Touching materials, constructing details, and exploring a real built space, are necessary to understand architecture: visions are realized through a physical process.

In recent years, several leading architecture faculties worldwide, such as the AA in London and the Stuttgart University, have established specific programs, the principle of which is design and construction of installations.

For that purpose, in both places mentioned above, specific locations in the city have been allocated to an annual reestablishment of the selected project and its exhibition to the public. In the summer program of the AA, guided by the architect Charles Walker and the engineer Martin Self, the installation is designed and implemented by second and third year students. The purpose is to allow the students to conceive, design and construct a pavilion, going from idea to design and finally – to realization.



Pict 3: AA summer pavilion 2009: 'Driftwood Space' by 3rd year student Danecia Sibingo at Bedford Square, London.



Pict 4: 'Driftwood Space' in progress by students

Stuttgart University has a special department combining between digitation and architecture, and the constructed installations are parametric in their essence. As the department vouches for itself:

¹"The Institute for Computational Design (ICD) is dedicated to the teaching and research of computational design and computer-aided manufacturing processes in architecture. The ICD's goal is to prepare students for the continuing advancement of computational processes in architecture, as they merge the fields of design, engineering, planning and construction. The interrelation of such topics is exposed as both a technical and intellectual venture of formal, spatial, constructional and ecological potentials. Through teaching, the ICD establishes a practical foundation in the fundamentals of parametric and algorithmic design strategies. This provides a platform for further exploration into the integrative use of computational processes in architectural design, with a particular focus on integrative methods for the generation, simulation and evaluation of comprehensive information-based and performance oriented models. There are two primary research fields at the ICD: the theoretical and practical development of generative computational design processes, and the integral use of computer-controlled manufacturing processes with a particular focus on robotic fabrication. These topics are examined through the development of computational methods which balance the reciprocities of form, material, structure and environment, and integrate technological advancements in manufacturing for the production of performative material and building systems."

¹ ICD institute for Computational Design website



Pict 5: ICD/ITKE Research Pavilion 2013-14 Inst. of Building Structures & Structural Design Prof. Knippers



Pict 6: ICD/ITKE Research Pavilion 2013-14 in progress by students

In the years 2003-2014, a course by the name Baupiloten was held at the Berlin Technical University, guided by Susanne Hofmann (who manages the Baupiloten architects' office). During the course, the students designed for real clients: ASB Kinder and Jugendhilfe GmbH – two companies that operate kindergartens. Although this course does not deal directly with the installation medium, it has the intention that students would experience real design (material, 1:1 scale, etc.) but conceptual in its nature, and design out of exploration of pure concepts of architecture and space.



¹08 May 2008. ArchDaily: *Within the scope of the refurbishment the Baupiloten created a completely new conceived world from the temporary structure of the kindergarten as imagined by the children. The results are interactive and communicative interior spaces as well as a multifunctional façade according to Pippi Longstockings's "Taka-Tuka-Land", by Astrid Lindgren's children's book of the same title, not only bestowed the name to the kindergarten but turned into architecture. The Baupiloten and the child minder inspired the children to design their own vision of "Taka-Tuka-Land". Their concepts of singing bridges as well as huts, the merry-go-round made of petals and the shell-throne belonging to Pippi's father gave the Baupiloten an inkling of spatial qualities the children imagined for their new kindergarten. With the help of collages and architectural models the Baupiloten then communicated their views to the staff and the children. Thus the end users had had a direct involvement in the design of their newly built environment. The daily observation of the children's play and the routine was a further inspiration to the Baupiloten.*

The original temporary structure of the kindergarten has been turned into an everlasting oak tree, where lemonade grows and flows. The flow of lemonade has seven intervals where the children can enjoy it, for example, the large-scale windows where the midday sun turns the room into a glittering environment due to the crystals that have been mounted in the windows. The architectural highpoint is the "lemonade-island" where the children are taller than the grown-ups.. In one of the rooms the stream of lemonade literally bursts out bounds and floods into the garden. Metaphorically Pippi Longstocking's old oak tree has been turned into an interactive façade. It has become an oblique climbing frame made of green oak wood covered by yellow membrane with plenty of spaces to hide. The entire construction is protected against the elements by a transparent yellow membrane that sheds the inside with a warm light.

¹ Taka Tuka Land / Baupiloten, Archdaily Internet Magazine



Pict 7: Taka Tuka Land / Baupiloten / Susanne Hofmann / Berlin 2007 / Facade



Pict 8: Taka Tuka Land / Baupiloten / Susanne Hofmann / Berlin 2007 / Interior



Body-Space-Action

Since 2013 my students at the NB Haifa School of Design take part in an installation studio, a course called "Body-Space-Action", in which a practical research of spatial relations and their effect on the architectural experience, takes place. A process of designing abstract and programless installations, and their construction in 1:1 scale, allows deepening the exploration of spatial concepts. A research after reciprocal interactions between space, body and the human instinctive action-reaction, is developed through models and documents with high attention to aesthetic expression. The final realization of the research is an actual built architectural installation. The students experience the entire design process, from thought to action, from sketch to detailed construction, and experiment with materials. A crucial practice for developing an imaginative and creative personality, is the artistic freedom of letting intuition be a part of the architectural-experience research for the future installations. This practice is an important milestone for developing high ability of abstraction in architects.

The design process of the installations starts with participation in a chosen dynamic social event (a basketball game, joint cooking, folk dance, etc.). During the course, the students analyze the event through two aspects: the physical (formative) interactions occurred between the participants, and their interaction with the specific space in which the event took place. In any social event, spatial compositions are created between the participants. These social / spatial / experiential / emotional situations during a group event are interpreted and translated into three-dimensional compositions, as reflections of architectural ideas and principles. Comprehending the event as a formalistic situation, as an opportunity for conducting a research lab of architectural forms, structures, templates, and patterns, provides a magnificent anchor (practical experiencing) for understanding the language of abstract, the language of architects.

The students examine the relations between body and space; actions those relations generate; effects of space and material on the motility of the body. Based on the discovered relations, superposition of mass / bodies / people compositions is translated into a spatial system, which will generate installations containing within them the essence of the event. A clear definition (a headline / a word) of the specified spatial system describes the pragmatic architectural act, and generates the construction of an abstract conceptual space with clear architectural understandings.

The installation radicalizes the effect of the designed space on the person entering it, stimulating a reaction of the body-space relation. The physical reaction of the person entering the installation will constitute a renewed expression to the original social activity.

As part of the final project presentations, a field test takes place – a dance event in the installations themselves. Professional dancers are invited to improvise, respond physically, and explore movements in the installations. The body movements of the dancers allow a more careful examination in learning the effects of the designed space, both on the limits of the physical movements, and on the potential human interactions the structures may produce.



"Body-Space-Action" Installations

Horizontal

"Horizontal", installation developed out of a social event of playing Monopoly.

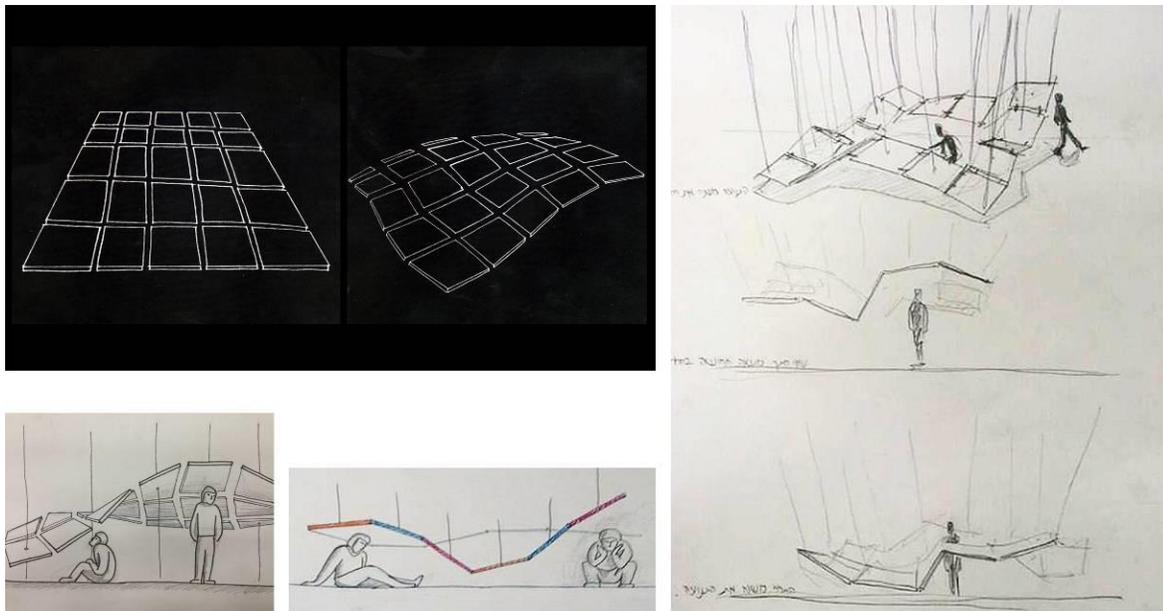
Four students sit on the ground around a Monopoly board. Their bodies barely move, and are almost static: sitting position. Interactions between the participants exist only through hands and verbal exchange. The game board defines a flat and horizontal situation, centering a symmetric spatial composition.



Pict 9: Interactions between people playing Monopoly

The formalistic abstraction of the event is a plane generator in the form of a flat board through which all the action is generated. The board dominates the situation and its composition, forcing the players into a static cube position, while the great occurrences of the game influence a vibrant and dynamic experience.

"Horizontal" condenses the approach of the architectural act in this installation. Only one principle guided the design process: a horizontal, flat and single object will act in a dynamic matter to generate multiple spatial situations. This minimalistic approach has led the group to keep the square shape of the Monopoly board and the grid of the game printed on it, as basic tectonic foundations and borders for planning a three-dimensional space.



Pict 10: "Horizontal" drawings by students



"Horizontal" is a dynamic plateau, composed of 25 connected wooden 70X70cm squares. The squares are laid in an orthogonal grid with 10cm gaps between them, hanged horizontally parallel to the floor. One rope attached to each square enables, by a single pull, to change the appearance of the plateau and alter the space it covers.



Pict 11: In progress, 25 connected and hanged wooden 70X70 cm squares

In its default state, "Horizontal" is a canopy stretched over an area of 4X4m. A unique handle made of polyurethane rope and plastic sleeve, adjacent to each of the wooden squares, enables the units to slide vertically along the rope and change their distance from the floor. The canopy performs as a flexible dynamic surface, which redefines the space bellow each time its units are repositioned. The single solid space it covers can turn into two spaces and more.



Pict 12: "Horizontal" Instalattion, 'The NB Haifa School of Design', Gallery, 2014



Pict 13: "Horizontal" Instalattion, 'The NB Haifa School of Design', Gallery, 2014

The sight of the floating shed is tempting to get underneath. The spaces between the places and the ropes hanging from them encourage the user to understand that the roofed area has a game-like element, and that the nature of the roofing is dynamic, and can express what is a sensation of roofing and its definition in a personal manner. The dynamics arouses the instinct to amuse oneself by checking what happens when you pull the rope, how it changes the space and how it would affect other people standing by me under the canopy. The architectural experience radicalizes the perception of what is a canopy, and turns the stay underneath is into an active process, or at least one that is not taken for granted. The multiple possibilities the canopy offers immediately expands the absolute given-in-advance boundaries of a 4x4m area. In the field test, the curiosity the installation roused both in the audience and the dancers was especially noticeable, to feel the various canopy sensations and to stay underneath it.



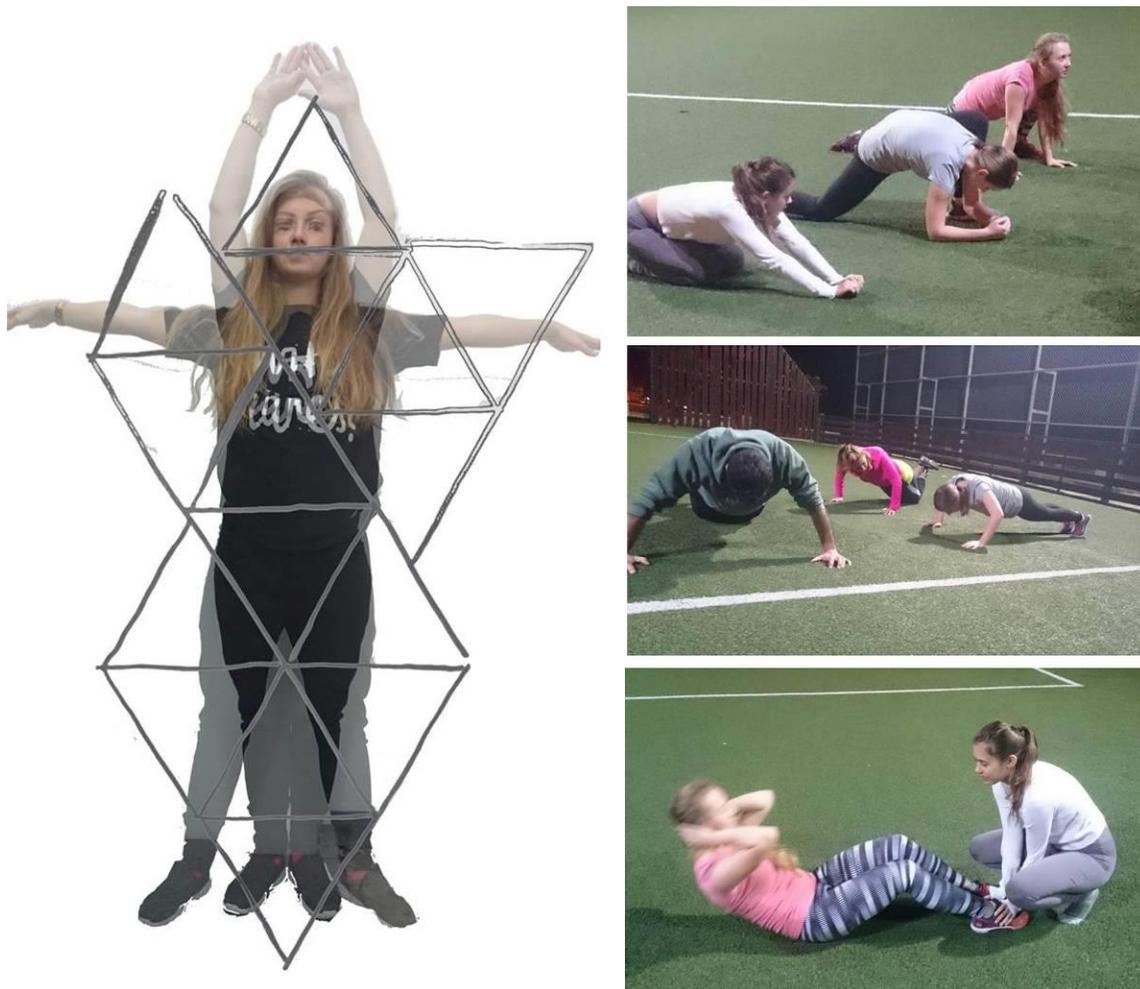
Pict 14: "Horizontal" experimented by dancers and audience.



Kinetic Screen

Kinetic Screen installation developed out of "CrossFit" collective training.

"CrossFit" is a fitness program which consists a mix of exercises from multiple disciplines, and constantly varied functional movements executed at high intensity. The students who trained together shared close physical interactions even when they were not working on the same routine, making them aware not only of their body movements, but also of how they are effected by others moving intensively around them. The experience was an ongoing attention of "in and out", in for the self-exertion, out for the social- commotion around.

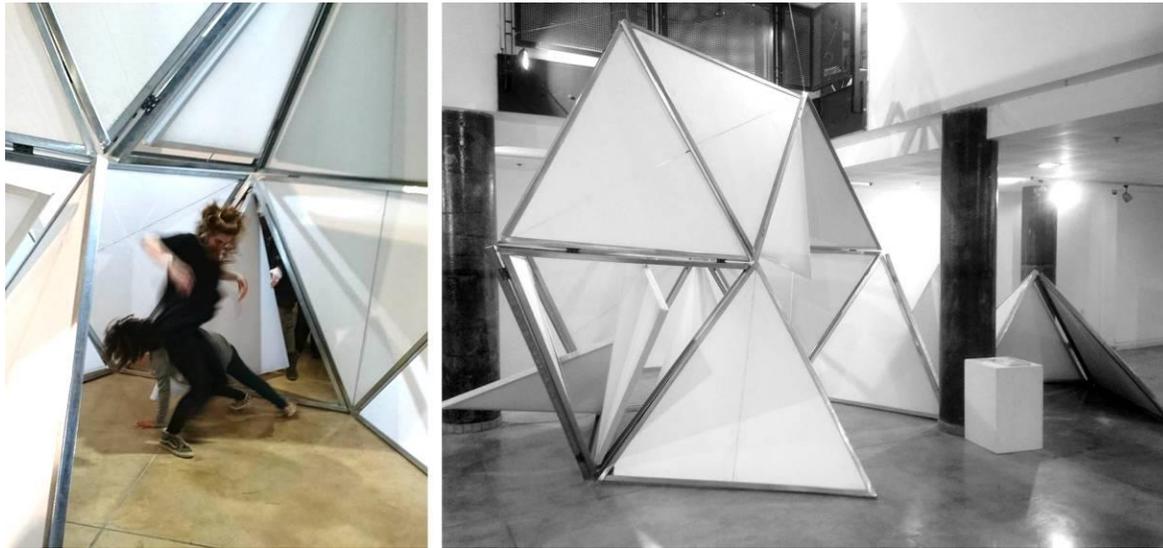


Pict 15: "Kinetic Screen" Interactions between people and space while exercising CrossFit

The idea in the architectural process is a design of a defined, stationary space, big enough for several people, with an ability to change, which affects the relation between the exterior and the interior. The default state of the installation is an opaque and relatively closed space. The change of situation and its opening to a connection with the space exterior to it take place at the side walls, without the changing of the actual space. The side walls

of the structure are composed of opaque modules of 1.7m tall equilateral triangles, made of Styrofoam, which turn around on an axis. The dynamic units are placed within static triangles made of tin profiles, which are connected to each other.

Unlike the formations familiar to us that connect between the exterior and interior (a door, a window, a sliding wall, etc.), the triangles of this dynamic casing radicalize and challenge the space of stay within the installation, and form irregular and surprising openings. Their ability to move 360 degrees simultaneously forms new access pathways, openings, passages and accessibility, thus the defined space also acts as an unexpected space.



Pict 16: "Kinetic Screen" 'The NB Haifa School of Design', Gallery, 2016

Playing with the scale of the installation allows possibilities for design in different contexts and creation of varied programmatic spaces where one can stay.

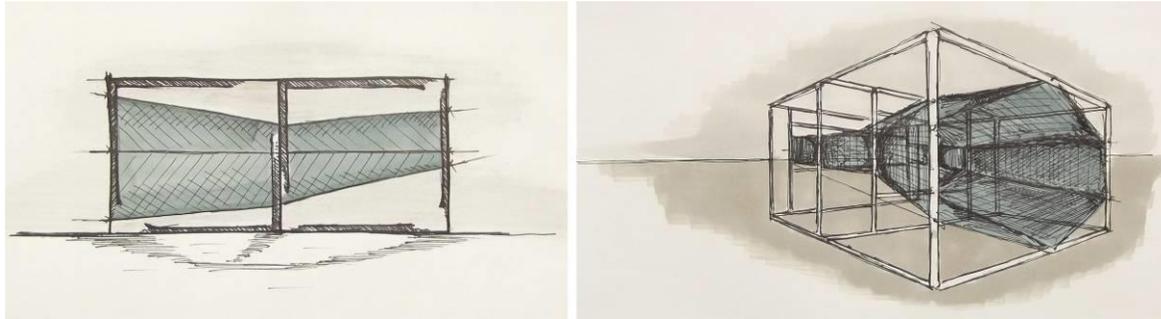


Pict 17: "Kinetic Screen" different location - different scale



Instability Zone

Following a social activity of shared viewing of the sunset on the beach, it was evident that the spatial, physical and human interactions have been extremely static and introverted. Following that, the space that has been developed continues to maintain the experience from the beach, translated into a formative and architectural experience. The students built an installation made of industrial plastic wrap, bound around a construction of metal cables stretched on scaffoldings. Despite its aesthetic and intriguing visibility, in spite the space of the installation was wide, it was uncomfortable to stay within it together with someone. This is a separating space, which can contain several people at the same time, but does not enable sharing a shared intimate experience. The architectural experience within an amorphous, floating and translucent tube radicalizes the sensation of freedom and disengagement from the gravitational forces, allowing to stay within it while comfortably lying down or sitting.



Pict 18: "Instability Zone" drawings by students



Pict 19: "Instability Zone" 'The NB Haifa School of Design', 2014



Pict 20: "Instability Zone" 'The NB Haifa School of Design', 2014

Betrayal Story of Space and Substance

This group has held several social events, out of the aspiration to find the event that would constitute the richest source of inspiration. The multiple events led to segmentation in the group, and to sensations that have even been described by them as betrayal. Inspired by these sensations, which are not anchored in physical or spatial relations, but rather only in the interpersonal interactions, the installation that has been designed is, in its definition, a treacherous space. This conceptual approach is very similar to a more artistic process, after exploring how to express sensations of betrayal in material and shape, several verbal principles have been found, that have later been assigned spatial expression: crumbling, unstable, spineless, leaving traces, a space that isn't a space, absence of clear borders, its spatial visibility is questionable. "Betrayal Story of Space and Substance" is an installation made of dismantled and unraveled ropes and nets, covered with plaster castings, gently hung from the ceiling in the space in which it is installed. The entrance to the installation is possible from any direction, and every touch causes it to crumble. While the installation seems like something that may be the remains after a catastrophe, its tight composition implies design and intention, that this is the way it is supposed to seem and behave.



Pict 21: "Betrayal Story of Space and Substance". Unraveled ropes and nets covered with gypsum. 2014



Pict 22: "Betrayal Story of Space and Substance". Details



Pict 23: "Betrayal Story of Space and Substance". Field test with "Fresco" Dance Company. 2014

Conclusion

Architecture is the meeting point between spirit, matter and form. The architectural practice, and especially the bureaucratic and technical aspects in the construction process of anything architectural, cannot harm the important and essential aspects of the architectural experience. The architectural experience will exist anyway, even if the design is dry and tired and lacks spirit. We, the institutions and the architects who teach in them, must keep the future generations from surrendering to the banal. The technological and digital future will only expand the exciting possibilities to explore forms, spatial principles, their concrete implementation, and the architectural experience they entail. In an era where shape and form accepts presence as a leading principle in the design process, architects should not forget that the form can enrich our spaces beyond their aesthetical aspects. FFF 21th century: Form Frees Function.



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Leopold Krakauer- The artist's perception/observation of a place

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Abstract

The drastic change in the artistic style of the renowned architect Leopold Krakauer, which followed his arrival in the Land of Israel in the 1920's, influenced his architectural style substantially. Turning away from the eclectic-historicistic architectural style, which he had studied in Vienna, Krakauer adopted a clearly modern style. This change in his style should not be mistaken to be a part of the rising Modernism in Europe or the zeitgeist. It is the spirit of the place that affected both his architectural and his artistic work upon his arrival in the Land of Israel. Krakauer assimilated the local landscape by means of intense and expressive drawing. This is what eventually produced his elegant and unique architectural style, which is disguised as modern but is in fact a direct translation of the local architecture as it was perceived by a talented and observant artist.

The rebirth of an artist and architect in a new homeland

"When a true artist engages in two art forms, it does not usually involve a creature finding expression in two different ways, but two different aspects of his own self; two aspects which complete one another, which gain their form from either side."¹

It was with these words that Martin Buber eulogized Leopold Krakauer. Krakauer was a professional architect but his spirit never forsook its passion for artistic expression. He never abandoned architecture for the sake of art or art for the sake of architecture. He always engaged in both and his works in both fields were significant and influential.²

¹ Leopold Krakauer, *Ma'ale Yerushalayim: Drawings with notes by M. Buber and P. Schiff*, Dvir Publishing House, Tel Aviv, 1955 (Ma'ale Yerushalayim)

²In my original paper I discussed Krakauer's influence on other artists at length. Unfortunately, many issues could not be presented in this essay, including the influence of Krakauer's charcoal on paper drawing style on Anna Ticho, especially noticeable in her drawings from the 50's and 60's.



In literature written on Krakauer¹, critics tend to describe his work as being the result of two parallel worlds meeting inside one person^{2 3}, apparently by chance. Avraham Erlik, one of Krakauer's architecture students, used the following words to describe him:

"Two fields serve him in his artistic work – drawing and architecture – as the different aspects of his spirit... the sadness and despondency that prevails in his drawings turns in his buildings into seriousness and sometimes weightiness – which constitutes the dialectics in this field. The desert landscape's Memento Mori has become Memento Vivere in architecture."⁴

Indeed, his drawings seem to have a vivacious expressiveness when compared to his architecture, which seems to be someone else's work; it is unpretentious, formal and elegant.

In this essay, I claim that the relationship between art and architecture in Krakauer's work is profound and not at all accidental. Regarding his art as expressionistic but his architecture as modern is misleading and could lead to a distorted interpretation of his character and his life work. Krakauer himself insisted, although he was forced to pay a dear price of social alienation for it, not to separate his works of architecture from his works of artistic drawing in exhibitions in which he participated.⁵

The principle turning point in Krakauer's life was his arrival in the Land of Israel in 1924. In this context, it is interesting to cite the words of Abel Jacob Herzberg, who was a Jewish lawyer in Amsterdam and wrote the preface to the exhibition book of 'Palestina':⁶

"In 1925 he settled in Jerusalem to satisfy his desire to live and work in an atmosphere of his own. To a non-Jewish artist it may seem strange to look for form and inspiration in a far-off country but to a Jew the acquisition of a nationality of his own opens up new possibilities."

These words become clear when examining Krakauer's disappointment of the subversive revolutionary activity of the 'Bond' organization. Krakauer's membership in the 'Bond' enabled him to participate in major exhibitions in post-WW2 Vienna. A few years later, the activist alliance "collapsed spiritually", to Krakauer's disappointment. "They had the chance to create a new world and did nothing," Krakauer told Erlik. Krakauer saw in the Land of Israel a new place where the danger of degeneration does not prevail, due to the fact that

¹Notably in the Israel Museum's exhibition book and in the book published as part of a series named *Leopold Krakauer* by Meira Perry-Lehmann and Michael Levin. *Leopold Krakauer*. The Israel Museum, Jerusalem, 1966. Avraham Erlik, *Leopold Krakauer*, Hakibbutz Hameuchad -Sifriat Poalim Publishing Group, 1987.

² Evidence of this can be found in the fact that two of the chapters in the Israel Museum book are named "Krakauer the Artist" and "Krakauer the Architect." Perry-Lehmann, who specializes in Israeli art, namely in the art of drawing, wrote about his drawing while Professor Levin, a historian who specializes in architecture, wrote the chapter about his architecture.

³ In another book about Krakauer written by one of his students, Avraham Erlik, who was an architect himself, the chapter about his architecture seems much richer than the chapter about his drawing.

⁴ Erlik pages 55-56

⁵"The Tel-Aviv Museum of Art asked me to send over two works for an exhibition. I wrote Dizengoff that I couldn't because it would be problematic to present my drawings without architecture... the artists are also putting together an exhibition but I already explained this to them --- so I don't think they will ask me to participate again... glorious loneliness...it can be fatal..." A letter to his wife, Greta Wolf-Krakauer, from March 2, 1932. Perry-Lehmann and Levin, page 60.

⁶ 'Palestina' – the name of an exhibition held in Europe (Belgium and the Netherlands.)



it was only in the early years of its physical and spiritual development. He regarded the Land of Israel also as a place with high potential for professional and artistic development.

Upon arriving in Israel, Krakauer began working for Alexander Baerwald in Haifa. Baerwald had attempted to establish a new Jewish-Architectural style in the Land of Israel, mainly by using the Muslim Architectural Dictionary of Geometric Shapes. Krakauer was unable to identify with Baerwald's approach and left his office as well as the city of Haifa¹ after only four months. He then worked in Tel Aviv for a short period of time, but his searching soul still hadn't found peace. Upon arriving in Jerusalem, Krakauer began working for the British Administration but resigned shortly afterwards. From then on he would be self-employed.

The Krakauer of the Land of Israel is no longer the same as the Krakauer of Vienna. His artistic and architectural style can be divided into two periods – before and after he made Aliyah. As far as we know, working in Vienna, he planned mostly parliament houses in Belgrade, endorsing the eclectic-historicistic style, which he had studied at Vienna's Institute of Technology (Technische Hochschule in Wien). Nevertheless, in the Land of Israel he completely abandoned eclectic-historicism, which is presumably the reason he resigned from Baerwald's office. His style became "modern" and was based on the composition of simple prisms and plain geometry with a well-calculated alignment of apertures; free of embellishments and mannerisms. The transition point from the historicistic style to the modern style is manifested in the proposal he submitted for the planning of the Kibbutz building in the Alfa House. The proposal was clearly influenced by Baerwald's style² and was apparently submitted just months after he had left his office.

In the art field, on the other hand, there seems to be no style marking a transition period and the change is even more drastic. If in Vienna his drawings were almost exclusively composed of abstract and geometric shapes, in the Land of Israel Krakauer seized to draw abstract drawings completely. His drawings focused on studying the local landscape, vegetation and man. Architecture³ appears in most of his landscape drawings; at times in the form of only a mere implication and at times in a more noticeable manner, as a chief part of the composition. However, architecture is never regarded as an independent subject. In his early works in the Land of Israel (up to 1935), a slight resemblance to the Viennese style appears. In these works he covered the entire sheet with paint, a technique he would later abandon by leaving a substantial part of the sheet white in order to make the drawing more dramatic and well-composed.

The change in the widespread architectural style in the 1930's can be attributed to the zeitgeist prevailing in Central Europe at the time, which betokened Modernism even in the Middle East. This would probably become evident when examining various architects of the time; however, I don't believe that this is the case with Krakauer. His focus solely on landscape drawings indicates that he was much more fascinated by the local landscape than by the landscape of his homeland, which, as far as we know, he never drew. The

¹Dotan mentions that Krakauer did not like living in the vicinity of the sea because "one always looks out toward its horizon [...] which always causes one to disappear between its waves and wander to different worlds." He preferred the aridness which the desert symbolizes. Dotan, page 11.

² Nonetheless, the dimensions plan still depicts Krakauer's style and does not resemble a Muslim public building, but an Arab village instead.

³In the landscape drawing, the architecture is always vernacular; architecture without architects, a kind of second nature.



constant presence of vernacular architecture in his landscape drawings indicates that he perceived houses as an immanent part of the local scenery; each house was just another rock on the mountain for him. The thousands of drawings he drew in his lifetime can be viewed as an ongoing research of the nature of the landscape in the Land of Israel; a research of the relationship between houses and the land they had been built upon. It can be deduced that the architectural style Krakauer adopted when working in the Land of Israel was an attempt to imitate local architecture by means of modern interpretation and tools. He studied this local architecture by engaging in intensive and Sisyphean drawing of the local homes and their characteristics during the period just before the wave of Jewish construction began in the Land of Israel.

Krakauer's perception of the Land of Israel, which he became acquainted with through the eyes of an observing artist, is unique. In opposition to the work of the architects belonging to the so-called "Tel-Aviv School"¹, who imported the international modern styles that they had studied in Europe, Krakauer created a modern style that was born from within the Land of Israel.

Key characteristics of the relationship between architecture and drawing

Krakauer's architectural work was in many ways influenced by the tight bond between his virtuous drawing and his perception of landscape, as it appears in his drawings. The two forms of art come together in what can be regarded as a sort of unity, as Fritz Schiff phrased it:

"Elka was bent over his drawing board all day long, wearing either the artist's or the architect's hat, and would draw over sheet after sheet, each one a poem, even if it were an urban building blueprint, for Krakauer had this sort of continuance: he planned buildings like an artist and drew like an architect."²

Let us now examine several elements that indicate the resemblance of his drawing to his architecture and the relationship between them.

Drawing

Technique and Blurred Borders

Krakauer would always draw from memory and at his home, never standing before his subject matter. He would never clear his schedule in order to draw. Instead, he would draw his drawings alongside his architectural work. Perhaps for this reason he used special sheets usually used for architectural drawings³. He used almost exclusively pencil and charcoal in his drawings, which clearly resemble architectural graphics.

¹ This term was coined by Alona Nitzan-Shifan, in her article which states: "Controversy in Zionist Architecture: Erich Mendelson and the School of Tel Aviv". Her article was an inspiration to me when I examined the approach of an isolated architect facing a more institutionalized approach endorsed by several architects.

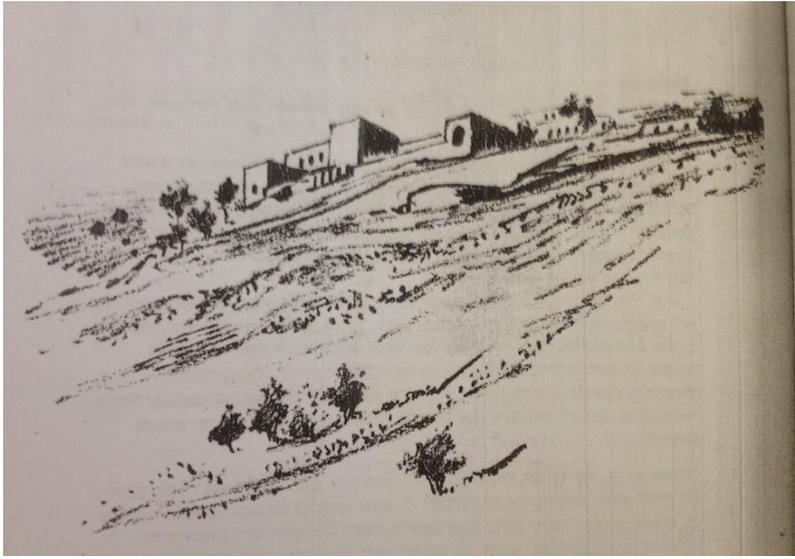
² Fritz Schiff, *Ma'ale Yerushalayim*

³ There is controversy among the writers of Krakauer's biography regarding this issue: Perry-Lehmann and Levin state that they were not the same sheets (page 78), while Dotan claims that they were (138).



Here is an example of a perspective drawing of the youth village in the Galilee: it is a typical landscape drawing of Krakauer. The rocks and clods of earth have apparently come together to form the geometric shapes of the buildings.¹

The observer of this drawing or perspective

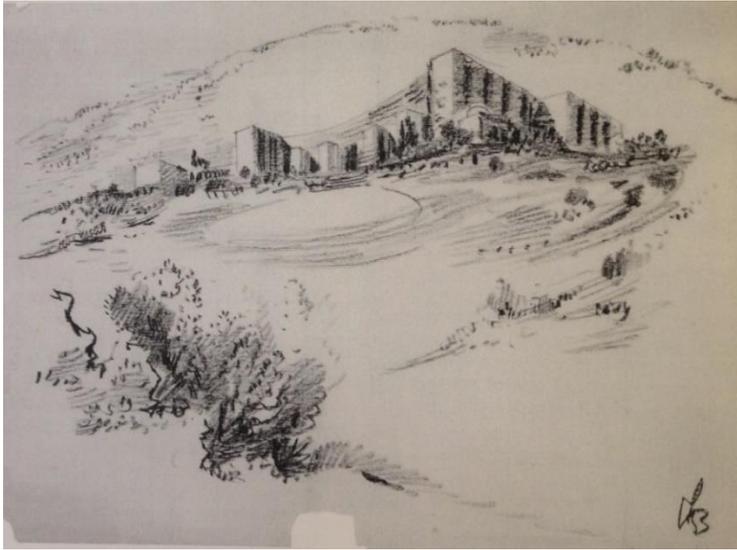


(Image 1: proposal for youth village in Galilee)

may mistake it for an image belonging to either the drawing or architecture world. However, it exists in both worlds simultaneously.² In his proposal for the planning of the Bezalel National Museum,

¹ Erlik, page 14.

² In his book, Erlik decided to place this image at the end of the chapter on Krakauer's drawing, just before the chapter on architecture, page 41.



[Image 2: proposal for Bezael Museum)

the building itself seems to be embracing nature, as it merges with the mountain. The hierarchy we are used to noticing from an architectural perspective, of the building being on top of the hill, does not exist in this case. Additionally, careful attention was given to the bush on the bottom left corner of the drawing and it seems that the details of the bush are just as important as the details of the museum.

The Tree

The blueprints for the grave of Edmond de Rothschild were drawn using a gloomy nocturnal technique that resembles Krakauer's early style from the period of his arrival in the Land of Israel, before he abandoned the style of dark compositions that took up the entire sheet.



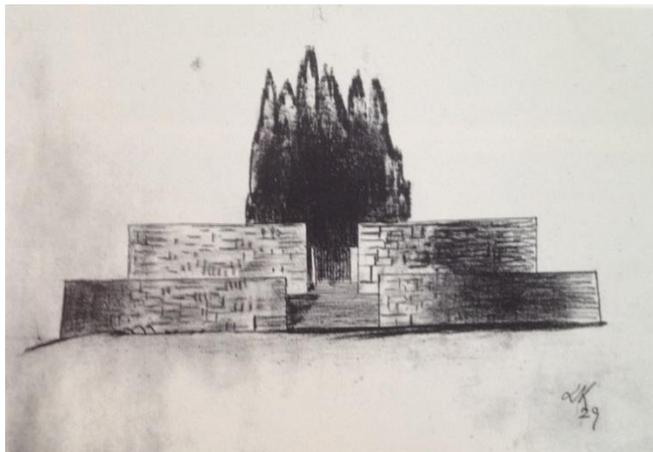
(image 3: proposal for Rothschild's Grave: Perspective)

This drawing particularly resembles another drawing from his first years in the Land of Israel, named "The Jerusalem Walls and a Cemetery"



(image 4: The Jerusalem Walls and a Cemetery)

The composition and elements in both drawings are the same, only this one has the grave in it. The trees are an immanent part of the grave – "Without the dense cypresses in the center of the composition, the Baron's grave would've lost its meaning,"¹ he stated. This is particularly noticeable in the drawing of the front of the grave.



(image 5: proposal for Rothschild's Grave: Elevation)

¹ An article written by Perry-Lehmann and Levin, page 179.



The Mountain

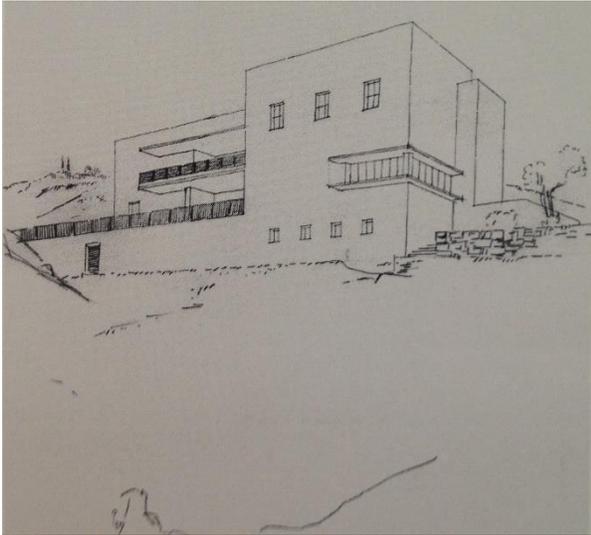
Krakauer's technique of dividing the different sections of the house according to the topography of the landscape is noticeable in his Bonem House project. This technique is a natural result of constructing buildings on mountainsides. When examining his drawing named "Mountainous Landscape with Houses"¹, one notices he had beautifully arranged the houses in a row, taking into consideration the uneven mountainside. It is hard to tell whether the houses constitute a single unit or whether they are separated.



(image 6: Mountainous Landscape with Houses)

Krakauer constructed large houses on mountainsides, planned to look as if they consisted of several separate houses. The Bonem House and the Sonnenburg House are good examples of this technique. In the three drawings representing the different stages of Sonnenburg House plans, the hierarchy between the different cuboids becomes more complex as Krakauer further dismantles the single unit.

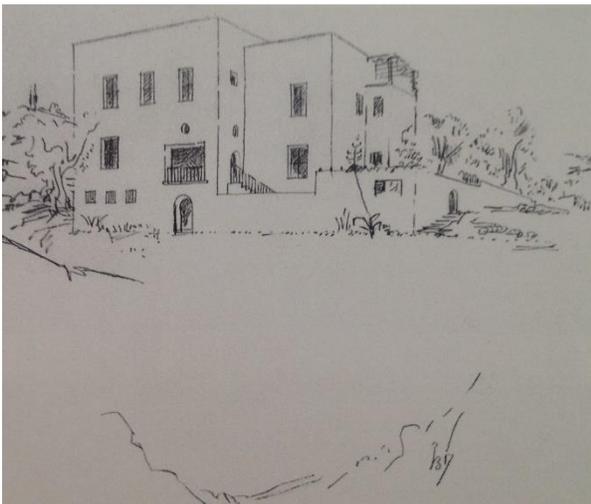
¹ Page 153, drawing 103



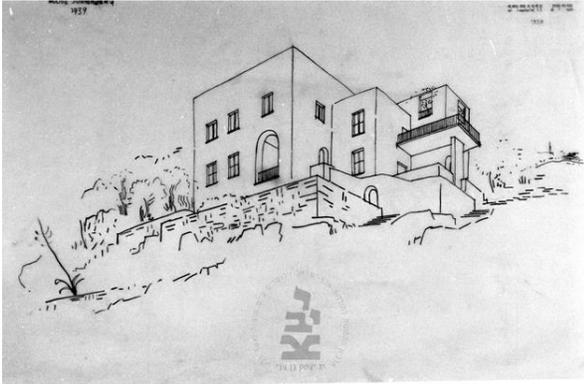
07: First stage



08: Second stage



09: Third stage



10: Fourth stage

[images 07, 08, 09, 10]: 4 stages of planning: Sonnenburg House

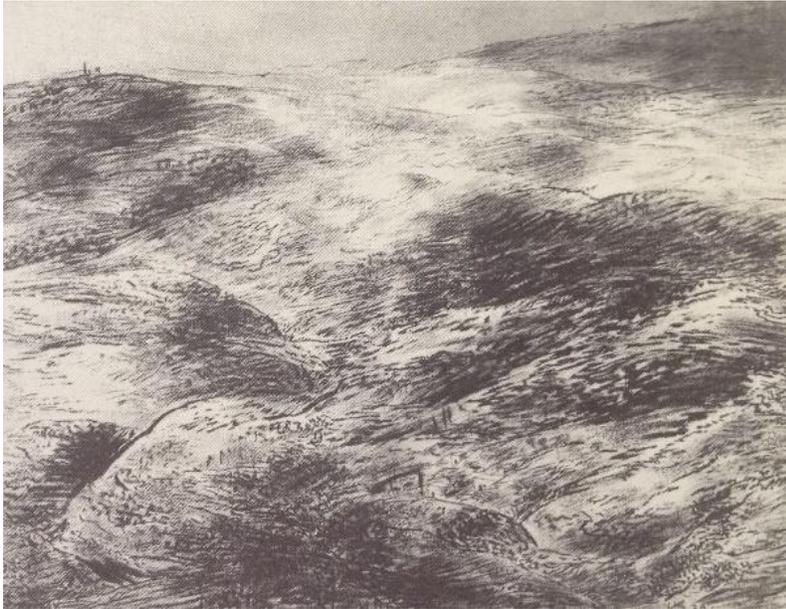
The House

Krakauer's landscape drawings are full of houses. At times the entire composition focuses on the house.



(image 11: The old Jewish Quarter)

These drawings show how each house is like an "offspring of the stone" that it inhabits. At other times, the houses constitute only an addition to the landscape, as is seen in various drawings under the common name: "Mountainous Landscape with Houses"



(image 12: Mountainous Landscape with Houses)
or "Mountainous Landscape with Arab Houses/an Arab Village".



(image 13: Mountainous Landscape with Arab Houses/an Arab Village)

The names of the drawings always describe a mountain with a house built on top of it, as if the mountain and the house were synonyms and one could not exist without the other. Even the houses that are unnoticeable at first glance can eventually be found after searching the drawing, in the form of stones on the ground. The houses in all of his landscape drawings share a common trait: they never attempt to form a



complicated architectural system, but are all simple houses, usually isolated in the landscape. They are all simple "Arab houses."

"Their geometrical shapes are explicit prisms and cubes, and yet they are an inseparable element of the scenery just like the rocks themselves. Cézanne's idea of a geometrical outline hidden inside an amorphous nature is interpreted by Krakauer in a unique manner. The rock apparently reveals its geometrical shape, but it is not accidental. The architect is the one to reveal this geometrical character, creating an antithesis: the house is a part of nature and at the same time it contradicts it, overcomes it."¹

Architecture

Style

In the houses that Krakauer planned and built not a single embellishment or adornment can be found. The beauty of his architectural work is situated in the composition itself and sometimes even in the texture and material. In contrast to Adolf Loos, he did not need to wage war on the European tradition, for the rural Arab houses that had influenced him were never overly embellished.

Shapes

The rectangle and the cuboid. The juxtaposition of the prisms and the arrangement and size of the apertures are what make a house unique in comparison to other houses. Krakauer always used basic geometric shapes, usually simple cuboids, when planning both the general dimensions of the structure and its apertures.

The circle. The semicircle² does not appear often in Krakauer's work (the Teltsch Hotel), and it usually appears in the form of an arched aperture that does not intend to imitate the historical shape of the archway but to emphasize a certain aperture in the façade, usually in order to frame a mountainous landscape.³

The Triangle. The triangle is even less common in Krakauer's work. In fact, it mostly appears in its gable form, in the dining room of the Dgania Kibbutz⁴ for the first time. There it serves as a sort of trick used to let in more light⁵.

¹ Erlik page 14

² Krakauer only used a full circle once, in Rothschild's grave described above.

³ It is found mostly in houses with a view, like the Sonneburg House situated on the mountainside of Mount Carmel, the Kish House on the Mount of Olives (which was never built) and the Ussishkin House [image 12]. The fact that they were built in a certain urban context encouraged Krakauer to give them a "local" and romantic element. In the structures he built for the Kibbutz no such romantic treatment is found.

⁴ The gable in the dining rooms in Dgania and Kiryat Anavim and in the children's room in the Beit Alfa Kibbutz [image 23] stemmed from the necessity to use roof tiles. However, roof tiles must not be mistaken to be a part of Krakauer's approach. The Kibbutz Movement demanded that Krakauer as well as other architects who built for the Kibbutz, like Richard Kaufmann, use roof tiles.

⁵ This technique will later introduce the monumental idea behind the famous dining room in the Tel Yosef Kibbutz.



(image 14: Dining Room of the Dgania Kibbutz)

The gable will return near the end of Krakauer's life, in the blueprints of the Ussishkin House.¹ The gable in this project was not planned to constitute a technological-climatic solution, but as a structural echo to the typical tetrahedron shape of Mount Hermon.



image 15: Ussishkin House's Drawing

¹ Before the Ussishkin House was built Krakauer produced blueprints for a contest to plan Herzl's grave, which he wanted to build as a gable. It seems he found the gable to be a shape worthy of commemoration. More information on this issue appears in a book written by Tomer Gardi, *Stone, Paper*, particularity on page 156.



Composition

Krakauer always paid close attention when planning the apertures of the house's facade. When the delicate balance between the open and the closed is violated, something within the whole composition of the building is undermined.

"Every object in his drawings is composed of an abundance of short lines, straight and curvy, or broken [...]. Krakauer did not follow the way of the Impressionists, who drew lines that together formed a picture. In his drawings, every line has its own special value and is characterized by the same utter devotion, with which he had built a memorial for Jerusalem and its surroundings."¹

This text was written on Krakauer's art, and the fact that it is relevant also when regarding his architecture isn't surprising. Just as every line in his drawings has meaning, every window in his house is significant. When you erase a line you diminish the mountain, when you add a door you harm the house.

Zeit geist

Krakauer drew from the local modern geometric shape dictionary and borrowed different elements from it. He gave local elements a modern interpretation and translated modern elements into the local language. The Le Corbusier "Piloti", invented in order to detach the home from the earth and to make way for the machine (the car), was reintroduced by Krakauer as a sort of open foyer intended to allow the outer view and the sea breeze to enter the structure, constituting a climatic solution (the Teltsch Hotel). The Arab-Muslim "Mashrabiya" blends into the front balconies of the plastered Bonem House, in order to maintain a certain modest characteristic, serving as a decorative climatic element and as a balustrade.

The Poem

Else Lasker-Schüler was a close friend of the Krakauers and used to visit them often in their home. She enjoyed watching Krakauer work and even published a poem² bearing his name. The poem describes the relationship between the artist, who gives life to his drawings and the subject matter of his drawings, which comes alive. The artist in this case assumes the role of the creator in this world – he wisely brings to life the mountain, the house and the man. The poem rhymes Krakauer's fields of creativity in a way no article is able, therefore I will quote the full poem:³

¹ Fritz Schiff, *Ma'ale Yerushalayim*

² She wrote the poem for Krakauer's exhibition in the Schlosser-Galsburg Gallery, situated on Jerusalem's Ben Yehuda Street, in the beginning of 1940.

³ The poem was translated to English by Audri Durchslag and Jaenette Litman-Demeestere.



Vaults of heaven fallen to earth,
Petrifying themselves, merging into mountain-chain,
Grey and sand-colored, sunset-dyed,
Already from the drawing they outcry,
Raging with color, to God!

Leopold Krakauer's sign-designs
Are creations,
Flayed, like nature's frame of space,
From the form of a colossal camel-hump.
One perceives the desert-mountain's heart
Throbbing on the canvas, though still asleep,
Throbbing with the dead in the tomb on the Mount of Olives,
At God's gate of the resurrection of greening vines.

The artist, a man of makings, breathes
A soul into his images,
Generous as God into Holy Mount Sinai,
Into the stones of Moab and Gilboa.
The painter's heights elevate themselves –
Far beyond pen and drawing-board upward to eternity.
Into their stone-fissured husks



Lie veins, tissue, and organ.

And – everywhere

Age-old unbounded silence...

Aboriginal structures, dome over dome;

A weary Godwanderer, man seeks the gate,

Archsynagogues of the archangel,

Where the winged congregation flock together.

Erected heroically out of clotted blood, dust and

enlightenment,

The artist immortalizes

Immortality.

All his stately sarcophagi upon the mountains

Preserve God's "lost likeness,"

- Mankind's lost fortune!

What are we creatures without the stirring smile of God?

Now I know: chilled mountains and hills.



Built and Open Places in Theatre: Evoking Meanings of Everyday Urban Life in Tel Aviv - A Case Study

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Abstract

This research focuses on the presence of built and open places in contemporaneous theatre. Built and open places are defined as urban surroundings, urban landscapes, urban cultural landscapes, etc. and their hermeneutic cycles of meaning. The paper suggests that the urban surroundings are reflected in the entirety of the theatre (play, plot, stage design, etc.), and that this reflection is of utmost importance for the understanding of urban culture in its specificity, and a potential precursor of critical contemplation of architecture and its socio-political function. Through an in depth examination of the affinities between the city of Tel-Aviv, and the play "The Bride and the Butterfly Hunter," by Nissim Aloni, 1967. The paper will show how meta-theatrical tools, together with elements from the contemporaneous socio-cultural and socio-political reality were used to create a complex, stratified and intertextual space. This approach was unique to the Israeli Theatre of the time. Furthermore, the paper will reveal how the stratified feature of the theatrical event challenged the dominant ideology in a time when it seemed unquestionable.

Introduction: an overlook on the research

This article presents a segment of a larger research named-

A Reflection of Tel Aviv's Urban Landscape in Theater and its Relationship to the Contemporary Surrounding Environment: "The Bride and the Butterfly Hunter" as Case Study. (The research is conducted at the Faculty of Architecture and Town Planning, Technion I.I.T. ,Guided by Prof. Nurit Lissovsky , I.I.T. and Prof. Nurit Yaari, T.A.U)

The premise of the research at large is that an urban landscape is a construct, similar to a theatrical play; and that each of them constitutes a "text"¹, saturated with conceptions intentions, values and interests that assemble to form a world view. Via analysis of the play (dramatic text) according to the model suggested by

¹ Text is a concept that includes a group of phrases that may be structured (pictures, words, movements or any other representation) to create an overall, expanded and uniform statement (Rozik, 2013, p. 4).



Patrice Pavis¹, the research seeks to expose these world views, and to read the theatrical play in affinity with the urban landscape of the time, as part of a wider perception of culture.

A second basic assumption is that researching the affinity between a specific urban landscape and a theatrical play (intertextuality²), is only possible via the context in which both exist. Intertextuality is created in the mind of the theatergoer, who is also a user of the city, by identifying codes - words, phrases, slogans and gestures - that are imbued with significance in the context of daily life.

Underlying this study are three fields of creative work and research:

The city, the theater and 20th century culture.

- (1) Within the urban arena, the research focuses mainly on the *Garden City* model [Howard, 1946] that is reflected in the Geddes plan³ for the city of Tel Aviv.
- (2) In the field of theater the genres "realism", "epic theater" and the "theater of the absurd", are emphasized as theatrical models which reflect reality and motivate action, and therefore provide for social reform. The spirit of these genres is evident in the works of Nissim Aloni, playwright and director of "*The Bride and the Butterfly Hunter*". Contrary to the playwrights of his generation, Aloni refrained from merely presenting the actual reality on the stage, and instead used it as raw material for original creative work.
- (3) Approaches of Cultural Studies are applied to review critical research on theater and urban landscape planning in Israel, with emphasis on the Zionist narrative and the figure of the Sabra – formative concepts in Israeli culture.

¹ Patrice Pavis, *Theses for the analysis of dramatic text*. <http://waiyu.bjfu.edu.cn/document/20130901154121677333.pdf> as well as Pavis' books:

Languages of the Stage: Essays in the Semiology of the Theater (1982).

Theater at the Crossroads of Culture (1992).

Analyzing Performance: Theater, Dance and Film (2003).

² The concept "intertextual", first used by Julia Kristeva (Kristeva, 1980 [1969], pp. 64-91) discusses the perpetual formulation of texts within the connections they create, consciously or unconsciously, with other texts. These texts may be written, but may also be visual, social, political or other.

³ Sir Patrick Geddes is currently considered a pioneer in the field of urban and regional planning (Meller, 1990). In 1915, he published *Cities in Evolution*, in which he presented his ideas. He considered the goal of planning as the provision of an infrastructure for evolutionary development and social education (Marom, 2009, p. 30; p. 63). He claimed that the city is an inseparable part of the space in which it grows. His general plan for organizing the Tel Aviv-Jaffa area was presented in 1925. Later on, it was used by local planners from the technical department of the Tel Aviv Municipality. Geddes' documents described the current situation of Tel Aviv (1925) and a new northern area of the city (currently known as the "city center" or the "old northern neighborhood"). On an east-west axis, the city ranges from the sea eastwards to Ibn Gabirol Street. On the seashore, it stretches from Bograshov Street northwards to the Yarkon River. Geddes' plan had enormous influence over the organization of the streets in Tel Aviv and the development of the urban landscape, from the sixties and seventies to date. There are gaps between the planning and the implementation of Geddes plan, that stem from various interests. However, the spirit of the plan and its basic guidelines have, by and large, been preserved.



The main research findings portray Tel Aviv with regard to spaces and ideas in the world of theatergoers: *Here and now (the space of theater)*; *Garden of Eden*; *The Urban as opposed to The Rural*, as well as urban mythologies, such as: *Little Tel Aviv*. The city of Tel Aviv in the play is offered as a liminal space that challenges everything and anything presented during the sixties as unassailable truth.

The Bride and the Butterfly Hunter

"The Bride and the Butterfly Hunter" premiered in 1967 at Bimot Theater (production revived in 1974). In 1980, the play was once again performed by the same cast, together with an original sequel by Nissim Aloni, "The Deceased Misbehaves", whose plot takes place ten years later. These period, namely the 1960's-1970's, were a turning point in Israeli society, witnessing the first cracks in the Zionist narrative that, by and large, were not reflected in the theater or in architecture.

"The Bride and the Butterfly Hunter" appears to present a poetic story that takes place in an urban park of unknown location. Getz, a clerk, scion of a pioneering family, frequents the garden every Wednesday to hunt butterflies, which he deliberately never catches. One afternoon, he meets Mee, a bride who has run away from her own wedding, because the groom, a flute player, didn't show up, and also because he never utters her name, he merely plays it on his flute. The butterfly hunter shares with the bride sandwiches, prepared by his wife, and a bottle of soda water. He confides in her things which he has never shared with anyone, she also shares her feelings with him. Their developing conversation is interspersed with instructions of the administration-office announcer, and the voices of the groom and the wedding guests, who beg the bride to return to the wedding.

A close reading of the play, above and beyond the simple, romantic story line, reveals a layered statement that touches on concrete questions from the Israeli reality of the period.

In this article, I will focus on the way in which Aloni, the playwright and director, constructs the Tel Aviv landscape by means of **the evocative rather than the iconic**.

In "The Bride and the Butterfly Hunter" the patterning of the landscape is constructed by stimulating the audience to evoke sensations, memories and previous experiences connected to the actual landscape, mainly to those central and northern city districts that had been based on the Geddes plan. From a physical, theatrical or scenographic perspective, the actual landscape of the period makes no appearance whatsoever! In this regard, Aloni is quite different from other members of his generation. He does not elicit the Tel Aviv landscape through the use of actual objects or visual/physical images. Rather, he triggers the audience into interpreting the theatrical image in terms of the context of their daily lives.

Thus, via the **intertext**, the play points to the **context**, and assumes its critical significance. The theater serves Aloni as **a method of distancing, creating a space of action**.

Similar to the epic theater of Brecht, in Aloni's work, distancing was meant to grant the audience **an aesthetic experience coupled with the option of forming a critical view**.



Everyday urban life as the Framework of the Play

The play (and the theatrical show) opens with a visual image that presents two figures seated on a bench. Stage directions merely give a general description: "A distant corner of a spacious urban park". The timeframe is added through the voice of the announcer who says.... "Nowadays...."

Despite first impression, the opening scene provides an information-saturated description that constitutes a framework for the entire play. From the opening scene onwards, the audience formulates two parallel arenas of action. The first - is the **associative dimension**, that evokes the city of Tel Aviv, familiar to them from their daily life. The second is the visual/actual dimension and the unfolding of events in the play, in such a way as to facilitate **interpretation** of the scenery and the objects on the stage.

The verbal description "urban park" refers to a cultivated site that mimics nature. The description of the park landscape is associated in the viewer's mind with the *Garden of Eden* myth, with European gardens and the traditions they represent, and to modern ideologies such as the "garden city" model (that, as aforementioned, constituted the foundation for the crystallization of Tel Aviv's character).

Wooden benches, such as the one situated on the stage, were a familiar sight in Tel Aviv, as well as a situation bringing to mind "posing for the camera". However, the scene as revealed to the viewers resembles a painted picture, non-realistic and extremely theatrical:

".... on the stage there are blue screens and a large picture, painted in blue, of a lake and the sky. In front of the picture there are two rows of small, green bushes, and a boulevard bench of rough wood. Over to the side is a green sunflower, with a loudspeaker in its center. A flute is playing variations on the theme of mi....." (Zartel, Davar, 13/01/1967). However, the bushes are not of the cultivated sort, that one would expect in an urban garden; rather, they are the large leaves of a watery or jungle-like landscape. The screen, similar to the leaves, is painted in an expressive style that highlights the brush strokes and the material nature of the paint.¹ It is not concealed; neither does it stretch across the entire space of the stage. It is placed in the depth of center stage. In this way, from the opening of the play, the language of theater immediately creates a mysterious and enigmatic theatrical image, pertaining to stage and theater space, on the one hand, and connecting to actual city space, on the other hand.

¹The painter Yosl Bergner, a close friend and colleague of Nissim Aloni, was in charge of scenery and costumes. The play was based on a picture he had drawn. The wider research addresses this aspect of the play "The Bride and the Butterfly Hunter", and the implications it raises. It is beyond the scope of the present article to address this aspect.



Names and figures as an Indication of Tel-Aviv

Tel Aviv urbanity is also formulated through the description of the characters in the play. One character is explicitly visible as a bride; the other character – that of the butterfly hunter, is more mysterious. We are presented with a man "wearing grey trousers and a worn coat; a green vest, a bow tie and a casket hat". From his attire, it is clear that he is an urban, petit-bourgeois figure. Later on in the play, Getz reveals that he is a clerk in an insurance company; an explicitly urban occupation that strengthens the first impression. It is also associated with the characterization of Tel Aviv as a city that was born from private initiative, as a petit-bourgeoisie enterprise, healthy and well ordered¹. This was done at a time when the prevailing Zionist ethos promoted the communal rather than the individual good.

The names of actual artists and actors are mentioned alongside those of the imaginary characters. This reminder is a meta-theatrical gesture that connects events on the stage with the cultural life of Tel Aviv. Particularly prominent is the mention of Nissim Aloni (playwright and director) and Yossi Banai (the leading actor), that evoke the overall body of creative work of each of them and their history as creative figures. Both were ascending figures in the *Habimah* National Theater, which they left in a move that stirred great tumult in the world of Israeli culture. Banai was also familiar to the audience as the star of the cabaret "Little Tel Aviv" that was presented in 1958, in honor of the 50th year Jubilee of Tel Aviv. The latter lurks as a yearned-for background in "The Bride and the Butterfly Hunter" and returns over and over again, as reference point in various contexts along the play.

In a later part of the play, additional personalities and places, connected with Tel Aviv's urban and cultural realms, are mentioned: The names "Dani ben-Dan from Bayit-ve-Gan" and "Dan ben-Dov" (Aloni, 1980, p. 20) are associated with two prominent personalities in the history of the city.

The first is Dan-ben-Amotz, author, actor and an Israeli bohemian, here referred to as Dan-ben-Dan². The name suggests a man who gave birth to himself, creating his own imaginary father, ethnic origin, and history.

³

The second character is Dan Danin, of the "Tel Aviv boys" and son of Yechezkel Dov Danin (Sochovolsky), who was one of the pioneers of Ahuzat Bayit, the group that founded Tel-Aviv in 1909).

Also mentioned is Bayit-ve-Gan, the name of a Tel Aviv group that established the city of Bat-Yam.

¹ The first goal of the "Ahuzat Bayit" Company, according to the protocol dated 29/12/1906 is: "To establish a Hebrew hub in place that is good for the health and well-ordered;" (Shchori, 1990, p. 34).

² The word "ben" in hebrew means: son of...

³In his autobiography, Yosl Bergner said "Dan was born in Poland, but described himself as the perfect embodiment of the Sabra. He knew how to change colors like a chameleon" (Bergner and Bondy, 1996, p. 136).



Evocation of the city through its built and open places atmosphere

Names are only one type of "code" that Aloni scatters throughout the play to evoke images of the Tel Aviv urbanscape that was familiar to theatregoers at the time. Another type of "code" is the use of expressions and remarks introduced in the replicas of the butterfly hunter and the messages conveyed by the announcer - the park administration representative.

The garden and the city are characterized as places of leisure and entertainment; places to which people come to see and be seen. Getz prefers to hunt butterflies, "...here.... far away from everyone...." (ibid. p. 36). In other words, he is looking for a place that is quiet and intimate, and distant from the public arena, frequented by "everyone".

In his declaration to the bride (ibid. p. 13) he proclaims that "women's fashion is all about spending...", evoking images of a fashionable avenue of shops. During the sixties, Dizengoff Street was the only such avenue of shops in Israel. It served as a center of cultural life and a symbol of Tel Aviv. The reputation of Dizengoff Street that was in its heyday during this period spoke for itself by virtue of its cafes, places of entertainment and shops; it was well known as a popular place to see and be seen (Azaryahu, 2005, p. 128). Furthermore, a special verb describing the action of 'hanging-out in dizengoff' street was used - "Dizengoffing".

A bit later (ibid. p. 15), the butterfly hunter suggests that the groom is delayed because of traffic jams: "people are late.... it's well known.... transportation... they want to be on time... but it just doesn't" This statement paints a picture of heavy urban traffic on a regular basis, as a routine matter. The tumult was typical of the metropolitan nature of Tel Aviv.

An additional example is Music. Pasodoble and Waltz fill the garden audio background during the entire play. Music for social dancing in the public arena is also, in the Israeli context, a uniquely Tel Avivan phenomenon. During the 40's and the 50's social dancing was routinely practiced in city cafés and on the beach boardwalk. In the 60's, a new trend was born in Tel-Aviv: youngsters who defected from socialist youth movement activities, exchanged the "Hora" (folk dance performed in a ring) for the sounds of hit parade and couple dancing, and the braids and sandals for brilliantine and nylon stockings.

Characterization of Tel Aviv's Urbanity as a Contrast

From its establishment, and certainly during the sixties, the Tel Aviv lifestyle was considered urban in nature. It was populated by the bourgeoisie, whose perspective (spiritual, intellectual and consumer oriented lifestyle) followed that of Europe and subsequently the United States. In the local context, Tel Aviv appeared to be the embodiment of urbanity; a materialistic and even hedonistic place. Ballroom dancing,



entertainment and leisure activities on shop-lined avenues, and the preoccupation with fashion, were all considered the rabid antithesis of working and cultivating the land. The pioneering ideal as an ethos sanctifying material frugality, self-sacrifice and proximity to the land, were fully realized only by a small part of the population, but were considered in a positive light by the general public in Israel.

In the play, the characterization of the park as urban, and its reference to Tel Aviv is also accomplished by its contrast to non-urban space, mainly through the group of uncles who are guests at the wedding. Their names are juxtaposed to names of places such as "Uncle Elchanan from Moshav (cooperative village) Elchanan" or "Aunt Hoff from Kfar (village) Hess". This juxtaposition creates a direct, inherent connection between person and place, and thus, in the sense of an individual who symbolizes the general, the names characterize agricultural villages throughout Israel.

Among them is mentioned, "that guy from Nahalal who is kissing....". In 1967, Nahalal was the prime example and symbol of the way to inhabit the land. It was associated with Moshe Dayan, son of Nahalal and the Defense Minister who led Israel to a heroic victory in the 1967 Six Day War. Aloni utilizes this indirect association with Dayan to characterize the uncles as the "elite of the valley", the crème de la crème of the laboring agricultural villages and, of course, to current events of the day. By contrast, he identifies Tel Aviv and the fictional space of the garden as an antithesis to the arena of agricultural settling.

In summary: the "The Bride and the Butterfly Hunter" does not offer a visual representation of Tel Aviv, as was customary in the Israeli theater of the period. On the contrary: Aloni mobilizes **evocation and theatrical distancing** to encourage interpretation according to the audience own sensations, memories, experiences and ideas, regarding the city and actual reality. In an era when the prevailing was a naïve, Zionist ethos, the gap between the visible (on stage) and the interpreted (via intertextuality) allowed the audience to accept a critical view, in a manner free of subjection to undermining due to the general consensus.

Tel Aviv in the play is a representation of "urbanity", "Westernization" and "Israeliness", not a mere replica of physical structures and spaces. It is pictured as a tumultuous, lively place that allows for a creative and cultural life. However, it is also painted as a hedonistic, material place, in stark contrast to the socialist and altruistic world of the agricultural villages. As far as the Zionist ethos, the mere conception of Tel Aviv with alternative values, and the possibility of regarding it as a legitimate way of living, challenges the predominant ideology and places it in question. The multi-layered perspective of the play offers a critique of the incisive monism that was accepted in the 1960's in Israel regarding theater, the nature of the city and the overall Zionist ethos.



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Exceptional Objects

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Abstract

“Exceptional objects” are imagery that exceed the mere descriptive by provoking the viewer to subjective and embodied encounter with the taken for granted quality of urban experience. Focusing on two such renowned artifacts –the *Prisons* by Piranesi and the *Micromegas* by Libeskind–demonstrates the responses to the excessive complexity and unknowingness of urban space, conveying the poetics particular to urban everyday experience. Since urban space is excessively fragmented, accumulative and unknown, it thrives on suggestive poetics of seeking, not finding. Thus its imagery reconstructs multiple possibilities rather than a singular image, and compels the viewer to explore rather than informs.

Introduction: impenetrability of the urban experience

Theoretical academic phrasing is insufficient when it comes to elaborating the texture of embodied experience and the excessive dynamics of the urban tangible and intangible. Conversely, the stream of images—sketches, drawings, artifacts and various types of diagrams and maps—in the very same theories of urban design, but mostly in less canonized resources, sometimes succeeds in delivering the ineffable experiential qualities of urban space.

This paper points at “exceptional objects” in urban design discourse which exceed the mere representational and descriptive by provoking the viewer to subjective and embodied encounter with the taken for granted quality of urban space –therefore they can be considered as works of art. These artifacts are the means of practitioners and academia to communicate, research and envision the experience we frequently refer to as “urban”.



Examining the majority of imagery integrated in urban design theories these artifacts stand out in three senses: first, in their enigmatic character, second in their subversive use of architectural representational conventions (e.g., corrupted and faulty perspectives, orthogonal projections, axonometry, figure-ground diagrams); third, in constructing the moment of encounter with urban space rather than representing it.

For the sake of brevity I would address only two such images associated with depicting urban space – *The Prisons* by architect Giovanni Battista Piranesi (mid-18th century) and the *Micromegas* by architect Daniel Libeskind (1979). Daniel Libeskind's *Micromegas* and Piranesi's *Prisons* were considered from the outset as works of art, while other works such as *Nolli's map of Rome* by architect Giambattista Nolli (1748) was conceived as a masterful and innovative cartographical achievement and *The Naked City* by the theorist Guy Debord and artist Asger Jorn (1957) - although conceived in artistic circles - was a demonstration of the International Situationists' experiments with psychogeography - behavioral and emotional mapping of the urban environment.

It is not the subject of this presentation to decide which is art and which isn't, only to suggest some essential similarities of these images with some artful objects, prominently their speculative quality and their use of the extraordinary in order to bring forth the taken for granted ordinary encounter with urban space. These two chosen works as well as others demonstrate the various contexts, modes of making and diverse media of conveying the poetics particular to urban everyday experience.

Exceptional objects: encounter with the taken for granted quality of urban space

More than two hundred years separate Piranesi's series "The Prisons" (1745- 1761) from Libeskind's series "Micromegas" (1979). Although both Piranesi and Libeskind are architects, these works are considered art at least in regard to their context of display: The Metropolitan Museum of Art and the MoMa Museum for the Art respectively.

The Prisons (Le Carceri) was discussed in architectural and urban design context, prominently Manfredo Tafuri's "The Sphere and the Labyrinth" (1987), Anthony



Vidler's "The Architectural Uncanny: Essays in the Modern Unhomely" (1992) and the contemporary writing of Teresa Stoppani (2008; 2013).¹ Piranesi's *Prisons* have influenced contemporary architects including certain works of Leon Krier, Stan Allan, Coop Himmelblau, Daniel Libeskind, and Labbeus Woods (Maluga 2011: 246). *The Prisons* are layered underground vaulted constructions, a labyrinth of stairways and spaces dissolving into each other, embedded in each other and superposing each other, implying more and more spaces beyond.² They can be perceived as machines producing perspectives rather than certain perspectives in themselves.

The *Micromegas* by Daniel Libeskind (1979), originally published in his book *Between Zero and Infinity* (Libeskind 1981), were inspired by Voltaire's short story about an interplanetary traveler (1752).³ The exhibition catalogue *End Space* includes notes by Juhani Pallasmaa, John Hejduk, Dalibor Veseley and Daniel Libeskind himself (Libeskind 1980). *Micromegas* posit abstract patterns and adjacencies of artifacts tailored to plug into specific construction configurations only that to be drifted away from their designated contexts, maybe reforming and reassembling towards alternative contexts. Consequently they form "deconstructive constructs" (ibid), infinite dynamic formations of fragments and ephemeral constellations that one can dive into their complex depth and insinuations.

Both series depict imaginary landscapes which are not necessarily or directly urban either by title or by contents.⁴ Their inclusion in architectural and urban design discourse stands out as the drawings negate representational architectural norms and conventions (they suggest paradoxical and simultaneous perspectives and they also defy scale, boundaries and finitude, place, time, typology or even concreteness born out of materiality and structure). Nevertheless their appearance in urban design discourse is triggering responds that point at the poetics of everyday urban experience and attribute it to certain excessive complexity and unknowingness.

1. Excessive complexity

The Prisons demonstrate an evolving complexity as Teresa Stoppani (2008) remarks in "Piranesi's Urban Manifesto":



Piranesi's 'prisons', far from resembling dungeons, propose impossible, broken, composed perspectival views of vast and richly articulated open spaces that, far from secluding either the observer or the pictured prisoners, spin an endless series of expanding movements. They are open, moving and in the making, the only static elements in them being the ineffectual machines of torture which do not work. The 'prisons' are, in fact, visions of urban spaces of an 'other' Rome, the half-sheltered half-open spaces of a city perpetually in the making, spaces of change and adaptation for which the definition of function is still the makeshift result of invention (as 'finding') and adaptation.

In "Translucent and Fluid: Piranesi's Impossible Plan" she adds (Stoppani 2013: 99):

Piranesi's Rome, its architectures and its surroundings—a multiple city made of past and present—never exist as a resolved, flat, static plane, but always become: dynamic, layered, fragmented, they work on a surface that is an ambiguous space of tension, never possibly resolved by a dividing line.

Stoppani notes the richness and diversity of spatial situations, the paradoxical and impossible views that are composed from different broken perspectives that enmesh, the extreme sense of movement and evolvment. This raw scene of complexity involves the viewer in a landscape of excessive dynamics and diversity that is never resolved, impossible to analyze or define, simultaneously expanding and fragmenting. Celestino Soddu (2003) testifies to the excessive quality of Piranesi's *Prisons* in "Visionary Aesthetics and Architecture Variations" exclaiming that:

The urban images of Piranesi, the series of engravings on the "Carceri" are, perhaps, the highest visionary representations of the urban and architectural complexity in a single sketch. But even Piranesi, in order to reach complexity, stratified one sketch onto the other, using an already carved plate and stratifying new visions, often contaminating one perspective logic with another, creating ambiguity and new possible overlapping reading keys that follow different temporal and emotional moments contaminating one another but that are not contradictory.



The *Prisons* reach their extreme complexity by the ambiguity and overlaps of inconsistent accumulating scenes.

Moving to Libeskind, Geoffrey Broadbent's book *Emerging Concepts in Urban Space Design* showcases only one plate from the *Micromegas* along with the following explanatory caption (Broadbent 2003:454):

Although none of the conventional unifying devices is used, such as symmetry or one dominating element complexity extends across the whole surface in such a way as to produce a rich unity of diversity.

Michael Hays adds that *Micromegas* break the continuity and unity of space into a multiplicity of conflicting spaces (Hays 2000: 484):

Employing the ambiguities of architectural projection as their starting point, Micromegas disrupt the homogenous, continuous space of axonometry and isometry into a multitude of conflicting spaces. ...the Micromegas, however unrelenting in their destruction of unified picture space, are masterly compositions; abstract but eminently three dimensional, belonging to an established convention of pictorial fragmentation.

Micromegas then, appear here as a demonstration of urban complexity, the kind that Venturi referred to as "both-and" or "difficult whole" (Venturi 1966:88).

Observing Piranesi's *Prisons* and Libeskind's *Micromegas*, and their commentary in the context of architecture and urban design as is reviewed above, the excessive and condensed fragmentation and the accumulative stratifying dynamics of their evolving scapes are unmistakable. Both series of images carry the excessive complexity of the tangible urban world. These images capture the observer with wonder and maybe terror. These are imagined cities with architecture and spaces that may be impossible to realize, and nonetheless, they depict the true complexity experienced in the City: excessive, condensed, fragmented, disturbed, accumulative.

2. Excessive unknowingness



The commentators on *Micromegas* by Libeskind and *The Prisons* by Piranesi considered these images to be suffused with enigmatic traces, memory provoking signs, chaotic contingencies, strange and unfathomable spatiality, infinite possibilities and multiplicity. For example, Marotta's and Mlicka's citations in regard to Libeskind's *Micromegas*:

With these drawings the architect introduces desires into his composition, unknown spaces, the worlds of the invisible and the not yet seen, and finally the lost traces of memory (Marotta 2007: 24-26).

And:

*The newly formed arrangements of signs reflect the innumerable possibilities and relationships of spaces in the city. This opens the works up to the idea of an order of complexity; Next to an apparent chaos of possible interpretations one can feel the architect's control over the blank sheet. In Eisenman's account of the series *Micromegas* he mentions that these drawings "were carefully projected within the bounds of zero and infinity," which suggests a careful management of even an infinite space (Mlicka 2007:19).*

The first citation remarks the unknowable strangeness of the spaces depicted in *Micromegas*, similar to no familiar spatiality and yet it nevertheless uses pseudo- architectural layout, conventional elements and grid as well as an architectural representational method. The second citation refers to the abundance of choice that this series offers, involving the observer in an urban-like dynamics of temptation and concession.

Conclusion: fields of seeking, vessels of thought

In *End Space* (1980:22) Daniel Libeskind argues that:

An architectural drawing is as much a prospective unfolding of future possibilities as it is a recovery of a particular history, to whose intentions it testifies and whose limits it always challenges. In any case a drawing is more than the

shadow of an object, more than a pile of lines, more than a resignation to the inertia of convention.



Libeskind advocates architectural drawing which surpasses its thingness by projecting horizons of possible interpretations of both the futures and the histories of architectural space. Instead of being “a shadow of an object”, i.e. normative depiction or conventional representation of physical space, Libeskind suggests a different kind of object, an exceptional object, one that involves the spectator, transforms spectator to participant, immersed in a quest of re-imagining, questioning, criticizing, seeking the new boundaries that form our contemporary space.

Citing May Sekler, Manfredo Tafuri (1987:26) claims that *the Prisons* are indefinitely opening up spaces:

one fitted within the other, their multiplication, their metamorphoses, and their disarticulation polemically supersede the sources of the Carceri itself

and that it:

induces the spectator to reconnect the fragments of a puzzle that proves to be, in the end, unsolvable. But it can also be said that the spectator of the Carceri is obliged, more than invited, to participate in the process of mental reconstruction proposed by Piranesi

Architectural drawing then, is not a proposing a given report of former exploration that yielded a specific interpretation but rather a challenging invitation to exploration. It is an explorative tool, suggestive, compelling, and immersive. It is demanding the collapse of normative conventions and concepts at its outset, while the remnants of conventional space such as the architectural artifacts – the arches, the columns and the stairs in Piranesi’s Prisons and the composite precast elements in Libeskind’s Micromegas – contribute to the uncanny presence. The familiar objects regress to unfamiliarity bourn from their de- contextualization, shifting from the finite and definite to the infinitely suggestive and evolving.

Back to the city, and to the architectural representations of the urban experiential space, I’d like to suggest that such exceptional architectural drawings have a different relationship with real space when it concerns the city. Since urban space is excessively fragmented, accumulative and unknown, it thrives on poetics of seeking, not finding, of uncertainty and flickering realities, not decisive images. Thus its imagery has to reconstruct possibilities and the encounter with the excess of the world rather than with unitary singular image.

Acknowledging this role of certain artful imagery in mediating urban experiential space in urban design theories may contribute to its accreditation as ways of studying urban space and communicating knowledge that otherwise is only vaguely present in theoretical discourse.



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¹ Some of the "prisons" plates are available online:

<https://sala17.wordpress.com/2010/03/10/giovanni-battista-piranesi-1720-1778/>

² their palimpsest character is indeed attributed to the fact that the later edition was produced by Piranesi as iteration of the original print plates.

³ The complete series is available online: <http://libeskind.com/work/micromegas/>

⁴ They are all produced as a series rather than singular objects, pointing at their explorative motivation and iterative process of making;



Ar(t)chitecture as a Mediation Between Sacred and Secular: The Israeli Synagogue (1940-1970)¹

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Abstract

This paper examines the dialogue between art and architecture in Israeli sacred space and its contribution to the spiritual experience. While the topic of integration of art into the built environment is prominent in modern architectural discourse, in the context of sacred architecture it contributes to the mediation between sacred and secular and the praising of the occasion of worship. Thus, the integration of art into architecture acquires in this case a functional meaning, one which exceeds its definition as mere decoration.

The discussion develops from an analysis of the architectural works of Israel Komet, Zvi Hecker and Meir Ben-Uri. Alongside the architectural investigation, I relate to the debate over the role of art in sacred architecture in the modern Jewish philosophy of Franz Rosenzweig and Martin Buber.

¹ An earlier version of this paper presented at AR(t)CHITECTURE conference at Haifa, April 2016. I would like to thank Yair Ben-Uri, Zvi Hecker and Yechiel Komet for their kind hospitality, for the opportunity to explore and present in this article documents from their collections and for their helpful comments for my paper. I would also like to thank Dr. Avinoam Rosenak and Yair Ben-Uri for their useful remarks for this paper.



Re:Manifest

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Abstract

This paper investigates definitions of water and our continually changing relationship to it. How we cultural understand our relationship to this valuable resource - Water - are constructed through both art and urban practices, whether in the form of (his)stories, maps or the connections between water, its' edges and those of our cities. These forms ultimately establish our relationship to the natural world and in-form our societies social organization. How this interface is designed, celebrated or embellished in rituals, etc. is an ongoing process, as cultural ideas, and technologies change through time, so to how we come to understand the complexities and dynamic processes of edges, intersections, durations, cycles and limits/extents. All of which, define the relationship between all watery bodies and our urban environments. This paper focuses on Mannhattans' Eastern Edge and the Blocks that terminate along a section of the East River. Students asked to interrogate the scalar dynamics of the East River Estuary, the aftermath of Super Storm Sandy (2013), and Climate Change predictions, in order to Re:Envisioning a future, circa 2050, that Re:Manifests Mannhattans' Eastern Edge.



Art for Architecture/Architecture for Art

Amdavad ni Gufa (Caves of Ahmedabad, 1990-5) Ahmedabad, India

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Abstract

*This paper articulates the relationship between art, the crafts and architecture through the description of **Amdavad ni Gufa (Caves of Ahmedabad, 1990-5)**. M.F. Husain (1913– 2011), Indian artist of international acclaim, and Balkrishna V. Doshi (b.1927), got together to see how they could challenge each other, and how art and architecture can derive from, question, contribute and interpret each other. The project is an example of contemporary architectural creation vindicating itself from assertions of alienation and a loss of sense of place and at the same time averring architecture's skill in utilizing its own and other disciplinary methods to enrich its tools, techniques and technologies. The architect through the built form challenged the artist to revisit his own procedures. Husain could not hang any paintings on the curvilinear walls of the gallery. He had to pick up his brushes and paints and use the walls and ceilings as his canvas.*

The shape and structure of the gufa with its roof comprising of multiple connected domes and the interior tree like columns and its form akin to subterranean caves, necessitated the use of local tribal craftsmanship and the technique of construction they used to make their own huts. This connectedness to their technique of construction inspired the local tribal people to perform their rituals of dance and puja (worship) on site for nine days. This in turn inspired the artist to paint the roof with Sheshnaag, the mythological cobra. This dialogue between the artists and craftsmen, between myths, rituals and reality gave Doshi the opportunity to use narratives and stories to shape and explain his design. The gufa itself becomes a verbose orator and storyteller raising the chiral question- whether this architecture was meant for art or was the art meant for the architecture. This interesting encounter highlights the understanding of architecture as an art of storytelling which aids cosmopoiesis, bringing together the cultural and natural realms as well as humanistic and scientific thinking.



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Introduction

This paper is based on the encounter between two masters: M.F. Husain (1913–2011), Indian artist of international acclaim and Balkrishna.V. Doshi (b.1927), Indian architect who worked with Le Corbusier and shaped the face of modern Indian architecture after independence from colonial rule in 1947. The two masters got together to see how they could challenge each other, and how art and architecture can derive from, question, contribute and interpret each other. Husain wanted to build a gallery for his works and when he met Doshi he expressed a desire to do so along with his fascination for underground spaces.¹ The resulting underground art gallery built between 1990-95 with its roof comprising of multiple connected domes and the interior tree like columns was called Amdavad ni Gufa (Caves of Ahmedabad) due to its form akin to subterranean caves. It is located near to *Centre for Environmental Planning and Technology*, the school of architecture and interior design that Doshi was instrumental in establishing. Doshi's contacts from diverse backgrounds enriched the environment of the School of Architecture, where an almost continuous stream of visitors, including the likes of Buckminster Fuller, Aldo van Eyck, Jane Drew, Maxwell Fry, James Stirling and many Indian architects, painters, musicians, authors and intellectuals were stimuli to the dialogues that took place there.²

¹ Doshi, Balkrishna, Amdavad-ni-Gufa, Ahmedabad, 1990-95, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2008, Pg. 1

² Doshi, Balkrishna, Paths Uncharted, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2011



In the *Gufa*, the architect through the built form challenged the artist to revisit his own procedures. Husain could not hang any paintings on the curvilinear walls of the gallery. He had to pick up his brushes and paints and use the walls and ceilings as his canvas. He made bespoke metal sculptures of human figures for the *gufa*.¹ The paintings and sculpture like the architecture, educed the idea of an ancient cave with wall paintings. In the *gufa* this coalesced interrelationship between art and architecture reverberated with the same interdependence as of music and architecture in the Gregorian chants in the cathedrals making one wonder if the chants seemed to be so powerful as a result of being in the cathedral or was the cathedral mystified due to the chants?

The Making of the Gufa

The activity and involvement of the artist and the architect extended into the period of construction- developing, refining and exploiting the construction techniques indigenous to the site's locale. On the site, adjoining the *gufa* is a permanent art gallery, named after Husain's American friend and art collector, Chester Herwitz where art is displayed on walls with proper lighting.² The *gufa* in stark contrast to this formal gallery space is at once spatial and conceptual where the opacity of technique and medium in the artwork is ameliorated. The *gufa* conceived within the specific architectural location is best described as a piece which tells the story it resides in.

For Doshi, the conception of liminal space starts with stories. These stories answer the question that he asks himself when thinking about architecture, *'Is there a binding thread that joins the real and the imagined together?'*³ He describes that the mythical stories he enjoyed as a child often talked of imaginary people, places and animals. These for him trigger lots of thoughts and images.⁴ He describes that he often has such dreams where he sees irrational things. He derives joy from impossible possibilities.⁵ He believes that for creation to happen one has to become 'consciously subconscious'.⁶ For Doshi, there is no greater teacher than intuition and dreams because they *'emanate from the source.'*⁷

In a story written about the *gufa*, "The Revelation" Doshi weaves a complex network of sources of inspiration. The story goes beyond formal references to include the way the *gufa* was made, a compelling combination of digital and traditional techniques. According to the story, after several failed attempts to give a form to the *gufa*, Doshi visited the site to find a clue and that night, had a dream in which appeared a body of a large tortoise like form. Unlike the normal tortoise this was long and had two large mouths at the opposite ends. They were interconnected with many shells

¹ Doshi, Balkrishna, *Paths Uncharted*, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2011, Pg. 336

² *Ibid*, Pg. 337

³ *Ibid*, Pg.89

⁴ *Ibid*, Pg.34

⁵ Doshi, Balkrishna, *Paths Uncharted*, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad, 2011, Pg. 36

⁶ *Ibid*, Pg.394

⁷ *Ibid*, Pg.364



of different shapes and sizes. It had six legs and in their manner and position appeared to be attempting to somehow move.¹

It began to ask him questions about his present approach to architecture and its relevance to contemporary times. Doshi describes how in his dream his answer emphasized only the contemporary and day to day notions of how to design an acceptable form, or create a well lit functional space, or employ construction technologies available within the means. Then the tortoise reminded him of the discoveries made by Giulio Romano and others during the post Renaissance and Baroque period urging him to design so that space and structure are integrated totally; so that the final object became a living being.²

These kinds of day dreaming ushered forth a new set of explorations. From sketches of caves and other subterranean spaces evolved a series of hand molded thermocole and clay models. While working with the models Doshi decided to shake these and the *'rectilinear axes of the various spaces gave way gave way to a multitude of intersecting spatial events.'*³ This required rethinking the usual and prevalent construction methods and techniques.⁴ Ferro cement technology seemed ideally suited for this and so a choice of very light steel reinforcement and chicken wire mesh covered by a rich mortar mix of cement and sand to achieve this structure was concluded. No foundations were required for this peculiar structure. To enhance the cave like feeling of the gallery, the contours of the site were retained, rather than being levelled and thin concrete floor slab poured over it.⁵

Doshi describes how no trained mason was willing to work on it. For them to apply the cement sand mortar on the curved mesh was just not possible as there were no straight lines or levels and no shuttering around the curvilinear forms to hold the mortar. The idea of using untrained labor instead of the masons was abandoned after a few samples. It then occurred to Doshi that the tribal people from the forests who made beautiful handmade clay houses and terracotta horses should be approached. These people could easily transform their skill to apply clay by hand used in the construction of their mud houses to hand pressing the mortar around the skeleton of light steel reinforcement and chicken wire mesh. The concrete was then covered with a compacted layer of vermiculite followed by a mosaic of pieces of broken china.⁶ The porthole windows on the domes were oriented to allow maximum light and minimum amount of heat to overcome the hot climate of Ahmedabad. The interior of the gufa comprised of two large rotundas which were intended for discourses on art and culture⁷

¹ Doshi, Balkrishna, Amdavad-ni-Gufa, Ahmedabad, 1990-95, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2008, Pg.2

² Ibid, Pg. 2

³ Doshi, Balkrishna, Amdavad-ni-Gufa, Ahmedabad, 1990-95, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2008, Pg.46

⁴ Ibid, Pg. 46

⁵ Ibid, Pg. 46

⁶ Ibid, Pg. 46

⁷ Doshi, Balkrishna, Amdavad-ni-Gufa, Ahmedabad, 1990-95, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2008, Pg.2



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The shape and structure of the gufa necessitated the use of local tribal craftsmanship, local industrial waste material, and local technique of construction. This connectedness to their technique of construction inspired the local tribal people to perform their rituals of dance and puja (worship) on site for nine days. This in turn inspired the artist, Husain to paint the roof with Sheshnaag, the mythological cobra, painted in oil connecting the two large rotundas on the exterior of the still incomplete glazed domes. These were later glazed in black mosaic. Ironically, the tribal method used to construct this building were used in combination with computer aided programmes and complicated concrete shell engineering. The inventiveness of the architectural form is complemented by its site which is located near the architecture school acting as the perfect stage to present and brace this way of imagining architecture. The audience comprising of learners from the architecture school can witness the relationship between architecture, art and craft.

The Story of the Gufa

Doshi's architectural process in the Gufa combined reality and myth, dreams and wakefulness. His story acted as a rhetorical procedure to set the stage where tangible and hypothetical components of imagination both became important players releasing the emotional content of somatic reality. In the midst of rationalist and functionalist building practices and empty formalism of modernity, this can be defined as an attempt to create a possibility for the embodied human beings. Doshi realises that an architect is a being whose memory, associations and experiences dominate his life. Through these he reconstructs an image to connect to the world around.¹

¹ Doshi, Balkrishna, Paths Uncharted, Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad, 2011, Pg. 150



As Steele points out, Doshi realizes the potential India holds to provide labour intensive handicraft and feels it is the architect's responsibility to originate new uses to nourish these as opposed to modern tendency of grounding the discipline independent of its techniques.¹ In the gufa, the association of ancient traditions of crafts with new technologies aided with computers and cultural congruence with the locality is a lucid antidote to the jaded modern project with its neutrality of space, material and technique of construction and detailing. The gufa allowed results not possible with the obvious means to conceive the making of architecture. It combined the artistic and ingenious qualities of the architect with the manual and craft skills of the tribal, myths with reality and tradition with technology to create a receptacle or container inseparable from its contents.

Marco identifies that for architectural stories articulated by the multifaceted world of making which connects people, processes and material world, a distinction should be understood between behaviour, a name for the 'informative cases, which are determined by a built environment', and action- a name for the 'stories which are determinative of an architectural environment.'² These stories Marco likens to what Nelson Goodman calls world-making or cosmopoiesis, which is a kind of re-making as it starts from the world already at hand. It embraces multiple vantage points and extends perception.³ Marco calls this the *crafty process of storytelling* which defines the '*making of thoughtful and thought-making architecture*'⁴ based on experience conveyed by storytelling, not by the '*briefing given by photo renderings.*'⁵

The gufa is a complete demonstration of this crafty process. Doshi did not start with a presupposed mental image. His process oscillated between the understanding of the site, dreaming the form, then back to attuning the form to the site, including local people and techniques. The making of the gufa became inclusive in this way where all the players related and associated with it in their own personal ways. Tayyibji describes that in general Doshi uses stories to get a grasp of reality which is not singular. He writes "*For Doshi reality is to be understood through the search for its secret intangibles, rather than its obvious manifestations, and in this the story is his map. He travels by the map and as he does the map is transformed, he draws it again and uses this for still further explorations.*"⁶ The story is Doshi's response to the professional crisis of 1970's where he searched for his identity rather than relying on his interpretation of architecture as influenced by Corbusier or Kahn's work.⁷ Doshi turned away from the appropriation of a singular, universal and utopian

¹ Steele, James, Rethinking Modernism for the Developing World; The Complete Architecture of Balkrishna Doshi. New York, N.Y., Whitney Library of Design., 1998

² Frascari, Marco, An Architectural Good-Life can be Built, Explained and Taught only through Storytelling, Reading Architecture and Culture-Researching Buildings, Spaces and Documents, Ed. Sharr, Adam, Routledge, London, New York, 2012 Pg. 226

³ Ibid, Pg. 226

⁴ Ibid, Pg. 228

⁵ Ibid, Pg. 228

⁶ Tayyibji, Riyaz, The Search of Joy in the Modern Project, Ed. Chhaya, Neelkanth, Harnessing the Intangible, National Institute of Advanced Studies in Architecture, The academic Unit of Council of Architecture, New Delhi, 2014, Pg. 93

⁷ Tayyibji, Riyaz, The Search of Joy in the Modern Project, Ed. Chhaya, Neelkanth, Harnessing the Intangible, National Institute of Advanced Studies in Architecture, The academic Unit of Council of Architecture, New Delhi, 2014, Pg.98-9



image¹ to his own culture which had nurtured an appreciation of diverse images moving through the mind.²

Doshi's storytelling, be it verbal, visual or embodied in the gufa brings forth a unique way of architectural creation through dreaming, an act between reasoning, fantasizing and discovering by chance. As Marco Frascari rightly sums, '*dialogic micro stories of the extraordinary and the infra ordinary are at the base of assimilation of the processes of architectural conceiving... aiming at dialogue with human consciousness back and forth.*'³ This subjunctive mode of thinking practised by Doshi brings together reason, fantasy and serendipity. His storytelling involves reminiscing while at the same time fosters remembrance by embodying it in the built.

In an article written together with Christopher Alexander, Doshi highlights the virtue of excellence and participation by surrendering to a larger goal.⁴ Doshi advocates that architects should not decide everything right down to the smallest detail but let the community and generations of architects and planners participate in decisions about the substructures. Doshi feels this alone can lead to the immense richness that the region's traditional solution embodies. This he calls *heterogeneous homogeneity*⁵ where the collective and the individual both find opportunities for self-expression and believes it can be the antidote to the contemporary developments where personal statements are commonplace resulting in '*fragmentation of the urban fabric and a chaos of architectural expressions*' and as a means to '*restore a sense of wholeness to our built environment.*'⁶

The story of the gufa creates this heterogeneous homogeneity. Alberto Perez Gomez in the article '*The Place of Narrative in Architectural Theory: From Treatise to Story*' argues that in view of the '*evident limitations of technology and gratuitous formalism*', the modality of discourse of history and storytelling should be given priority.⁷ If architecture engages these, both for its central orientation and for projects, it will offer better alternatives to reconcile the personal imagination of the architect with an understanding of local places and cultures, and pressing political and ethical concerns. Alberto explains the three terms *theoria*, *techne* and *phronesis*. Since the time of Vitruvius architectural treatises in the Western tradition were, mostly aligned with *theoria*, '*the contemplation of order in Nature associated by Plato with mathemata*'.⁸ Theoria which according

¹ Ibid, Pg.99

² Ibid, Pg.99

³ Frascari, Marco, *Eleven Exercises in the Art of Architectural Drawing: Slow Food for the Architect's Imagination*, Abingdon, Oxon; New York: Routledge, 2011, Pg. 173

⁴ Alexander Christopher, "Main Structure Concept" (with B. V. Doshi), *LANDSCAPE*, Vol. 13, No. 2 (Winter), 1963-64, pp. 17-20. Reprinted in *EKISTICS*, Vol. 17, No. 103 (June 1964), pp. 352-354.

⁵ Doshi, Balkrishna, *Social Institutions and a Sense of Place*, Marg Vol 48, No. 3, Marg Publications, Mumbai, India, 1997, Pg.23- 24

⁶ Doshi, Balkrishna, *Social Institutions and a Sense of Place*, Marg Vol 48, No. 3, Marg Publications, Mumbai, India, 1997, Pg.23- 24

⁷ Pérez-Gómez, Alberto *The Place of Narrative in Architectural Theory: From Treatise to Story*, 4th Global Conference, STORYTELLING, Tuesday 21st May – Friday 24th May 2013, Prague, Czech Republic, Conference Draft Paper, Accessed July 31, 2016 <http://www.inter-disciplinary.net/probing-the-boundaries/wp-content/uploads/2013/04/gomezspaper.pdf>, Pg. 1

⁸ Ibid, Pg.7



to Vitruvius was the same for a doctor or an architect never constituted the practice of architecture which relied on *techne* issued from specific practical knowledge.

Hans-Georg Gadamer described the Greek understanding of *technē* in the “*Apologia for the Art of Healing*,” as a special form of practical knowing. Gadamer’s “practical knowing” believed that “*the true art of healing, which involves authentic knowing and doing, thus requires the capacity to distinguish between the particular constitution of the organism in question and what is actually compatible with that constitution.*”¹ It was knowing how the universal could be applied in a particular context. Furthermore, there was also since the time of Vitruvius a tradition of storytelling that accounted for important issues of meaning and appropriateness of form to cultural situations and natural sites. This tradition emerged from Aristotle’s “practical philosophy” and constituted a way to articulate *phronesis*, wisdom, through the telling of stories.²

The gufa allowed the coming to being of the built only through interaction locally and ad persona. Doshi combined local actualities and histories with information manipulated and modulated to serve the deeper needs of human communities. He brought together generalities and particularities and immersed the user to experience it. In the process, he identified not only the subconscious realm of his identity but also provided an opportunity to others to do so steering them to ‘*think within architecture*’ instead of ‘*think about architecture*.’³ Marco identifies buildings as factures that ‘*must be revealed to active subjects as a direct consequence of some local control exerted by that subject through the intermediary of some functioning object.*’ and quotes Miller’s idea that objects become significant objects only through activity and exploration. They become so when they are found and cannot be separated from the activity that defines them.⁴

Doshi’s verbal and architectural storytelling instead of generating universals involved the application of these universals in given social and cultural settings. It provided the means of developing connections between each other’s past experience and facilitated for architecture a system oriented approach encompassing natural and cultural realms along with humanistic and scientific thinking in the world of making (cosmopoiesis).⁵ For Doshi artistic creation is one where only one does what one truly enjoys by shedding borrowed baggage in the form of conventions, presuppositions and the urge for approval. The resulting architecture then comes to be defined by what transpires intuitively and in lieu with the socio cultural and economic milieu. Doshi concludes that true architecture like the nature of man is multivalent and has the capacity to emit several

¹ Hans-Georg Gadamer. *The Enigma of Health*. (Stanford: Stanford UPress, 1996): 31-44.

² Pérez-Gómez, Alberto *The Place of Narrative in Architectural Theory: From Treatise to Story*, 4th Global Conference, STORYTELLING, Tuesday 21st May – Friday 24th May 2013, Prague, Czech Republic, Conference Draft Paper, Accessed July 31, 2016 <http://www.inter-disciplinary.net/probing-the-boundaries/wp-content/uploads/2013/04/gomezpaper.pdf>, Pg. 7

³ Frascari, Marco, *An Architectural Good-Life can be Built, Explained and Taught only through Storytelling*, Reading Architecture and Culture-Researching Buildings, Spaces and Documents, Ed. Sharr, Adam, Routledge, London, New York, 2012, Pg. 228-9

⁴ Marco quoting Miller, John William, *In Defense of the Psychological*, New York: W.W. Norton Co., 1983, Pg.171, Ibid, Pg. 229

⁵ Frascari, Marco, *An Architectural Good-Life can be Built, Explained and Taught only through Storytelling*, Reading Architecture and Culture-Researching Buildings, Spaces and Documents, Ed. Sharr, Adam, Routledge, London, New York, 2012, Pg. 224



messages and fulfill several functions beyond the climatic and structural ones¹. To do that he concludes it must possess the *'magic of a story'*² -the relationship of the building to its physical, social and cultural milieu and to memories and associations.

¹ Doshi, Balkrishna, The Nature of Architecture in Melotto, Bruno ed., Balkrishna Doshi, Sangath-Indian Architecture between tradition and Modernity, Maggioli Editore, Bia del Carpino,2012,

² Ibid, Pg. 35



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Contested Miniatures

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Abstract

This paper explores the relationship between architectural production and curating architecture in China. It looks specifically at how culture of hardware in museum and software in programming and curating are overridden in the practice of architectural design corresponded to the project of China's ambitious cultural making.

The phenomenal museum boom in China over the past decade has effected how we understand society and culture. In 2011, some 400 museums opened. Museums are glorified storage and material amassing spaces that can manifest a city's identity. But without balancing a new knowledge base with the increasing display space, many lack a strong discriminatory direction. Ideas, however small, play a tremendous role in shaping and exhibiting the art and architecture. Is there a museum where a single manifold, complex, idea can be manifested?

The Miniature Museum (M/M) is an architectural and curatorial project initiative by artist/architect Thomas Tsang and conceptual artist Zhou Yi (Inside-Out Art Museum and CAFA). It is a free standing concrete structure, ostensibly a wall and a facade. M/M is a compact and autonomous structure that serves to house art installations of various mediums: low-frequency sound installations, a visual art installation based on uncanny fantasies and childhood memories, and a work that questions land and landscapes in a dark space. By giving space to renowned international artists working in a wide range

of mediums M/M operates as kind of kunsthalle, with site-specific works, no permanent collections, it highlights what is exhibiting architecture, under the auspices of Grand Opening Projects.

Grand Opening Projects, a curatorial project between 2014-2017, questions the role of curating architecture in a site-specific setting of the Miniature Museum. It establishes a dialogue between art and architecture, sparks new ideas of which public spaces are equally contained, contrary to the common practice of an empty shell museum that seldom connects to today's practice, to witnessed the greatest cultural projects, where 'grand openings' are the greatest collection of this miniature museum.

In miniaturization, greater influences have been recognized in the changing faceted worlds, lies between reality and fiction, activities between believing and wondering are highly contested. In this process, the motivation behind this research focuses on tangible and materially sound projects, that is essentially an idea of intangible and sublime. Privileges concrete examples into abstraction to



nurture being inside can be remotely distant. “Miniaturization is a classic of China’s entertainment and tourism culture. In ancient time it resulted in the bonsai tree, miniature forest and false mountains; in Shenzhen it passed through some mysterious transformation to become a commercial innovation. Miniaturized scenes are a kind of substitute, they not only compress the wider world, they also compress the distance between people’s dream and reality” - Ou Ning, South of Southern: Space, Geography, History & the Biennale (2014), Chapter from The Amusement Park.



The Artistry of Scarpa's Stampalia and Olivetti in Venice

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Abstract

Carlo Scarpa's architecture has an *otherness* in material expression by use of enigmatic, intellectually creative strategies resulting in original buildings. Formatively, Scarpa worked on remarkable glass designs for Venini (1932-1947) and it is his experimental creative methodology from that period that helps to inform the inspired, sensitive and layered tectonics in two beautiful jewel-like Venetian projects: Fondazione Querini Stampalia (1961-1963) and the Olivetti Showroom (1958). This paper looks at the use of contextualised materials that dematerialise and delineate concrete, cement and stone by the meticulous physical grafting of divergent ingredients into each other. It is the splicing and interaction of different materials through the eye of Scarpa that makes these projects architectural delights in a city already full of the rhetoric of grandiose historic culture and import.

Introduction

Carlo Scarpa¹ created architectural work utilising rich expression based on an intense passion for materials and materiality. In comparison to more famous, recognised architects like Mies van der Rohe, Scarpa's architecture was not as renowned during his lifetime, but it has uniqueness in physical, material countenance and a deft, creatively intellectual approach to manipulated right-angled geometries.

It is in this sense, of the non-traditional (for the time) that the work of Scarpa is like that of special small projects by Jean Prouvé (La maison de Jean Prouvé, 1953), Pierre Chareau (Maison de Verre, 1928-1932)² and Gerrit Rietveld (Rietveld Schröder House, 1924)^{3&4}, who were also not formally trained architects. Indeed, both Rietveld and Chareau had worked on crafting furniture prior to being recognised for their architecture and Prouvé⁵ was immersed in metal work and had a fascination with aviation materials and lightweights. With these seminal works in architecture, these designers were clearly able to bring to the fore their formative specialisms in materials and material behaviour that helped craft machine-like (or by deployment of meticulous technique) buildings that entranced the intellect with evocatively tangential construction methodology and design conception.



Scarpa was obsessed with materials and this is clear to see in his architectural work which is abundant in tectonic variety where he is able to control light, form and materials with fine-grain attention to detail. Ostensibly decorative, the use of different materials is, at first viewing, slightly strange and perhaps merely finely detailed, but upon repeated experiences, Scarpa's architecture sophisticatedly reveals itself as both sensitively contextual and yet original also; the combination of which is a rare in architecture.

Otherness through Context as Architectural Palimpsest

What is fascinating about the methodology that Scarpa uses when he combines the old or contextual within or pertaining to the site of his buildings and the newness, the purity of his design ideas and expression, is that it embodies the notion of the architectural palimpsest. In this context a palimpsest can be described as a ghost or a trace of the past, embodied within the present or current status of the architecture, inhabiting outwardly the corporeal and yet also its opposite (from the past), as a spirit. So, if the spirit is the ghostly remnant of the past, for example the Stampalia's exposed outline of the old staircase underneath the newer stone laid over it, and the present is the body (the newer stone) then this combination is where the resulting architecture is the new flesh, the palimpsest (see Fig. 1).



Fig. 1: Querini Stampalia Palimpsest Staircase.

Scarpa is able to go back and forth through this spectral and fleshly rift by sensitively juxtaposing the old and new so that each gains significance that alone one element or material would not. It is this ability to straddle old and new, past and present, that enables a finer, more intellectual understanding of what Scarpa achieved in his lifetime. It is also a useful way of understanding the



context of Venice as an ever-iterative city: the resultant urban grain due to its close proximity to water with little or no room for expansion (see Fig. 2 and Fig. 3).



Fig. 2: Figure/Ground Plan of Venice and Murano.



Fig. 3: Venice Grand Canal.

A little analysis of Scarpa's work shows that in merely combining the spirit and flesh he was not satisfied and it is how he did the combination of old and new that starts to answer why this is important when understanding the intricate delicacy of his architecture. Impressively Scarpa's work does not express clumsiness due to this combination, as he is able to allow differing materials to entwine and dance so beautifully. This can be understood in the way Scarpa is sensitive to the past, to context. In both the Stampalia and Olivetti buildings Scarpa uses traces or elements of both classical and Islamic⁶ design methodologies which he repeats ostensibly as patterns but these form a more complex sophisticated quality to the way the architecture is viewed. One such element Scarpa uses is a repetitive right angled design language at various scales by use of grafting materials within other materials, and for larger tectonic elements such as stairs; the offset stair to the interior of the Olivetti Showroom for example, or long, elegant walls; as in the exterior garden wall and right-angled wrapped-around seating to the Stampalia (see Figs. 4, 5 & 6)



Fig. 4: Olivetti Showroom Staircase context.



Fig. 5: Querini Stampalia Garden Wall.



Fig. 6: Querini Stampalia Water Detail.

You can see a similarly offset repetitious pattern in the exquisitely crafted Venetian Chiesa Redentore (1592) by classical architect Andrea Palladio⁷ which features clear elements of symmetry in the grandiose use of tall columns in full heavyweight massed splendour, both inside and out. However, upon closer inspection the elegant tyranny of the classical order is broken, if only briefly, by the repetitious right-angled undulations of decoration, seen as a horizontal strip along the front elevation's light hued stone walls. This decorative pattern (and its variations) was also used in ancient Greek design, but a version of it has clearly travelled to Venice: originally this type of pattern could be found decorating small houses, in detailed adornment of objects such as ceramic or earthenware pots⁸, as well as larger scale uses, as in the Redentore. This ancient style of pattern embellishment can also be seen in detail to balustrades within Venice as decorative elements to houses (see Fig. 7).



Fig. 7: Venice House Decorative Balustrade Detail.

Further context to Scarpa's work can be seen in the subtle influence from Byzantine architecture⁹ in the Stampalia, and in the aforementioned Islamic context with the use of layers and meshed elements to doorways and windows in the Olivetti Showroom¹⁰. Venice being an old port city is used to a lot of trading and the influence of different cultures is clear in some of the vernacular detailing of its architecture. It is not a definitive statement that Scarpa used an ancient Greek key type pattern (or similar), or Modernism¹¹ or Islamic architectural details *directly* as his only influences, but the use of patterns, repetitive at first, then gently elongated and discursive, and finally, finely wrought through Scarpa's control of materials, is very clear in his designs and built work¹².

Otherness as Architectural Metamorphosis

Where Scarpa deviates from classical and modernist traditions in architecture and what allows his work a sense of *otherness* is the employment of tectonic disproportionality. For example, this can be seen within the use of the garden stone steps, internal radiator enclosure and gallery space within the Stampalia¹³, and definitively as the expression of the staircase that leads up to the gallery space in the Olivetti¹⁴ (see Fig. 4). But why would Scarpa use this idiosyncratic, disjointed language¹⁵ when he could have so easily followed more directly the clean, regulated and outwardly hierarchical design ideology of the past with unvarying columns of classical order, or the pared-back minimalism and formal tectonics of some examples of the modernist era, of which Scarpa lived through?



This is a complex situation of interrelated factors but some of the analysis can be found in the very distorted nature of planning (or lack thereof) in old towns and cities, and Venice is a prime example of a city that is not entirely rational in that it does not use a readily definable grid as say in Manhattan, New York (see Fig. 2). Instead Venice is full of intricate oddities in the way it has, like a larger, urban version of the aforementioned architectural palimpsest, contrived its material, built-form through endless deposits and slivers of past and present architectural urban dermatology through a labyrinthine collection of buildings and streets, due in no small part to the very limited space for building within its centre (see Figs. 3, 8 & 9).



Fig. 8: Venice Construction Layers.



Fig. 9: Side Wall Detail to Chiesa Redentore

So, designing uniformly may not be to an architectural advantage when you are dealing with quite the opposite in an irregular urban context, especially with relatively newer, smaller building restorations in existing built contexts like the Stampalia and Olivetti, both of which having more than one entrance as a consequence. This is in opposition to the larger Venetian buildings by Palladio for example, which were built centuries earlier and to grander budgets and requirements of typology necessitating in symmetry and resultant grand main entrances, and use of linear routes through programme (see Fig. 10).



Fig. 10: Palladio. Church of San Giorgio Maggiore.



Another factor in the absence of symmetrical proportion in Scarpa's work is the employment of weathering and the elements into his buildings, particularly within the Stampalia, where water is literally allowed into it, through the meticulously crafted and asymmetrically detailed two-part metal gate, then to the eccentric delight of the boat entrance and finally up its angularly cut stone and concrete steps into the main building¹⁶ (see Figs. 11 & 12).



Fig. 11: Querini Stampalia Water Gate Entrance.



Fig. 12: Querini Stampalia Water Gate Detail.

By shifting the eye from neutral or symmetrical into a seemingly more awkward visual irregularity, Scarpa then enables constant reinterpretation, almost immediately to the viewer, and here he exploits this to create a new appreciation for the depth, thickness and layering of materials by revealing the edges, of stone or concrete for example, cleanly cut and presented: somewhat akin to a building dissection; peeling away the grafts of skin, flesh and bone, layer by layer. The way Scarpa combines or straddles two opposing positions, for example, of symmetry & asymmetry or of past & present, can be understood by the terms immutable and mutable as expressed in this philosophical analysis, 'This pattern can be thought of as a single, immutable template to be traced or copied, which appears to be how Plato understood it, or it can be thought of as a mutable rhythm governing a pattern of movement, like the figure of a dance: a rhythm or order (*kosmos*) that is rediscovered with each new tracing of the figure.'¹⁷

Scarpa's Experimental Creativity with Venini Glass

Scarpa worked at Venini in Venice creating glass work from 1932-1947¹⁸ with a period prior to this experience from 1925-1931 at the Maestri Vetrai Muranesi of Giacomo Cappellin^{19&20}. In this time Scarpa was involved in the crafting of many beautiful pieces of glass from decorative sculptures to vases and small bowls. It is important to look at Scarpa's time at Venini to contextualise his architecture, not just the work he did with glass, although this is significant, but in terms of his pedagogical methodology. This ability to learn from contexts is also essential as it confers an intellectual yet humble quality to Scarpa, so that by the process of learning he was able to fine-tune his confidence and ability to design and manipulate materials further.



During his time at Venini, 'Scarpa himself became a master: he entertained long conversations with the craftsmen, stimulated experimentation and paved the way for innovative projects...The materials be they transparent or opaque, bright or satined, smooth or rugged, thick or thin, colourless or multi-coloured, presented features which could be manipulated at will, as witnessed by the high levels of experimentation and the peculiarity of the outcomes. They showed Scarpa as an artist-chemist, able to demonstrate practically to what extent glass can be modelled and light effects can be manipulated...'²¹



Fig. 13: Scarpa at Venini Sketch 1.



Fig. 14: Scarpa at Venini Sketch 2.

By understanding that he was honing his ability to manipulate materials we can then see how this is an influence on his architecture, whereby with the examples of the Stampalia and Olivetti, Scarpa readily manipulated planes of tectonics^{22&23} through wall, floor, stair and detailing. The notion of being experimental is also important here, and in this sense Scarpa's humbleness in the context of needing to learn is not only related to his earnestness in experimentation, but is also key to understanding why he *did* experiment. Thus, due to his prolific glass work with Venini, inclusive of many freehand drawings, it can be interpreted as a methodology of curiosity, of discovery, and this enables the aforementioned artist-chemist²⁴ to prevail. Furthermore, within an essay on Scarpa entitled *The Architect of the Incalculable*, the following is stated: 'Even more striking is his alchemical mingling of seemingly incompatible materials whose quotients of expansion cause fissures and corrosion. If Scarpa has a sixth sense for the behaviour of matter, it goaded him to strain substances to the brink of their properties.'²⁵

Within his time at Venini and working with and learning from master craftsmen Scarpa developed the notion of experimentation not simply for the sake of trying something new, rather Scarpa's obsessiveness was in order to get him further along a path of discovery through the notion of getting-ever-closer, whereby 'In this period he searched for pure beauty trying to model a fluid material with the rigor of a clearly worked out project but the immediacy of the execution of Oriental calligraphy. He thus created several hundred unique pieces: forms blown by the



unpredictable mastery of craftsmen, the joyous freedom in inventing decorations. The various glass techniques – *incalmo*, *incamiciatura*, iridisation or the extremely old and complex ones of murrine – charged glass with timeless experience, to raise vases, bowls and frames from simple everyday objects to unique pieces.²⁶

By this very experimentation, but with the discipline of discovering new materiality inherent in the glass, through colour, shadows, textures and transparency and translucency, Scarpa was not working arbitrarily, instead he was exploring creatively through testing and learning using techniques. Additionally, even though he was creating ostensibly decorative, jewel-like pieces, they were imbued with an intensity he gleaned from the master craftsmen that he studied when in their company, and this provides a lens to help peer into some of the reasons why he designed, and also the influence of experimental methodology (learning through glass work), as this opens up a clearer understanding to Scarpa's approach towards his obsessive, intricately crafted architecture thereafter.

Glass inserted into the Stampalia

One of the many beautiful details in the Stampalia²⁷ is to be seen in the external garden space. And here, along with the layers of contrasting stone, marble and concrete that make the elegant material composition of the design turn into tectonic partitioning of the landscape is another vertical + horizontal element in the form of a dividing wall made from concrete. With the wall, Scarpa has again employed the tactic of combining differing materials, but moreover, not in a haphazard way; rather he has revealed the concrete as a relief of colour and texture, and here he is employing the use of an architectural palimpsest where the wall contrasts with the old parts of the Stampalia, and yet by its very difference, it highlights both the traditional building and itself. Using carefully mixed lighter coloured aggregates and expressing textured formwork Scarpa creates a more distinctive concrete wall which fits into the language he uses to create the tectonics of the garden. What makes the wall special is the insertion of the delicate glass tiles towards its centre line (see Figs. 5, 15 & 16).



Fig. 15: Querini Stampalia Garden Wall 2.



Fig. 16: Querini Stampalia Garden Wall Detail.



Here the tiles form a regulated pattern gently assembled across the wall, and during daylight the glass elements of the tiles glisten beautifully with subtlety. What is apparent here is that the glass tiles draw the eye towards the centre of the wall and as a result the viewer is no longer confronted by the massed grey concrete, but something a little different. In the case of the glass tiles these are located through their straight lines within the context of the slightly less controlled textures and aggregates in the concrete, which by comparison are not as uniformly ordered in the expression.

Consequently, what appears to be a simple set of decorative tiles into a concrete wall can, upon reflection, be read to have more meaning than a mere surface reading alone allows. This is because the clever use of small glass tiles breaks up the heavy monotony of the concrete wall, by its very delicacy, and therefore confers a sense of dematerialisation to the heavy mass of the concrete, without physical removal of the mass. Along with the textures expressed and the use of lighter coloured aggregates, the glass tiles cleverly delineate the concrete wall, along with its context to the other meandering tectonic elements that make up the garden to create an expression that is both pristine in a certain type of modernist idiom (clean, geometric straight lines) yet by the manipulation of unevenly ordered right angles, similar to the aforementioned style akin to the ancient Greek patterns. It expresses the architectural palimpsest of the past by manifestation of its alternating right-angled language, and also by its situation within the context of a contrasting, much older building.

Upon leaving the garden to walk into the interior of the gallery the visitor is immersed in rich visual laminations of concrete, stone, travertine marble, and brass detailing (originally used for hanging frames) along its walls, door and flooring detailing. To the rear of the gallery, facing opposite to the garden is a large radiator and it is housed distinctively which exposes, through use of the design language of meandering right angles, the stone²⁸ to clad it and its negative, the glass, allowing permeability into the gallery. The use of glass here also serves to draw the attention of the viewer into an otherwise utilitarian heating servicing element, and Scarpa is able to make this relatively simple part of the building programme just as special as the layered detailing found elsewhere in the interior and garden. By doing this, just as in the external stair from the boat waterside entrance, you are exposed to the differing thickness of the materials and its juxtaposition with the glass. This exposure allows a tangible, haptic connection with the architectural tectonics, similar to the travertine door to the gallery which also employs, discursively, a right-angled sliced opening for a special sensory touch to its operation (see Figs. 17 & 18).



Fig.17: Querini Stampalia Travertine door detail.

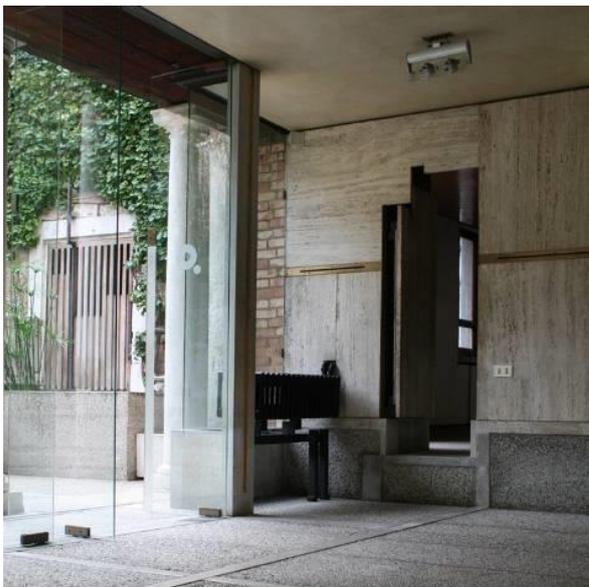


Fig. 18: Querini Stampalia Gallery.

By the use of this haptic methodology expressed through design language, Scarpa connects a person at human scale through the intimacy and immediacy of the moment, of a seemingly innocuous



radiator within the building. This allows and invites a person to touch and the tangibility and appreciation of the revealed thickness of the material provides a sense of intimacy and connectedness to the building and its delicately formed materiality.

Glass and the Olivetti Showroom

When walking through the busy centre of St Mark's Square in Venice it is very easy to be distracted by the people, events, and generally busy, vibrant life of the historical city centre. Within this context are some very old buildings, such as the grandiose Doge's Palace (dating variously in its incarnations back to approximately 800AD) and St. Mark's Basilica (approx. 1092, see Fig. 19) which along with the sounds of water and boats form rich, historical sensory patina to the experience of Venice.



Fig. 19: St. Mark's Basilica, St. Mark's Square.

Within the bustling atmosphere of St Mark's Square however, at number 101, is the Olivetti Showroom based on a building restored by Scarpa in 1958. Olivetti typewriters are beautifully crafted and intricate Italian-made machines and are a delight to hold, operate and touch. Upon attaining the commission, Scarpa worked to the extracted shell and structure of the interior of 101 St Mark's Square and grafted the new layers of construction to form the language of his architectural tectonics. One of the striking elements in this design which enable its jewel-like quality to be expressed is the colourful mosaic floor upon entrance into the ground-floor showroom. Here the experience is one of tradition and modernism at once, again exploiting the deft use of architectural palimpsest. Having visited the showroom in 2010, prior to the current refurbishment, the floor looked like a normal tiled stone surface, but upon closer inspection the colours of the mosaic reflected differently to the norm. Post the 2011 refurbishment, during visits in 2012 and 2014, the mosaic floor was revealed beautifully and with further research it was discovered that



the floor was crafted with layers of glass tesserae, which were cleaned and repaired to bring back some of the original lustre²⁹ (See Figs. 4, 20, 21 & 22).



Fig. 20: Olivetti Showroom Side Entrance.



Fig. 21: Olivetti Showroom Floor Detail.

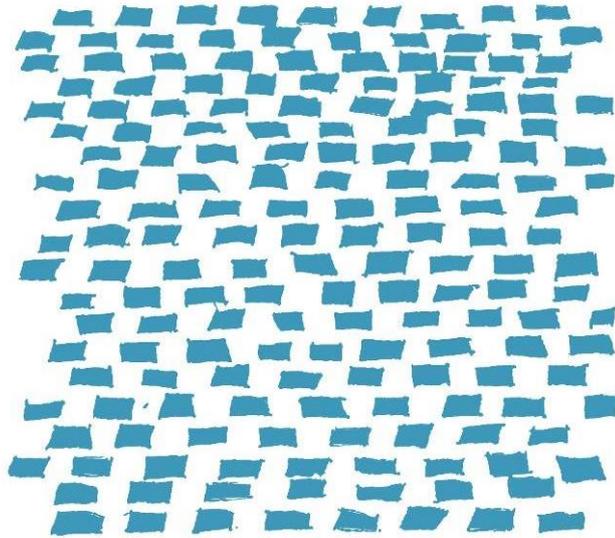


Fig. 22: Olivetti Showroom Glass Floor Tiles Drawing.

Normally, with a mosaic floor, its experience to the viewer is based on the surface expression – what is outwardly seen. However, Scarpa goes further here and the insertion of elements of glass allows a special reflectivity to be discerned and therefore to draw the eye to the materiality of the floor, so it is not merely a decorative pattern, but what transpires is that even a hidden element such as the glass (when constructed into the depth of the flooring, but appearing as a surface) is part of a more intricate tectonic layering at varying uses of scale – from the thick external Olivetti logo stonework (see Fig. 20) to the etched materiality of the internal staircase and then right down to the glass within the flooring.

The experience upon walking into the restored Olivetti showroom in 2012 was as if there were a new, gleaming floor teeming with the detail of the individually laid glass pieces, and along with the restoration that was close to the original interior, the floor can be appreciated more in its entirety as a genuine and constituent tectonic element to the design, along with the planes of wall, ceiling and stair. What is seen when entering the Olivetti is the length of the floor regulated by clean rows of small tiles, unevenly shaped with a slight curvature but nonetheless very neatly and orderly located in the way they are laid within the flooring material; this is typical of Scarpa's balance between the regulated and divergent. These tectonic floor planes are then punctuated by red and blue zoning that denote certain parts of the programme, such as the main entrance, near the water-based sculpture *Nudo al sole* (1956) by Alberto Viani^{30&31}.

The use of glass in the flooring here forms part of a setting for Viani's sculpture inclusive of a source of light from the upper floor to help illuminate the sculpture and the area it is situated within. This



creates an elegant first impression on entering into this threshold. Scarpa designed this area fastidiously so that the sculpture was integral to the programme, and therefore this included the design and augmentation of the floor, the plinth, and lighting together, rather than the sculpture as an afterthought³². The intelligence here is that due to the specificity of the incorporation of the sculpture, with the flooring, and the light at the entrance, a visitor attains a sense of the identity of the specialised nature of the building, therefore the first impression reinforces meticulous craftsmanship, which is akin to that of the Olivetti products. A second rationale is that the determined design of even the flooring, reveals the lack of arbitrariness in Scarpa's work for the Olivetti showroom, which opposes negative perceptions of decoration as mere surface pattern.

Conclusion

Analysing Carlo Scarpa's work, from his early creative outputs in Venini Glass to two small jewel-like projects; Stampalia and Olivetti is the same as trying to unravel a highly sophisticated architectural enigma. However, unlike Rietveld's Schröder House which is influenced in part by the sharp and colourful geometry of Mondrian³³, and contains a beautiful, elegant machine-like quality of moving parts, Scarpa's work does not look alien to its context with other buildings, nor does it ask of you to operate it, though it does invite you to touch and feel its surfaces, indents and openings where possible. Similarly, with Chareau and Prouvé's work in Maison de Verre and La maison de Jean Prouvé respectively, these projects are like Rietveld's in that it is the incorporation of a machined symbiosis (moving parts, mechanical expression) with the constructed architecture, and these are no less enthralling than Scarpa's work, but for differing reasons. Scarpa inhabits his architecture within a rare schism between the playful language of the meandering angularity of junctions and the formal, physicality of material architecture, of the permanence of materials, that his fascination with Frank Lloyd Wright's architecture showed³⁴.

It is this particular *otherness* that is fascinating about Scarpa, and here he is similar, in approach to but not of expression, with the philosopher Ludwig Wittgenstein, who worked intensively on the house at Kundmannngasse³⁵ in Austria for his sister Mary Stonborough Wittgenstein, where minutiae and detail were crafted with meticulous precision just like Scarpa would, and you can see this in the designs for the radiators and door handles within Wittgenstein's house. Wittgenstein, who like Scarpa was not a formally qualified architect, was at least in part influenced in his philosophy by engineering and mathematics as a formative yet enduring presence, whilst Scarpa had the work with glass from Venini to explore and experiment, not mindlessly, but mindfully, always in a process of discovery. 'Unlike the work of Loos, Mies and Le Corbusier, the extreme precision of Wittgenstein's house on Kundmannngasse is *all* exactitude and *nothing* of standardization. This is not the precision of reliability that the nineteenth-century dissemination of the exact sciences and then modernist mass production cultivated, but, in the dedicated assigning of ever more accurate numerical values to physical quantities...Different door handles are different sizes, by a matter of prescribed half-millimetres...'³⁶



The analysis of the historical, and prior learning, making and testing experiences that Scarpa had with Venini glass works and through visiting both the Stampalia and Olivetti projects over a number of occasions during a period of eight years (and counting) enables augmented readings of his working methodology and some insight into his creative mind-set which reveals a personality and character that gravitates to intricate levels of detail, materiality and experimentation, similar to Wittgenstein's methodology. Intriguingly, what Scarpa's skin-grafting of glass with other materials teaches us in architecture is also about using the minimum without having the work perceived negatively as sterile or minimalist. And, here what is fascinating is that this methodology allows the creative individual to save on costs, without sacrificing inspiration, precision or expression.

An analysis on Scarpa's methodology in thought and design reveals, 'In examining Scarpa's spheres of influence, a definitive search for the original is irrelevant; it is the great variety of ideas and their subsequent application that go to make up Scarpa's architecture. The proliferation of print media in Scarpa's lifetime, and his turning to American and Japanese models, shows signs of a globalization of information and aesthetics – a phenomenon that is taken for granted today. Scarpa is modern because he treats architectonic elements in a nonhierarchical way and constructs a unified whole out of them. Working with fragments is also the basis of contemporary creative activity, which demands the capacity to allow these fragments to coexist. Scarpa gives form to object as well as the space between objects, planes and spaces. Nonphysical components such as memories and manifested cultural ties are an essential component of the stratified work.'³⁷

Scarpa's influences are an elegant compound of the connection of lyrical, pedagogical and material means; he is akin to a novelist or writer of narratives. Accordingly, he creates character or situations in architecture out of *fragments* of personalities, artisan experience of masters, fascination for certain architects like Frank Lloyd Wright and through particular abstractions in a meta-framing of these constituent parts. What subsequently arrives then is the delightful individualities of Scarpa's Architecture. 'His deft interventions into historic buildings rebuked late modernism's self-righteous bulldozings and postmodernism's trite panderings. His insistence upon the phenomenological countered the linguistic bias of prevailing architectural theory. Finally, his marginal professional status seemed to provide an authentic alternative to the corporate entanglements of the architectural status quo.'³⁸



Endnotes

1. For a comprehensive analysis and context of Carlo Scarpa's involvement with the Olivetti family, the development of the Showroom at 101 St Mark's Square and the restoration during 2010-2011 (inclusive of the glass inlays to the floor) and further contextualisation of Venice, and Scarpa's liking for sculpture, this is a good starting point.
Francesco Dal Co and Lucia Borromeo Dina, eds., *The Olivetti Showroom* (Italy: Edibus comunicazione S.r.l, 2011).
2. For further reading and context on the works of Pierre Chareau, his furniture designs, interiors and steel and glass masterpiece, *Maison de Verre*, alongside detailed biographical and anecdotal analysis.
Marc Vellay and Kenneth Frampton, *Pierre Chareau*. (London: Thames and Hudson, 1985).
3. A detailed general account on Rietveld for further reading and context.
Theodore M. Brown, *The Work of G. Rietveld Architect*. (Utrecht: A.W. Bruna & Zoon, 1958).
4. Specific account of the Schröder House with analysis on the furniture, good photography and compiled during the time of previous major restoration in the 1980s.
Paul Overley, *The Rietveld Schröder House*. (Laren: V+K Publishing, 1992).
5. Richard Copans and Stan Neumann, *La maison de Jean Prouvé. Architectures, Vol.4*. (ARTE France, 2005). DVD.
6. 'Layering exists in a realm of complexity and implies a capacity of being interpreted that goes beyond itself and creates references to the world at large instead of narcissistically contemplating itself alone.'
This is a very good scholarly and conscientiously written and analysed book, and extolls the qualities of layering as more than just material and includes a very useful diagram that shows influences to Scarpa, inclusive of Islam, Frank Lloyd Wright, De Stijl and the Vienna Secession. The work also analyses Scarpa's cultural influences, connections and friendships, and the use of stratification in Scarpa's work, with reference to the architect Richard Murphy's views on the subject. Additionally, there is also an indirect link with Gottfried Semper and written analysis of patterns from historical examples, and the similarity and connections Scarpa's work has with Japanese architecture.
Anne-Catrin Schultz, *Carlo Scarpa Layers*. (Stuttgart/London: Edition Axel Menges, 2007). p.6.
7. This is a good and relatively recently published starting point for further reference on Palladian Architecture and Andrea Palladio, as well as the *Chiesa Redentore* (1592).
Guido Beltramini and Howard Burns, eds., *Palladio*. (London: Royal Academy of the Arts, 2008).



8. Further reading on decoration with right-angled patterns from historical examples inclusive of Egyptian, Scandinavian, Indian and Greek types.
Gottfried Semper, *Style*. Trans. Mallgrave & Robinson. (Los Angeles: Getty Research Institute, 2004). p.485 & pp.905-920.
9. 'The Watergate's Byzantine tracery ripples and shimmers like windblown water, and it dissolves in brass accents and an intricate tripartite folding.'
Cadwell uses the quotation from Le Corbusier: "Qui est ce beau artisan?" (Who is this fine craftsman?) on enquiring about the work on Stampalia, p.3. Richard Murphy also uses this quotation in his book on the Stampalia, see Endnote 16, below.
Michael Cadwell, *Strange Details*. (Cambridge, MA: MIT Press, 2007). p.23.
10. Francesco Dal Co and Lucia Borromeo Dina, eds., *The Olivetti Showroom* (Italy: Edibus comunicazione S.r.l, 2011). p.92.
11. 'We know that Scarpa took an early interest in Mies (without turning himself into an adept), but leaned heavily on Frank Lloyd Wright, and for a considerable time followed Wright with the expectation that new ornament would spring from the margins of modern architecture. Scarpa's debt to Wright is perhaps uncomfortably burdensome in such buildings as the Villa Veritti of the 1950s, but toward the end of his life, with the Banca popolare di Verona of the 1970s, he had gained a firm footing and achieved a splendour all his own.'
Guido Beltramini and Italo Zannier, *Carlo Scarpa: Architecture and Design*. (New York: Rizzoli, 2012). p.25.
12. A good, comprehensive guide to many of Scarpa's projects providing a clear visual overview with some good essays.
Guido Beltramini and Italo Zannier, eds. *Carlo Scarpa: Architecture and Design*. (New York: Rizzoli, 2012).
13. Stampalia.
Robert McCarter, *Carlo Scarpa*. (London: Phaidon Press Limited, 2013). pp.162-178
14. Olivetti Showroom.
Robert McCarter, *Carlo Scarpa*. (London: Phaidon Press Limited, 2013). pp.114-127
15. Further reading: *Architecture at the Limits of Language*. A poetic and discursive analysis on architectural language utilising sources from history with some readings and context to philosophy.
Alberto Perez-Gomez, *Built upon Love*. Architectural longing after ethics and aesthetics. (Cambridge, MA: MIT Press, 2006). pp. 137-165.



16. A concise and very clear analysis of the Stampalia by the architect Richard Murphy. This also includes excellent images, and very clear technical drawings, alongside contextual descriptions of Venice, and the Stampalia as a building. Richard Murphy, Querini Stampalia Foundation. Carlo Scarpa. *Architecture in Detail*. (London: Phaidon Press Ltd, 1993).
17. Indra Kagis McEwen, *Socrates' Ancestor. An Essay on Architectural Beginnings*. (Cambridge, MA: The MIT Press, 1993). p.42.
18. This is a comprehensive and beautifully photographed account of Scarpa's time at Venini with many excellent photographs and some technical detail on glass making, and the context of Scarpa learning from masters, and becoming a glass design master. Marino Barovier, *Carlo Scarpa Venini 1932-1947*. (Milano: Skira, 2012).
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21. Marino Barovier, *Carlo Scarpa Venini 1932-1947*. (Milano: Skira, 2012). p.27
22. On tectonics, further reading:
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24. Marino Barovier, *Carlo Scarpa Venini 1932-1947*. (Milano: Skira, 2012). p.27.
25. Kurt W. Forster, "Architect of the Incalculable" in Guido Beltramini and Italo Zannier, eds. *Carlo Scarpa: Architecture and Design*. (New York: Rizzoli, 2012). p.23.
26. Marino Barovier, *Carlo Scarpa Venini 1932-1947*. (Milano: Skira, 2012). p.81.
27. An excellent documentary inclusive of commentary by Tobia Scarpa, this contains sounds and images of Venice for context, as well as filmed footage of the movement, reflectivity and operation of the Stampalia with attention to detail on the ingress of water within the building, and its context in the garden. It also contains further elaborative context about Scarpa from interviewed individuals.



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28. Further reading: *Stereotomy (Stone Construction)*.
Gottfried Semper, *Style*. Trans. Mallgrave & Robinson. (Los Angeles: Getty Research Institute, 2004). pp.725-821.
 29. Gretchen Alexander Gussalli Beretta, "Hidden Truths. The "Architecture of Contemplation" in the Conservation/Restoration of the Olivetti Showroom," in Francesco Dal Co and Lucia Borromeo Dina, eds., *The Olivetti Showroom* (Italy: Edibus comunicazione S.r.l, 2011). pp.55-65.
 30. 'His close relationship with Arturo Martini and the latter's great disciple, Alberto Viani, testify well to Scarpa's love for sculpture.'
Marino Barovier, *Carlo Scarpa Venini 1932-1947*. (Milano: Skira, 2012). p.81
 31. On connection of Scarpa to Alberto Viani and further curatorial work, and exhibitions.
Lisa Le Feuvre, *Carol Bove/Carlo Scarpa*. (Leeds: The Henry Moore Foundation, 2015). pp.76-83.
 32. Oretta Lanzarini, "'Nude Space": Carlo Scarpa Interprets Alberto Viani," in Francesco Dal Co and Lucia Borromeo Dina, eds., *The Olivetti Showroom* (Italy: Edibus comunicazione S.r.l, 2011). pp.29-31.
 33. Paul Overley, *The Rietveld Schröder House*. (Laren: V+K Publishing, 1992).
 34. *Falling Water (1936-1938)* by Frank Lloyd Wright due to its fame and relative ease of attainment in published form is a good place to start when considering Scarpa and his fascination with the American architect. In analysis of the sections, plans, elevations, external contexts and interior material detailing, this is a joyously crafted architectural work that delights in its many and varied offset, irregular and asymmetrical tectonics, layering and stratifications.
Robert McCarter, *Falling Water*. Frank Lloyd Wright. *Architecture in Detail*. (London: Phaidon Press Limited, 2007.).
 35. An analytical account of Wittgenstein's design and construction of the house at Kundmangasse, Austria, with context to the architect Paul Engelmann who worked on initial stages of the house, and Wittgenstein's connections to Adolf Loos. The work also includes technical drawings, excellent photographs of architectural componentry (like door handles and the radiators) in use, and disassembled.
Paul Wijdeveld, *Ludwig Wittgenstein Architect*. (Netherlands: The Pepin Press, 2000).



36. 'This is not Le Corbusier's symbolic conflation of metal or concrete with an inorganic, machine-made furniture, in which precision is a by-product of mass production, but a dramatic reining in of the minimum margin of tolerance, a radical inflation of exactitude.'
'...ultimately where Wittgenstein and Loos diverge is around the conceptual and physical, the otherworldly ethereality of the calculated on the one hand and the haptic sentimentality of the built (on the other): Wittgenstein wanted to close the gap between the two...'
Francesca Hughes, *The Architecture of Error. Matter, Measure, and the Misadventures of Precision*. (Cambridge, MA: MIT Press, 2014). pp. 230-231.
37. Anne-Catrin Schultz, *Carlo Scarpa Layers*. (Stuttgart/London: Edition Axel Menges, 2007). p.128.
38. Michael Cadwell, *Strange Details*. (Cambridge, MA: MIT Press, 2007). p.4.



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Architectural Forming Of Sculpture

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Abstract

In this contribution I focus on the common conditions of architecture and sculptural form and the consequences for placing art within a public space. I analyze the text of Germane sculptor Adolf Hildebrand (1847 – 1921) *The problem of form in painting and sculpture* (1893) in the parallel with thoughts of Austrian architect, painter and city planning theoretician Camillo Sitte (1843 – 1903) described in the seminal book *City planning according to artistic principles* (1889). The problems they described resonate in 60s and 70s of 20. Century in the criticism of placing of public art detached from the multilayered urban context.

For Hildebrand the art of sculpting and painting is not an imitative act. Hildebrand prove that behind art is architectural formative strength. Architectural forming based on the artistic examination of nature is key principle of art. In the logic succession Hildebrand analysis how the architectural forming is connected with movement of human body, ways of perception and space orientation. It has consequence for the relationship of art and architecture as the case may be sculpture in public space.

Through dense and exacting text Hildebrand rationalizes the same thoughts as Camillo Sitte does sharply and simply in the book published six years later. Both authors critics the contemporary praxis of placing monuments in the center of the square. Sitte defines two archetypal principles of placing sculptures, memorials, monuments and other objects (trees, fountains) in the compact urban structure. He explains how placing sculptures or monuments out of main paths and on the background of architecture influences public space and create transition from the detail of art towards the architecture and urban scale.

From the 60s of 20. Century there is growing interest in American and European cities in supporting the production and proliferation of the art objects in public space. During two Decades modernist autonomous sculptures spread in the cities and they are often called as “plop art”. The criticism of praxis underpins the lack of the relationship with its context. As the reaction the artists are seeking to contextualize the art and understand the place and its historical, political and urban layers as the inspiration and integral part of art. The spatial understanding of the superposition of art and architecture as is examined by Hildebrand and Sitte represent valuable contribution to the conditions of integrity of urban space.

Key words: art, architecture, Hildebrand, Sitte.



Staging Urbanism: Space, Theater and Publicness in Acre

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Abstract

My presentation deals with the relationship between art and urbanity and examines the public interpretation of an artistic action (theater), within the urban sphere and space. My argument is that the interaction between the public, the city and the theater creates a unique model of local urbanity whose interpretation can better our understanding urbanism today.

The nexus of art and the city has been discussed in several fields of knowledge. Urban planners emphasize art's contribution to the processes of urban renewal and promote strategies of top down municipal initiatives to brand cities as creative. The artistic discourse concentrates on activist, bottom up tactics to facilitate changes in the urban scene. In the last decade those two discourses has been combined into a practical agenda which uses creativity in the cities as a tool for urban regeneration sometimes being critic as causing gentrification and other social inequalities. I wish to interpret the creative activity in the city outside the rhetoric of the creative agenda and seek to discuss the added value generated from overlaying physical space, artistic intervention and public interpretation. I will argue that this added value gives a new more dialectical perspective on local urbanism.

In order to do so I will focus on the city of Acre, a coastal city in the northern periphery of Israel. A World Heritage Site since 2008, Acre, was once considered the capital of the north, but is currently an ethno nationally mixed (Arab/Jewish) city. I will observe five scenes of theater in Acre, each scene represent a different scale of interaction with the city: neighborhood, quarter, city, region and national scale. The overlaying of the scenes weaves an urban network of connections flows and power relations which will produce a view of the artistic intervention in an urban scale.

Through a socio-urban ethnographic research which combines the theoretical framework of cultural production (Bourdieu 2005) and theories about space as product of social construction and conflicts (Lefebvre 1974) I will examine the forces operating the above mentioned scenes and ask how the artistic intervention in the city produces spatial and social conflicts and / or reflects them.

This new point of view on the city art/theater nexus facilitates a critical thinking and shed new light on the way artistic intervention and the public space generates each other. It's contribution in adding a critical layer to the ongoing urbanism discourse



BIOGRAPHIES



Miguel Alonso del Val, Carlos Chocarro, César Martín-Gómez

Architecture, Art and Technology in the Sanctuary of Our Lady of Aranzazu

Alonso del Val, Miguel holds a PhD with honors from the University of Navarra, Fulbright Scholar and Master Sc. In Architecture & Building Design from Columbia University. He obtained the Luis Barragan Prize and he was visiting professor at numerous European and American universities. With Rufino J. Hernández, founded and directed the 'Associated AH Study', with offices in Pamplona, Qatar and Panama, with whom he has won 70 first prizes in national and international competitions. He was a member of the Navarro Council of Culture (1991 and 2003) and Innovation Award of the Navarra Chamber of Commerce and Industry (2007).

Chocarro, Carlos holds a PhD in Art History from the University of Navarra. He completed his training with a postdoctoral scholarship from the Ministry of Education and Science at the Polytechnic University of Catalonia and several research stays in referral centers such as Rome, Venice and Paris in the context of many other research projects. He is the author of several books and articles on art and architecture from the eighteenth and twentieth centuries, among which the search for an identity: "The sculpture between the Guild and the Academy (1741-1833)" (2001), "Loewe matter of style 60 years" (2008), or the series of educational videos "Modern Art Hello! Conversations about art of the twentieth century" (2013), "Barocco and modernità: crocevia dell'arte e della storiografia" (2015). Martín-Gómez, César. PhD. School of Architecture. University of Navarra. He has been the responsible of building services in complex buildings such as the Auditorium of Navarra, the University Clinic or the Spanish Pavilion at the Saragossa Expo. He has worked in the Architecture Department in the Spanish Renewable Energies Center (CENER), and as Building Services and Energy Coordinator in *Mangado & Asociados*. Nowadays he works as researcher and professor in the School of Architecture in the Universidad de Navarra.

Federica Andreoni

In the Expanded Atmospheric Field

Paola Ardizzola

The Art Process of the Expressionist Crystal Chain as Conceptual Premise for Future Architecture

Deborah Ascher Barnstone

The Color of Innovation: Bruno Taut's Fantasy Drawings and Painted Architecture Poetic Exploration: Alvar Alto's Painting and Architecture

Dr. Deborah Ascher Barnstone, Professor and Associate Head of School Architecture University of Technology Sydney.

Juan Pablo Aschner

*CABIN/CAVERN: Archetypal Phenomena and Their Unconscious Persistence
Artistic Relations and Elements Present in the Architecture of Rogelio Salmons*

Architect holding a Master's Degree in Architecture, received with honors and a PhD in Art and Architecture received with honors as well. He co-authored and codirected the film *Euritmia*; has coauthored four books; is the author of the book *Counterpoint and Confluence in the Architecture Concert: Virgilio Barco Library*; and has written over thirty articles and chapters published in books and journals on architecture and the social sciences. He has experience in architectural design and construction in Colombia on projects of different scales and varying uses such as, for example, the project won by contest to design the Museum for San Agustín's Archaeological Park, a UNESCO world heritage site. Presently he is a professor in the Department of Architecture at the Universidad de los Andes, director of [Dearq Journal of Architecture](#), and is the coordinator of the [Cartagena International Architecture Workshop](#). www.juanpabloaschner.com



Dan Costa Baciú

Sigfried Giedion - Historiography and History of Reception on Global Stage

Dan Costa Baciú (spoken: Bachyou) was trained in architecture, as well as in architectural history at the Swiss Federal Institute of Technology, in Zurich. With an interest in the Digital Humanities, he currently implements methods from Data Science to trace major trends in architectural history. Dan Costa Baciú is also known for authoring an architectural guide for the years 1960–75 in Switzerland. In the position of editor in charge, he launched an architectural magazine focused on refurbishments and architectural history. In parallel to writing he teaches, and he founded his own architectural practice building for instance a penthouse that brings together the evening sunshine and a magnificent lake-view in a neighborhood in Zurich that is nicknamed “Silver-coast” because it used to offer either the one or the other.

David Baird

Iteration, Collaboration and Narrative

I was raised in Iowa City, Iowa, and benefited from the diverse thought and expression cultivated in a college town. The child of educators, (father a professor, mother an elementary school teacher) I was encouraged in his creative pursuits from an early age. I studied architecture at the University of Illinois, Champaign and received a Bachelor of Science in Architecture in 1987. From Champaign, Illinois, he moved to Copenhagen, Denmark, where I studied and worked for a Danish design firm. Upon my return to the United States, I was offered an assistantship at the University of Arizona, Tucson, which I accepted. There I studied art and architecture and obtained a Master of Architecture Degree in 1991.

Since graduation I have published over 30 academic papers, lectured at a dozen major universities and has received major grants that have supported my architectural investigations. This work has been recognized by my peers, published extensively and given numerous awards. In addition to architecture, I have been a professional artist since 1990. My artwork has been exhibited in over 60 venues across the country including eight museums. I have had solo exhibitions in Paris France and Mittersill, Austria. My work has won several awards and has been recognized by Peter Frank--The Village Voice; Jane Aldin--Metropolitan Museum of Art, NYC; George P. Schneider--The Arts Institute of Chicago; Beth Handler—Museum of Modern Art, NYC, Phyllis Braff-- New York Times; Fiona Ragheb—Guggenheim Museum, NYC; Helen Harrison-- Pollack-Krasner House; Lisa Phillips and David Kiehl, Whitney Museum of American Art, NYC. For the past six and a half years I have served as Director of the University of Nevada, Las Vegas School of Architecture, which houses Nevada’s premier accredited design programs in Interior Architecture, Landscape Architecture & Planning and Architecture. I also am the Co-founder and President of *+one design and construction*, an award-winning design firm with offices in Dallas and Baton Rouge. These platforms are an outlet for my passion and interest in socially responsible art and architecture.

Jacob Sebastian Bang

Fragments of an Architecture (Work in Progress)

Jacob Sebastian Bang, born 1965, Charlottenlund, Denmark. Architect, artist and Associate Professor at the Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation, IBD, Copenhagen, Denmark. Member of the Danish Society of Artists since 2003.

Amos Bar-Eli

Through the Filter of Walter Pichler: Life, Art, Architecture

I am a practicing architect, educator, and researcher. In 1993 I received architectural degree from Pratt Institute, NY. In 2010 I received a M.Arch degree from the Technion, Haifa. IN 1996, following a working experience in NYC and Tel-Aviv, I established my architectural studio in Tel-Aviv. In The studio I am engaged in design projects for both public and private sectors. Parallel to this I am a lecturer at HIT - Holon Institute of Technology, Faculty of Design, where I teach variety of design and theoretical courses for both undergraduate and graduate students. My research topics are theoretical, and are focused on concepts



relating to architecture, urban design, and architectural education. I regularly participate in international conferences and publish my research papers in peer-review academic journals.

Eduardo Benamor Duarte

User-Made Environments: Reflexivity & Digital Fabrication as Social Experience in Art & Architecture Pedagogy

Eduardo Benamor Duarte (b. 1975) holds a Masters of Science in Advanced Architectural Design from GSAPP Columbia University and is a Doctor of Philosophy from the Instituto Superior Técnico / Universidade de Lisboa. He is a member of OA Portuguese Architects Association / Ordem dos Arquitectos since 1999. Before opening his studio practice Benamor Duarte Architecture in 2009 he was an Associate Senior Designer for Skidmore Owings & Merrill LLP in NY. His areas of research, practice and teaching explore design process models combining cultural heritage & innovation often associating traditional and new manufacturing technologies in the making of user-based responsive environments. His design of public spaces, objects for the domestic environment, museums & historic preservation have been shown at the Cite de l'Architecture et du Patrimoine, Memphis Museum of Art, Salone Satellite and Made Expo in Milan; Wanted Design NY, UNESCO Renisla Forum, NY; Biennale Design in Saint Etienne and Experimenta in Lisbon. His work has won awards from several institutions in Europe and the US, including the Fondazione Bottari Lattes, Ministério da Cultura - Direcção Geral das Artes, Calouste Gulbenkian Foundation and FCT Fundação Ciência e Tecnologia.

Petra Čeferin

Dr. Petra Čeferin is an architect and associate professor at the Faculty of Architecture, University of Ljubljana. She teaches courses on architectural theory and history. Čeferin received her professional degree in architecture from both University of Ljubljana and University of Technology in Helsinki, and her doctorate in architecture from University of Ljubljana. She has lectured and written extensively on modern and contemporary architecture in connection with contemporary philosophy. Her publications include: *Constructing a Legend: The International Exhibitions of Finnish Architecture 1957-1967*, *Project Architecture: Creative Practice in the Time of Global Capitalism* (co-editor, with J. Bickert and C. Požar) and *Tectonics in Architecture: Frampton, Semper, Bötticher* (editor). She is also the co-founder of the book series *Theoretical Practice of Architecture*. Dr. Čeferin is also the recipient of the architectural prize *The Annual Bruno Zevi Award*.

Justyna Borucka, Anna Czech

THE ARCHITECTURE OF FASHION DESIGN

Justyna Borucka. Architect PhD., Assist. Prof. at Gdansk University of Technology (GUT), Poland, Board member Association of Polish Architects (SARP o.Wybrzeze), she is currently Visiting Prof. at Rome University La Sapienza, Italy. Her research focuses on: theory of architecture and strategies for urban renewal with the special impact of interdisciplinary relationships in contemporary architecture and urbanism based on relationships of architecture and other arts. She is now conducting research in several international projects with partners from Italy, Germany, Spain, Turkey, Portugal, Denmark, Norway and Sweden. Author and co-author of the following international projects: *Art and Science – Synergy of Art and Technology in Urban Spaces* (2011), *Sensing the City – Designing Urban Experience* (2009-2012) – coordinator of the International workshops within the programme IP Gdansk 2009, L'Aquila 2010, Caceres 2012, In her professional career, research and in education she recognize design as an important stimulators in social, cultural, architectural and urban regeneration strategies; expert on regeneration, public spaces and preservation of cultural and natural heritage in the context of XXI century development. She is the editor of a series of books, including: *Sensing the City – Designing Urban Experience*, Gdańsk, Borucka J., Nyka L. (eds.): (in print). Her writings appeared in Polish and international publications, among others: *Art and Urban Regeneration. Case Study of Gdansk and Rome* (Borucka J., Matoggnio C.) [in:] SGEMVienna (2016); *Art of Space – Space of Art. The role of Sound Art in Public Space* [in:] SGEM (2015), *Art and Architecture: New Horizons for Architecture and Urbanism* [in:] INTE 2014,(2015); *Experiencing the Ocean – the Paths for Urban Development of São Pedro do Estoril* (in Lisbon metropolitan area)(Borucka J., Nyka, L., Urbanowicz K.) [in:] EWWUD 2014, (2015); *What's*



the buzz in architecture? – The sonic aspect of space [in]: Soundplay/ Dźwiękowiska (Topolski K. eds. 2013); and others.

Anna Czech. Architect MSc, student of PhD studies at Gdansk University of Technology (GUT), Poland; Architect in ArchDeco Architecture Office since 2012. Parallel to her studies in the field of architecture, she earned a master's degree from the Faculty of Applied Physics and Mathematics GUT. Due to her interdisciplinary interests, her scientific research combines mathematics with designing 3D, spatial forms, as she searches for parameterization in architecture and art. She is active both in research and in education. She lectured (together with J.Borucka) on mathematical influences in architecture and art during the seminar within the regional programme "There is no career without mathematics" as a part of the Year of Mathematics in Gdansk, Pomerania (Gdansk, Poland 2015). She attended many international events such as conferences, seminars and workshops among others: Erasmus IP programme: Art&Science. Synergy of Technology and Art (Gdansk, Poland 2011); Sensing the City. Designing Urban Experience (L'Aquila, Italy 2010); and European Workshops on Tourism and Architecture. Waterfront Settlements (Ayvalik, Turkey 2010). Besides research work, she also has a very promising and successful professional career for which she has received many recognitions and awards in architectural competitions.

Ori Carmely, Rut Leonov

The Public Space - A Platform for Developing Interdisciplinary Tactics – Gym as a Study Case

Irit Carmon Popper

Artistic Intervention and Architectural Conservation of Sites in Conflict: The Story of Ein Hawd/Hod - an Arab Village and an Artists' Colony

Irit Carmon Popper is an art curator and a PhD Candidate at the Faculty of Architecture and Town Planning, Technion IIT. Her research, under the supervision of Prof. Alona Nitzan Shiftan, evokes new boundaries in the art and architecture historiography discourse with an interdisciplinary realm combining architectural heritage conservation in conflictual sites with contemporary art issues. Carmon Popper graduated in Philosophy and Art History BA, and in Art History MA at the Faculty of Humanities, The Hebrew University, Jerusalem, and in Museology Studies at the University Art Gallery, TA University, Tel Aviv. She serves as a teaching assistance of undergraduate courses on local and international architecture history and theory at the Faculty of Architecture, Technion and participating in Discussion Group on research and practice of cultural heritage at the TA University. Carmon Popper participated in "Conflict Art" Symposium at the Faculty of Humanities, Haifa University (2009), in a workshop and exhibition on the "Built Heritage" at the Faculty of Architecture, Politecnico di Milano, Mantova, Italy (2014) and in the international conference "Inheriting the City: Advancing Understandings of Urban Heritage", Taipei, Taiwan, organized by Ironbridge International Institute for Cultural Heritage, Birmingham University (2016).

Petra Čeferin

The Making of Ar(t)chitecture: Constructing Objects of a Special Type

Athina Charalampidou, Georgios-Petros Lazaridis

The Art of Computational Design

Athina Charalampidou was born in 1988 in Kavala, Greece. In (November) 2013 she received her Diploma in Architecture from the Aristotle University of Thessaloniki and soon after worked for a short time as an architectural assistant for various international competition. She is currently a postgraduate student ("Architectural Design" program) in the University of Thessaly, Department of Architecture Engineering. In addition, she participated in various workshops, investigating all fields of architecture, and collaborated with students and professionals from many countries. Cooperation, knowledge of other cultures and educational journeys to places all over the world are, according to her, the fundamental elements of a meaningful lifelong



educational process. In the following years she aims to expand her knowledge on theories of architecture, to explore the possibilities that new digital design tools have created and to advance her abilities concerning means of representation.

Georgios Petros Lazaridis finished his studies as an architectural engineer at the Aristotle University of Thessaloniki, Greece, with honors in April 2014. Part of his studies were completed at the Ecole Nationale Supérieure d'architecture de Paris-Malaquais, as part of the Erasmus exchange program. He is currently working at "atelier d'architecture 3bm3" in Geneva, followed by his previous collaborations with "group8" and "LOST Architekten" in Switzerland, where he worked on several competitions, among which the award winning projects of the New University in Fribourg and the Small-Scale Hotel in Aarbug. He has received several distinctions with his Master Diploma Thesis entitled "Lethe | S(m)oothing the trauma" (Pinup competition: Shapes Future Winner, Materiality "25 under 25" distinction, Architecture Otherwhere distinction) and he has won first prize in the national "Thessaloniki x 4" competition in Greece. His research interests are focused on computational design processes, primarily derived from the architectural vocabulary of nature, and digital fabrication.

João Borges da Cunha

Surfaces en Argos in Albis: The Artistry and Rhetoric of Whiteness in Modern Architecture

Yael Dagan

Embodying Architecture: A Speculative Conversation Between Bruno Taut and Rudolph Laban

Yael is an architect (B.Arch.) currently studying for her M.Sc. in architecture at the Faculty of Architecture and Town Planning, Technion, Haifa. An active architecture practitioner who has worked for leading offices including *Ram Carmi Architects* and *Ilan Pivko Architects*, Yael studied architecture at the Politecnico di Milano and History of the Arts at Tel Aviv University. She recently participated in a series of conferences of the Israeli Society for Dance Research with Dr. Marina Epstein-Pliouchtch. Yael is a dance and movement practitioner. Her current research on the relation between dance and architecture is conducted at the Faculty of Architecture and Town Planning in the Technion, under the supervision of Dr. Marina Epstein-Pliouchtch and Professor Iris Aravot and consultation of Dr. Sari Elron (Jerusalem Academy of Music and Dance).

Iskra Duric

Between art and architecture - Bogdan Bogdanovic and new formula of memorials in Socialist Federal Republic of Yugoslavia

Iskra Duric Montenegrin born architect currently based in Rome. Bachelor and Master studies of Architecture concludes at Faculty of Architecture in University of Belgrade. She obtained PhD in architecture in Faculty of Architecture, Sapienza University of Rome, as European Commission scholar, discussing the thesis *Memorials without memory, Bogdan Bogdanovic and Yugoslav memorial architecture in the changed social and political context*. The research is a survey on the concept of memory and identity in memorial architecture, with purpose of research is to build a path through which could be identified and proposed a new role of memorial architecture, within the changed social and political context. She has been active in research and academic activities in Faculties of Architecture in Podgorica, Montenegro and Rome, Italy, and today is oriented in managing common projects of Sapienza University and University of Montenegro. She has experience in organization of architectural and student congresses, meetings and workshops.

Ronit Eisenbach

Moving in Place: Dance & Architecture

Sites-in-Flux: Architects, Artists & Placemaking

[Ronit Eisenbach's](#) creative and scholarly efforts are located at the intersection of art and architecture. Eisenbach explores how the perception of subjective, invisible, and ephemeral objects affects understanding and experience of place. Her collaborative public [practice](#) includes teaching, writing, curating, exhibition



design, and the construction of temporary site-specific installations and performances in communities and sites-in-flux. She has exhibited at the Detroit Institute of Arts, Cranbrook Art Museum, Oslo's Galleri Rom, Venice's Palazzo Mocenigo, and the streets of Tel Aviv. *The Journal of Architectural Education, Public Art Review, Dance magazine, and Edgeeffects* have recently published her work. Co-authored books include *Installations by Architects* and *Ruth Adler Schnee: A Passion for Color*. She is a fellow of the Center for Creative Research, the Beverly Willis Architecture Foundation, SandBox at Washington College, and the MacDowell Colony. She serves as Associate Professor of Architecture at the University of Maryland and directs UMD's [Kibel Gallery](#).

Fernando Ferreira

Barbican on Solitude: (a) Walk(ing) Through

Fernando Ferreira (1987, Porto, Portugal) is a ReseArch(itect), an unstoppable thinker, whose practice relies on the interaction between creative practice and the public realm, with a background related to urban research, artistic/social practices, media representation and writing. Based in Porto, Ferreira graduated from the Escola de Arquitectura da Universidade do Minho (Guimarães, Portugal), with an honorable Master's degree in City and Territory. Since his graduation, Ferreira has been working in several fields: he was a guest critic at the Urban Laboratory in EAUM (2011); participated and won the European11 Guimarães as a team leader (2011); received special Mention in European13 Azenha do Mar (2015); and collaborated in architectural practices based in Porto (And-Ré Architects) and in London (AHMM Architects) between 2011-2015. He has also been invited to participate in several international competitions and workshops (2012-2015). Currently, Ferreira is an invited assistant at the Urban Laboratory in the Escola de Arquitectura do Minho, where he is developing his design as research and creative writing.

James Forren

Citadel Beacon Redux

James Forren's research addresses the aesthetics of technology: how building methods and materials impact the perception of our environment; and how an aesthetic inquiry into the means and methods of building technologies can reform their use. Digital technologies and their application to construction processes is one component of this work. Writings, exhibits, and built projects are the vehicles for inquiry carried out under the umbrella of Stilfragen Architecture, Art and Design often in partnership with industry and community groups. James currently teaches Design Studios, Building Systems Integration, and Technology Research Seminars as an Assistant Professor in Architecture at Dalhousie University. He holds a Master of Architecture from the Massachusetts Institute of Technology.

Raquel Franklin

Art is Organization...But Not Only: Hannes Meyer on Art and Architecture

Dr. Raquel Franklin is Head of the Architectural Research Center at Universidad Anáhuac México Norte, where she also teaches on the History and Theory of Modern and Contemporary Architecture. She obtained her Doctor of Science degree in Architecture from the Technion-Israel Institute of Technology with her dissertation "Hannes Meyer in Mexico (1939-1949)". She holds a Masters of Architecture degree from the UNAM and a Masters of Arts in Near Eastern and Judaic Studies from Brandeis University. Dr. Franklin is a founding member of the Mexican Chapter of DOCOMOMO. From 2013 to 2015 she was a fellow of the *Kulturstiftung des Bundes* (German Federal Cultural Foundation) at the Bauhaus Dessau Foundation, curating the exhibition "The Coop Principle: Hannes Meyer and the Idea of Collective Design". Her latest publication is "Auf das absolute Minimum reduziert" in *Hannes Meyer Co-op Interieur*, Haus der Kulturen der Welt, Berlin, 2015.



Asaf Friedman

Art and Architecture in Byzantine's Palaestina

Arch. Ph.D. Friedman Asaf, Bezalel Academy of Arts and Design

Terri Fuglem

Architecture into Art: The Ar(t)chitectural Production of Richard Henriquez

Terri Fuglem is Associate Professor of Architecture at the University of Manitoba. She graduated with distinction from a professional degree program in architecture at Carleton University in 1984, and completed a post-professional Master of Architecture in History and Theory at McGill University in 1993. Terri Fuglem has practiced in Ottawa, Montreal and London, England, where she worked for Lorenzo Apicella and Associates. She has taught at Carleton and Dalhousie Universities and has served as an external Thesis Examiner at Waterloo University, Rensselaer Polytechnic Institute and the School of Art at the University of Manitoba. Terri Fuglem was Co-Editor of Design for the Journal of Architectural Education (JAE) 2003-2005, as well as Acting Head of the Department of Architecture at the University of Manitoba (2012 – 2015). She currently teaches history, theory and design studio. Ms Fuglem has exhibited and written on a variety of architectural and art-related subjects. Terri Fuglem is Associate Professor of Architecture at the University of Manitoba. She graduated with distinction from a professional degree program in architecture at Carleton University in 1984, and completed a post-professional Master of Architecture in History and Theory at McGill University in 1993. Terri Fuglem has practiced in Ottawa, Montreal and London, England, where she worked for Lorenzo Apicella and Associates (later Pentagram). She has taught at Carleton and Dalhousie Universities and has served as an external Thesis Examiner at Waterloo University, Rensselaer Polytechnic Institute and the School of Art at the University of Manitoba. Terri Fuglem was Co-Editor of Design for the *Journal of Architectural Education* (JAE) 2003-2005, as well as Acting Head of the Department of Architecture at the University of Manitoba (2012 – 2015). She currently teaches history, theory and design studio. Ms Fuglem has exhibited and written on a variety of architectural and art-related subjects.

Lior Galili

Subject's Expression vs. Substance's Representation

Galili is an Israeli born artist, architect, researcher and educator based in the US. She holds a Master's degree in Architecture from the Harvard Graduate School of Design and a B.Arch. degree from the Cooper Union School of Architecture. Prior to her US education, she attended the School of Fine Arts and the School of Architecture at The Bezalel Academy for Art and Design. Her academic experience includes teaching at the Syracuse University School of Architecture; the Harvard Graduate School of Design. Her professional experience includes working for various firms in Jerusalem and NYC including the offices of DMA + Shigeru Ban Architects and Terreform, Center for Advanced Urban Research at Michael Sorkin Studio. Galili's research focuses on the intersection between art, architecture, media and public space. Her recent research explored the interrelationship between the urban practice and the urban fabric in Times Square, NYC.

Peter P. Goché

Chiaroscuro: A Peculiar Deposit

Peter P. Goché is a practicing architect, artist and educator. Goche works with the nature of perception and spatial phenomenon in developing his material practice. His works provoke a temporal-spatial encounter that understand the simultaneous and complex nature of cerebral and corporeal experience. He is founder and executive curator of *Black Contemporary*, a rural field station dedicated to the study of spatial phenomena and perception. Goché has exhibited and lectured on his creative practice and scholarship at many conferences and cultural institutions throughout North America and Western Europe. As educator in the Department of Architecture and foundational design at Iowa State University, Goché holds both B. Arch and M. Arch degrees in architectural studies from Iowa State University. He taught in the Department of Art at Drake University before joining the faculty at the Iowa State University, where he coordinates and teaches



design studios. His understanding and sensibilities regarding spatial experience and ethno-specific design stem from an agrarian upbringing and ongoing research in art, architecture and anthropology at Iowa State University. Equally, his travel throughout North America, Europe and the Czech Republic has nurtured his interest in human beings, their practices and the ways they occupy and perceive space.

Oscar Grauer, Maria A. Villalobos H.

Ephemeral Landscapes Toward Social Integration

Oscar Grauer holds a Master of Architecture in Urban Design and a Doctorate in Design, both from Harvard University. He has been a Visiting Professor: at PennDesign, Spring 2012 and 2014; at MIT Department of Architecture, Spring 2013, Universidade Federal do Rio de Janeiro, Brazil, Fall 2014. Occupied the Robert F. Kennedy Visiting Professor at Harvard University, Spring 2011. He was also a Visiting Scholar at Harvard DRCLAS, 2001-03. Before founding and chairing from 1995-2007 the Urban Design Master Program at Universidad Metropolitana in Caracas, Venezuela, he worked at PDVSA, Venezuela's Oil Company, 1981-2000. He has occupied public sector's positions in Venezuela. He is a Member (lifetime) of the National Academy of Engineering and Habitat of Venezuela. He is a principal of Ecopolis Group LLC, since 2007. Currently he is a Visiting Lecturer at the Massachusetts Institute of Technology, Cambridge, MA, USA.

Maria Villalobos holds doctoral degree on Landscape Sciences and Techniques from the ENSP-Versailles/AgroParisTech. She also holds a Masters in Urban Design from Harvard University, where she received the 2004 Excellence Award by the Joint Center for Housing Studies at Harvard. While working as part of the urban design team for Lower Manhattan, she contributed to the redevelopment of the Lincoln Center, Ground Zero, East River Waterfront and Fulton Street. While

working at Arup NY she collaborated in projects like Xochimilco Master Plan. In 2001, as part of Prof. Grauer's team, she shared the national awards at the 10th Architecture Biennial in Venezuela. She is responsible for the award winning Rehabilitation Plan of the Botanical Garden of Roberto Burle Marx in Maracaibo (Venezuela). Currently she is an Assistant Instructor the Department of Landscape Architecture at the University of Pennsylvania.

David Guggenheim

Made in Israel - Local and Modern architecture - East and West

Professor Architect David Guggenheim is a practicing architect specializing in regional planning conservation, urban renewal and contemporary architecture. He has received awards for his work, including: The "Rechter" Prize for School for Holocaust Studies at Yad Vashem, The Conservation Award of The Israel Council for the Conservation of Sites for the Tabgha Pilgrims' Hostel located near the Lake of Galilee and a first place award by the Society for a Beautiful Israel for the Teachers' Seminary, located in Shlomi.

Many of his works have been published in professional publications, notably, the School for Holocaust Studies in Yad Vashem published in the Phaidon Atlas of Contemporary World Architecture..

He teaches in the Urban Design program at the Bezalel Academy Jerusalem. He serves and has served on many professional-academic bodies in Israel and abroad including the ICOMOS Scientific Committee on Vernacular Architecture and the Salzburg Congress on Urban Planning and Development.

Harry Gugger

The Art of Architecture is Architecture

Simone Hain

Tikkun Olam 1517: A Cabbalistic Work of Ar(t)chitecture in the Eastern Alpes of Austria



Harriet Harriss

Blocks Versus Knots

Tiwánee Ir. Van der Horst

The City as Canvas, Architecture as Painting

My name is Tiwánee van der Horst. I am an architect, painter and thinker. With a wide-ranging curiosity in philosophy, natural phenomena and art, the world around me continuously inspires me in unexpected ways. I recently graduated from the faculty of Architecture, TU Delft with an honorable mention on the grounds of a profound research that provides new insights in the position of architecture in relation to the visual arts through developments in digital fabrication. I am half Dutch, half Puerto Rican, born and raised in Eindhoven, the Netherlands. Since I can remember I have had a passion for architecture. My paintings were always performed separate from my architectural work. Until in 2013 in Brazil, I made a wall painting on coffee shop in a favela of Rio de Janeiro, which had a profound impact on the local community. Since then, I became increasingly interested in the relation between painting and architecture and especially the area of overlap.

Zivia Kay

Arction and Fashitechtur – Towards Minoritarian Appearance in Public Space

Zivia Kay is a PhD candidate at faculty of Architecture and Town Planning at the Technion, IIT. She is a senior lecturer at Bezalel Academy of Art and Design, Jerusalem, and an active designer in KUAH, studio for innovative design strategies. Her PhD research 'The signature of Appearance in the contemporary urban space' originated in urban design, visual ethics, social activism and political philosophy in order to find a phenomenon that can serve as a spatial meme for the construction of meaning in the urban space.

Amber Kilborn

FRAMES+FIELDNOTES Existential Architectures for the Landscape of Climate Change

Amber Kilborn is a young Canadian architect from rural eastern Ontario. She began university in engineering, earned a diploma and studied philosophy before focusing intently on architecture as the recipient of Dalhousie University's Faculty of Graduate Studies scholarship. Amber's design work is driven by an intimate connection to cultural and natural landscapes, with particular interest in empathy, empowerment, and education in both process and product. The role of architecture in our perception of the changing environment is the theme of her master's thesis research which was recently completed in April 2016. Amber is currently working on realizing several artistic translations of this research in a variety of mediums.

Courtney Klein

A Sfumato of Past and Present

Courtney is currently working towards a Master of Architecture degree at the Azrieli School of Architecture & Urbanism, at Carleton University, in Ottawa, Canada. She recently completed her Bachelor of Architectural Studies at the same institution, graduating in June 2015 with Distinction. Her studio work has been published in the architecture school's annual publication, *Building 22*, as well as nominated for the 2014-2015 Teron Scholarship Award. She has worked for SMV Architects and CS&P Architects, in Toronto, Canada, and will be starting at Perkins+Will in Toronto this summer. She is currently living in Lisbon, Portugal, as part of an abroad studies program for her Master of Architecture.



Clive Knights

Pressing On: Acts of Printmaking as Interpretation of Being-There

Clive Knights is Professor of Architecture and Director of the School of Architecture at Portland State University, Portland, Oregon, USA, where he practices architecture and art, in particular mixed media and monotype printmaking. He holds professional architectural design undergraduate and graduate degrees from Portsmouth Polytechnic, UK, and a Master of Philosophy in Architectural History and Theory from Cambridge University. Clive has taught architecture for the past 32 years, previously at Sheffield University, UK, before moving to PSU in 1995 to collaborate in the founding of a new school and the creation of its architecture degree programs. His primary areas of creative research include the cultural meanings of architectural representation understood through the phenomenology of the human body, with particular reference to the writings of Maurice Merleau-Ponty; the revelatory capacity of metaphor in poetic work; and speculations in architectural design studio pedagogy.

Elena Markus

Miroslav Sik: Analogue Drawing as Architecture

studied architecture at the UdK, Berlin University of the Arts, and subsequently worked as an architect in Berlin, and architecture journalist for the Swiss architecture magazine *archithese*. Between 2011 and 2014, she was a curator at the SAM Swiss Architecture Museum in Basel, and has initiated an exhibition series “Spatial Positions”, in which she presented radical artistic and architectural projects. Further she co-curated the exhibition on contemporary Swiss architectural photography “Building Images. Photography focusing on Swiss Architecture”. Since 2014, Elena Markus has been a Research Associate at the Professorship of Architectural and Cultural Theory at the Technical University of Munich and is working on her PhD on the political and social effect of the architectural phenomenon Analogue Architecture.

Barbara Fernandes Leite

Sensorial Approach to Public Space

Barbara Fernandes Leite (1984 - V.N.Gaia, Portugal). Graduated in Architecture from the University of Porto in 2008, with the Final Thesis entitled “*Correlations between Architecture and Scenography: an ephemeral approach*”. Master Degree in Art and Design for the Public Space, with the master thesis entitled “*The sound of the city: a sensory approach to public space*”, graduating with honors, *Magna Cum Laude*. Currently attending the PhD programme at Faculty of Architecture, University of Porto, profile A – Housing Project and Forms of Dwelling, and developing a research entitled “*The importance of place in architectural design: Interventions in Public Space*”. She has participated in the collective exhibition “*Transforma Lab*”, in Torres Vedras, financed by the European Project: IMAGINE2020, in the workshop “*Art & Landscape - artistic interventions in rural villages: Andy Goldsworthy case-study*”, in Haute Provence, France, as well as in the collective exhibition “*(des)locaTNo um/ (dis)location one*”, in Crestuma, Portugal, as part of her project thesis.

Marta Magagnini

Unveiling the Archetype. Redrawing the Triple Igloo by Mario Merz

W.S.Vincci Mak

Art as Exploration of Landscape in Hong Kong

Moshe Margalith

On Drawing



Prof. Moshe Margalith has been combining the practice of architecture and academia for over 35 years. Moshe Margalith Architects & Urban Planners LTD., established in 1979 delivers planning and architectural services to government and municipal agencies, foundations, institutions and large corporations. The firm's work in urban planning, urban design & landscape, has included planning and design of urban cores and sites with unique historical contexts i.e.; the Seam area between east and west Jerusalem and road no.1 the new north entrance into the city, large neighborhoods adjacent to the historic center of the village of Beit Safafa and of historical compounds i.e. the Anglican Cathedral of St. George, the Dominican Church of St. Etienne, and other institutions i.e. hospitals, and centers for tourism and commerce in Jerusalem's Old City basin. In architecture the firms' work has included projects i.e., housing and housing for senior citizens, public buildings i.e., hospitals, civic centers, schools, colleges, community centers and libraries, and commercial buildings i.e. hotels, shopping centers, office buildings, industrial and office parks. Prof. Moshe Margalith heads 'Tel Aviv Institute of Architecture: Environment, Culture and Community,' and UNESCO Chair on Modern Heritage, and formerly headed the Azrieli School of Architecture at Tel Aviv University. Prof. Margalith has participated in and organized seminars and workshops on Modernism and the built heritage of Tel Aviv and on Urban Transformations for students from Tel Aviv University and from universities in India, China and Canada. He has also conducted wide academic research i.e. on; Jaffa -Tel Aviv, Nicosia, the Jewish Ghetto of Shanghai, and on pedestrians' domains in urban centers, on land policies and environmental protection. Prof. Margalith has served in various professional and public key positions i.e., the advisor to the Ministerial Committee for Regional and Urban Planning, the representative of the Architects' Association to Jerusalem's District Committee, a member of the Ministry of the Interior steering committee for Urban Rejuvenation, a member of the Ministry of Education Council for Higher Education International Evaluation Committee of schools of architecture in Israel, and a member of the academic founding committee of Neapolis University in Paphos Cyprus.

Frank Mruk

Is the Architecture of the Architecture Profession Sustainable in an Era of (de)Professionalization?

Frank Mruk is the associate dean for the NYIT School of Architecture and Design, where he has also served as co-director of the Masters of Architecture in Urban and Regional Design program. Previous teaching positions include Parsons School of Design, the BOMI Institute, and New York University.

Mruk is a licensed architect, a Fellow of the American Institute of Architects, a Fellow of the Strategic Planning Society, a member of the Royal Institute of British Architects, a Leadership in Energy and Environmental Design Accredited Professional, a Certified Strategic Management Professional, and a Chartered Architect in England. He has led strategic real estate development efforts on Wall Street at American International Group and Morgan Stanley, as well as design and identity efforts at Cendant Corp. In private practice, Mruk was a senior architect for URS Corp., one of the largest global engineering design firms, and has held partner positions at Palinode Group and DMA Architects PLLC. He is the co-founder of the Indo-U.S. Green Building Initiative. He has previously served as NY president of the Association for Strategic Planning (ASP) and the Construction Specification Institute. His education background includes Pratt Institute, Pace University and Oxford University.

Ainslie Murray

Oscillations Between Art and Architecture

Hilla Nadav

Art in the Hospital Space – a Comparative Visual Study

Born in 1986 in Israel, Hilla Nadav is an artist living and creating in Haifa. Hilla Studied at The Department of Visual Arts. There, she absorbed the acute attention to Sculpture, Drawing and Video-Art, subsequently refining her own visual and minimalistic conceptual style. Afterwards, that style emerged through Hilla's focus on the points of intersection between organic materials and subjects as: Body textures, Trauma, and hospitalizing affects. In 2015 Hilla completed her B.Ed. of Visual arts in Oramin Academic Collage. Following that, she received the Institution's First Honor prize for outstanding achievements, in specific for her Project



Installation '29'. She was also a recipient of AICF Scholarship of Plastic Arts, by the donation fund of Dalia and Eli Hurvitz.

Claudio J. Noriega

Architectonic Metaphorical Structure

Claudio J. Noriega was born in Lima, Peru where. He attended college in California and graduated from University of California at Berkeley with a Bachelor of Arts in Architecture. He continued his studies at Yale University in Connecticut where he received his Master in Architecture. He became a registered architect in Florida and has been teaching and practicing architecture ever since. After moving to Florida he taught architecture at the University of Miami and Florida International University before getting a full time teaching position in the architecture program at Broward College in Ft. Lauderdale. He also taught at Florida Atlantic University when their program in architecture started; while continuing his teaching at Broward College. He has a Master in Science in Architecture Studies with a concentration in Architecture Pedagogy from the University of Florida, School of Architecture in Gainesville, Florida.

Hadas Ophrat

Poetically Speaking: Art and the Public Space

Hadas Ophrat, multi-disciplinary artist; Co-Founder, The Train Theatre; Founder, former director & principal teacher, School of Visual Theatre (est. 1986); former Chairman & director, Hazira erformance Art, Jerusalem; Artistic director of The international Puppet Theatre festival, Phenomena festival, The Voice of the Word – all of them in Jerusalem. Chairman, Arteam – a multi-disciplinary art team - major project: a library for asylums and migrating communities at the Lewinsky garden, south Tel Aviv (1998-2014) Hadas Ophrat was born in Tel Aviv (1950), where he later studied literature and philosophy at Tel Aviv University. After completing his studies (1975), he moved to the Osaka University of Arts to study Japanese Bunraku and Noh theatre. Ophrat has directed and designed nearly 30 visual theatre oeuvres. Since mid 90ies he has developed performance-art and media installations. He is a leading figure in Israeli interdisciplinary art. His Performance-art and media installations have been shown at numerous art events, solo and group exhibitions of contemporary art in Israel and Europe, including a solo exhibition at the Israel Museum (2007). He was awarded the Minister of Culture prize for excellence in Art (2008) and the Israel Prize for performing arts (2016). At present, he is teaching scenography and performance art at the Academy of Music and Dance, Jerusalem, and directing contemporary puppetry at the School for the Art of Puppetry, Holon. He has published two books of poetry: Selected Poems (1973) and Threshold (1976) and three books on performative and artistic issues: Ever Never (2004), Conversations with a Puppet – on contemporary puppetry (2008), Too Much Reality – on the art of performance (2012), a DVD of documented performances (2005) and few catalogues of his major exhibitions (all in Hebrew).

Emanuele Palazzotto

A Work of "Total" Art. Phenomenology of the Italian Memorial in Auschwitz

Emanuele Palazzotto (1965) is associate professor at the Polytechnic School of Palermo, Department of Architecture, where he teaches Architectural Design. He is the coordinator of the PhD in Architecture with administrative headquarters at the University of Palermo. He is member of national groups of search, at the Department of Architecture of the University of Palermo. He participated in numerous competitions and architectural design awards getting recognitions and prizes. His research interests have been focused on the theory and the teaching of architectural design, and on the topics of "landscape urbanism", of the architecture for the liturgy and, lately, on the restoration of the architecture of the "Modern". Among his most recent books:

- E. Palazzotto, Elements of theory in architectural design (Palermo: Grafill, 2011).



- E. Palazzotto, ed., The restoration of the Modern in Italy and Europe (Milano: Franco Angeli, 2011).
- E. Palazzotto, ed., Experiences in the restoration of the Modern (Milano: Franco Angeli, 2013).

Daniela Palomba

ART and Perceptual ARTifices

Palomba Daniela, born in Naples in 1975, architect. Phd in Survey and Representation of Architecture and Environment and research fellow at the DiARC, Department of Architecture, University of Naples Federico II. She was adjunct professor at the University of Naples Federico II DiARC and The School of Architecture at the Politecnico di Milano for the courses of Descriptive Geometry and Technical Representation. She currently works as a adjunct professor for the course in Drawing and Survey of Cultural Heritage at the Academy of Fine Arts in Naples. She conducts research ranging from the design and representation of architecture themes, from the survey to the fundamentals of descriptive geometry and its applications.

Santiago Pastor Vila

J. Navarro Baldeweg's "The Table": The Aesthetic of Statism

Architect. He now teaches in the University of Alicante and has also taught in the Polytechnic University of Valencia. He holds a professional MArch from the School of Architecture of Valencia (with honours, 2003)). He obtained the D.E.A. in 2012 and he is currently finishing a doctoral thesis under the direction of prof. V.Vidal (U.P.V.) on the "A.R.A. Plan – Architecture and Rehabilitation of Alcoy". His research interests are focused on European contemporary architecture, specially on public strategies for the renewal of historic part of the city through urban projects.

Edita Riaubiene

Sketches as Vital Precondition for Architect's Creativity

Rotem Ritov

FFF 21th century: Form Frees Function

Rotem Ritov. 1974, Haifa. Live and work in Tel Aviv, Israel. Graduate of the Architecture department at The NB Haifa School of Design 2006, and since 2013 lecturer of the "Body-Space-Action" course, there as well. Independent artist, member of the Alfred Gallery Cooperative group. Rotem hold a multi-discipline approach toward the field of art, this includes the establishment of 'Apart Art Gallery' (2009-2011), a unique gallery format within her private living space, where she lived, curated and worked as an artist. Rotem joined 'Alfred Gallery' Cooperative group on 2011, a group of artists operating a large scale art center with 16 studios, a gallery, workshops and other art and culture activities. From 1996 until 2008 Rotem held a professional dance career, performing with leading contemporary dance groups in Israel, such as 'Ido Tadmor' Dance group, 'Fresco' Dance Group and more.

Avner Segal

Leopold Krakauer - Observation of a Place

Avner Segal was born and raised in Jerusalem's Old City. He is the grandson of the architect Yeshayahu Ilan. Segal attended the Rabbi Steinsaltz Yeshiva and volunteered in a New York suburb for a year in the framework of the yeshiva's educational program. He then began his architecture studies in the University of Ariel. Segal is currently completing his fifth year. His final project focuses on the development of a 'desolate' compound in the heart of the Old City and attempts to mend the different quarters of the city together. Segal has recently won the Goodovich Prize for his seminar paper on architect Leopold Krakauer.

Efrat Shalom

Built and Open Places in Theatre: Evoking Meanings of Everyday Urban Life in Tel Aviv - A Case Study



Ms. Efrat Shalom, B.A., M.F.A with distinction (Stage Design, Tel-Aviv University), is a scenographer and costume designer. Currently a doctorate candidate at the Faculty of Architecture and Town Planning, Technion, I.I.T. Research interests: Fiction-reality, Theatre-city interactions; Tel-Aviv urban-scape; Theatre semiotics; Performance studies.

Orit Shmueli

Exceptional Objects

PhD candidate and adjunct faculty member at the Architecture and Town Planning Faculty, I.I.T. Her research in applied phenomenology has been conducted in Delhi and Mumbai, India, and Jerusalem, Israel. She graduated as an architect IN 2000 and has been practicing and teaching architecture ever since.

Naomi Simhony

Ar(t)chitecture as a Mediation Between Sacred and Secular

Naomi Simhony is an architect and researcher who holds a Bachelor of Architecture (B.Arch.) and an M.A. in Philosophy from Tel-Aviv University. Her MA thesis examined the relationship between theology and aesthetics in Franz Rosenzweig's *The Star of Redemption*. Her doctoral studies at The Hebrew University of Jerusalem focus modern synagogue architecture in the state of Israel during the post-independence decades. Her research aims to uncover by which means the Modern Israeli synagogue defines a new Jewish-national identity which intertwines liturgical tradition, symbolism and memory on one hand, and a Zionist, Modern, national ideology on the other. The research is based upon architectural-historical analysis of a defined corpus. Examination of the corpus will be conducted through a theoretical discussion in three disciplines: History and Theory of Architecture, Jewish thought and Jewish history. In parallel with her research, Ms. Simhony is a journalist, and an instructor of architecture, art and sciences for children.

Catherine Ann Somerville Venart

RE: MANIFEST

Pallavi Swaranjali

Art for Architecture or Architecture for Art?

Pallavi has a Bachelor's in Architecture, a Master's in Industrial Design from India and is currently pursuing a PhD in the Azrieli School of Architecture and Urbanism, Carleton University, Canada. In the past she has worked as an architect with firms and as a freelancer and curated exhibitions along with teaching in the Architecture, Interior design and Product design disciplines. She is presently a contract instructor in the Architecture school at Carleton University where she is teaching first year Studio. She is also preparing an exhibition in Canada in conjunction with the office of Architect B.V., on whose work her presentation is based on. Her research interests include the ties between local and international architecture leading to a global reading of architectural history and theory, architectural storytelling and other subjunctive modes of thinking about architecture.

Thomas Tsang

Contested Miniatures

Thomas Tsang is an architect, artist, and curator based in Hong Kong, and founder of DEHOW PROJECTS. His work integrates artistic practice with architecture in installations and exhibitions. His curatorial projects include *Cloud of Unknowing: A City with Seven Streets* (2014) at Taipei Fine Arts Museum (with Roan Ching-yueh), *Grand Opening Projects* (2013–2015) at Miniature Museum, Beijing, and *Mobile Biennale* (2016). The recipient of numerous awards, including the Shinken-chiku-sha Prize, a Graham Foundation award, and the Marion O. and Maximilian E. Rome Prize, he is also the first architect to receive the Civitella Ranieri Fellowship. His publications include *On the Edge: Ten Architects from China* (2007), and he served as the moderator for a MoMA symposium on the publication *Open City: An Existential Approach* (2015). He previously taught at the Cooper Union and China Academy of Art, and is currently teaching at the University of Hong Kong.



Channa Vithana

The Artistry of Scarpa's Stampalia and Olivetti in Venice.

Prior to joining the Arts University Bournemouth in 2007 as a Senior Lecturer in Architecture, Channa Vithana had twelve years of architectural experience with both small and medium practices. He also combined work in practice with ARB/RIBA Part 1 Undergraduate and ARB/RIBA Part 2 Masters level architectural lecturing at the University of Greenwich. Channa's academic interests focus on the collaborating of architecture with other practices such as Fashion, Textiles and Graphic Design. Channa's research interests include external curatorial practice, architectural acoustics, and he has worked on research projects in France. Channa has published academic peer-reviewed work and is currently undertaking a Masters in Philosophy.

Petra Vlachynská

Architectural Forming Of Sculpture

Sharon Yavo Ayalon

Staging Urbanism: Space, Theater and Publicness in Acre





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