

### Lampadario Parametrica

Antonio Scaffidi (IBD)

Jakob Sieder-Semlitsch (AARCH)

The work consists of two aspects of interest

One is an initial approach to investigate circumstances for parametric design systems in conjunction with robotic 3D printing technology as a fabrication method. Subsequently, the question of - where and how can we benefit from objects designed to be inconsistent in a spatial context? Parametric design requires designing a system, a set of circumstances, rules, and variables - rather than one absolute solution. The work displays seven iterations of light vessels based on one parametric system. Size, shape, proportions, pleat, or twist are variables, as a result, subject to continuous investigation, exploring the physical appearance of each object and the object's relation or effect to an internal light source. The material at hand is natural coloured PLA (Polylactic Acid) - a starch bio-based polymer, with an innate translucent character. A 5W LED spot serves as a generic light source and allows us to evaluate each vessel rendered by light.

Lampadario Parametrica (parametric chandelier) is an attempt to curate non-uniform objects, fabricated individually through robotic 3D printing, into the context of one piece to explore how to benefit from parametrically designed objects. Lampadario Parametrica can adapt to a given space. The chandelier is positioned just above the floor; it grows tall and out into the space - to explore and illuminate through its vein-like routed branches and wirings. Each light vessel is held and presented in a specific way by the structure to complement the unique appearance of each object.

Lampadario Parametrica is a discussion about uniqueness in contrast to 'one-of', thus an investigation of a designed system; that can out-put exactly this or any other configuration - bespoke.

Antonio Scaffidi is a teaching associate professor at the Royal Danish Academy at the Institute for Architecture and Design. He is also a crossdisciplinary practitioner within furniture and product design and has a background in wood working. Within his research by design praxis, Antonio is enagged in fabrication methods, material design and computational design all entwined in an incontrovertible interest in finding sustainable and responsible solutions.

Jakob Sieder-Semlitsch is a fabricator, architectural designer and tool enthusiast. His work on the production and automation of architecture spans tool-making, interactive workflows, development and implementation of bespoke and industrial robotics. His work aims to find mechanical, virtual and actual solutions to contribute to a more inclusive, sustainably built future,

He holds degrees from the University of Innsbruck, Southern California Institute of Architecture, and the Royal Danish Academy, School of Architecture. He is currently engaged in research and teaching at Arkitektskolen Aarhus.

### Off-The-Shelf Symbolism

Kim Lenschow Andersen (IBD)

The Bauhaus Table is part of an ongoing experimentation into the intrinsic and symbolic values of the materials we encounter on a regular basis.

We do not perceive the world as a raw undifferentiated mass of sensory data. As experienced, our surroundings present themselves as already and immediately interpreted. Objects are, in a sense, pre-given, intuitively assigned a purpose and function, laden with value judgements and

This process - determined by the history, culture, and context of the perceiving subject shapes the way we perceive materials too.

Polycarbonate roofing sheets, epoxy resin, and extruded aluminium profiles are standard, off-the-shelf materials available in regular hardware stores. Encountered almost exclusively in the context of construction; the materials carry strong connotations of coarseness and instrumentality. The materials are regarded as an unrefined, practical means to an end and without intrinsic value in their own right.

Brought together in this unusual form and function, they evade the simple categorization and valuation we subject them to in the hardware store. The Bauhaus Table suspends our habitual 'value judgements' and allows its components to be cleansed from their banality. As symbols void of meaning, expressing an almost awkward aesthetic significance, their material identity can be re-negotiated.

The table attempts to challenge fixed material narratives, exposing our natural attitudes toward certain objects and the values they are made to carry. It questions the identity of materials and how we relate to our built surroundings.

Kim Lenschow is the founder of Office Kim Lenschow, an architecture office aiming to create personally engaging spaces that shape critical thinking. Through architecture and design, the firm seeks to reveal and challenge ingrained values, beliefs, and material narratives in established building practices and ways of life. Kim holds an artistic research position at the Royal Danish Academy, Institute of Architecture and Desian

# **Grundelementer #Monoblock**

Michael Lynge (IBD)

Grundelementer is part of a broader series of studies on potential accessible and sustainable building materials In this case, monoblock is used for the massive, load-bearing external walls. The block consists of three layers, each manufactured with different densities - a load-bearing layer with high compressive strength, a porous insulating layer in the middle and a robust climate screen. The lightweight block is fabricated from autoclaved cellular concrete composed of lime, sand and water.

The exhibition consists of a series of material experiments and a wall detail in scale 1:5. The experiments create a space that exposes the material's immanent qualities. New possibilities and potentials are presented and form a basis for the whole – for the body of the building. The model; is built from 'true materials'; scale and material connect to the senses and create a translation from model to reality. The exhibited work challenges assembly principles and questions the conventional use of the material. In the building process, a final treatment is applied to the interior and exterior of the monoblock wall to make it able to withstand degrading forces. This assembly practice wraps the material in layers that hide the tectonic coherence of the material. And thus, the coherence of the body of the build. The experiments are attempts to understand the material and experiment with the reduction of layers. Work is complete with surface treatments of lime plaster that merge with the materiality of the monoblock. The material samples create different expressions and new experiences of the material. The surface treatment will stand in place of layers of bricks, felt, mesh, paint and cement and will therefore constitute; a more sustainable and healthy building.

Aerated concrete has a beautiful texture but is not always considered as such today. Artist Jakob Steen has executed scagliola work on standard slabs of aerated concrete. Scagliola is a type of fine plaster which is processed specially. The work explores the physical and sensory potential in treating standardised elements a certain way, thereby elevating the material's architectural and cultural value.

Michael Lynge 1988 Cand. Arch. MAA, studied architecture at the Royal Danish Academy on the programme "Cultural heritage, transformation and restoration". Trained as an architect at Studio Mumbai, Mette Lange Architects and throughout field studies in Tanzania and India. Alongside his own practice Lynge Lynge Architects, he teaches at the Royal Danish Academy at the Institute of Architecture and Design, as a teaching assistant professor.

# **Transmission, Reflection & Refraction**

has been teaching, lecturing, and working extensively in Denmark and abroad.

Malene Kristiansen (IBD) Karina Mose (IBD) Anette Kreutzberg (IBD)

"Transmission, Reflection & Refraction" is characterized by the artistic process and act of experimentation. One designer and two architects collaborate and challenge each other, merging working methods, reflecting on similarities and differences, and engaging the viewer, the user, in

The colour of an object is made tangible through its material. Materials absorb, reflect, and echo light. The project investigates the influence of material and light on colour perception and how digital design tools represent this perception.

The exhibition consists of a selection of cubes in four basic colours and a variety of materials as well as digitally rendered variations. The physical cubes are instrumental in creating nuanced tales and facilitating intuitive and sensuous experiences on a human scale. The material differences of the cubes challenge our sociocultural conception of importance, value and built-in hierarchies. Illuminating with coloured light alters the visual perceptions of the cubes and the interpretation of their materiality. Digital rendering provides an

opportunity to experiment with numerous combinations and variations. The project intends to push prevalent boundaries and ways of looking at and representing material colour at the Royal Danish Academy.

Malene Kristiansen is a Textile Designer and Teaching Associate Professor at Royal Danish Academy, Institute of Architecture and Design. She Is Head of the Product+ Bachelor Program. Her research focuses on the human perception of colours, materials and textures. She investigates how the combination of elements from classical colour theory and aesthetic theory of light and atmosphere can develop into an experimental material-

based colour design narrative. Her investigation is driven partly by scientific theories and partly by personal observations and interpretations. She

Karina Mose is an Architect & Industrial Designer and Associate Professor at the Royal Danish Academy, Institute of Architecture and Design. She has been the head of the master programs Architectural Lighting Design, Spatial Design and Industrial Design. She is part of the Light in Architecture and Design Research Cluster. Her research focuses on architectural lighting design methods such as representation techniques / nonverbal communication and light as narrative. Through her research by design projects, she investigates the relation between and representation of light, colour, material, and form. She has been teaching, lecturing and exhibiting in Denmark and abroad.

Anette Kreutzberg is an Architect and Teaching Associate Professor at Royal Danish Academy, Institute of Architecture and Design. She is part of the Light in Architecture and Design Research Cluster as well as the Architectural Representation Research Cluster. Her activities focus on the digital representation of architectural concepts, with a special interest in the Nordic daylight phenomena. Her research involves the use of immersive VR, 360° panorama photography and renderings, as well as animation and interactive media as tools to explore qualities of light and material interaction in architectural spaces. She has been teaching, lecturing and exhibiting in Denmark and abroad.

#### Fragile horizons - Horizontal/Vertical time

Mads Max Ibenfeldt (IBD)

The surface of the horizon defines a point zero. It is our kind of orientation in the world. Without being a line but more a meeting between two temporalities, two materials, two distances, it distinguishes something above and below, but also something before and after. Point zero on the horizon oscillates between a past and a future.

### It can be defined based on two units of measurements

A: a physical distance measured in e.g., millimetres

B; a temporal stretch in which the surface is a temporal point zero, lying between a before and an after and thus becoming an image of the present By creating an above and a below, and a before and an after, the horizons surface activates a vertical extension. This vertical extent only exists by virtue of its defined point to zero. The vertical movement goes towards a centre and the endless - at this span is the present. The length is variable but expands a form of geological time. The terrain becomes a contrast to the horizon - a vertical measurement. It measures the height and the depts in relation to point zero of the horizon's surface. The terrain is seen as a spatially defining element for understanding the world. Likewise, the spatial perception of the distant horizon considered from its eve-level location is a relationship between height and distance

Towards a new worldview

In a sufficiently, for the viewer, incoherent timespan, distance and visual perception of this, a discrepancy occurs. The work tries to shed light on this incoherence.

The work shall be seen as a way of approaching the world - a way of viewing it. It measures 3 horizons in the scale of 1:1.300.000, 1 depth explained in 2 measurements in scales 1:1.300.000 and 1:3500.

The measurements are based on a horizon surface and a point in it. The depth measurement relates to a terrain level - the horizon to a curvante. The horizon is measured from 3 heights: 1.7 meters, 14 meters and 7000 meters.

Mads Max Ibenfeldt runs an independent practice established in 2016 based in Denmark and Sri Lanka. His work is primarily engaged in artistic research - developing projects in a close connection between ideas, context and fabrication that interfere in/with the world. The office distinguishes between 2 types of work; Imaginary projects, which produce material for the other type of work; Realized projects Mads holds an adjunct position at the program 'Helhed og Del' at the Royal Danish Academy, Institute of Architecture and Design, and has a master from the master program art and architecture from the Royal Danish Academy.

## **Small Chair**

Nicolai de Gier (IBD)

The world is facing numerous significant challenges. The structural changes in the international economy caused by globalization and an everincreasing climate crisis have radically altered the conditions of our welfare society. The consumer culture must fundamentally transform; it is imperative that we learn to consume and produce differently and with greater care.

Designers have a say and a huge responsibility to shoulder. We can contribute positively to the green transition by rethinking how we use materials and how our furniture is produced, used, and recycled. Designers must now and in the future address the entire complex system in which the product is a part.

With the new sustainability agendas, Denmark and the Nordic countries have a unique opportunity to contribute to the green transition. Our design tradition is founded on societal relevance, moderation, and sensible use of materials. Our manufacturing processes have a long history and extensive experience in adapting production methods and optimizing the use of resources in creating useful everyday products. Small Chair is produced in laminated beech veneer that optimates the use of materials.

Small Chair discusses type and tectonics concerning the term 'Design for Disassembly'. Construction is component-based, enabling the replacement of individual parts. Small Chair is shipped flat-packed directly to the user.

Nicolai de Gier is Head of programme MA Furniture Design - products, materials & contexts, The Royal Danish Academy, Institute of Architecture and Design. Architect maa, Professor MSO. Interested in sustainable agendas in relation to Furniture Design and research primarily focused on furniture typology and tectonics, universal design, and sustainable approaches to designing. Work both as a researcher, practitioner and educator and do artistic research.

# Limited Edition – refashioning the unwanted

Marcus Aminaka Wilmont (IBD)

Ongoing artistic research project at the Royal Danish Academy

Limited Edition explores the inherent complexity of constructed identity, the abstract concept of form, and the multifaceted challenges of responsible design in an alter-modern era. The work is a speculative observation of the human condition expressed through materiality and a critique of the current state of our society.

Black boxes that the exhibited pieces exist within; can either reveal form and intent in endless repetition or conceal and disrupt when disengaged. It is a metaphorical representation of the manifold concepts our clothes quietly project in our daily lives and a manifestation of our disjuncture from their authentic potential and factual value. The materiality of the pieces and the nature of their staging combine to elevate our shared perception of their true worth but simultaneously spin a cynical social illusion. The encapsulated garment's inability to serve the function they were created for; provides a contextual framework for deeper personal reflection and possible comprehension. As such, the propositions of the work shift with metronomic certainty between cautiously optimistic opportunity and abject looming threats of failure - a state that also incidentally mirrors most creative processes. It is all inevitably an expression of the designer's opinion that art and design are both infuriatingly rudimentary and intrinsically necessary in modern society.

The work combines material understanding and artisanal skills for a deeper understanding of possible future design solutions and methodologies. The ultimate intent is the development of new design methodologies through meticulous experimentation that provides an alternative to the current industrialized 'consume and discard -' market strategies.

Marcus Aminaka Wilmont is the Head of Program for the 'Fashion, Clothing and Textile' Master's degree at the Royal Danish Academy, Institute of Architecture and Design. His work merges a profound curiosity for theoretical inquiries into the power of clothing concerning constructed identities, responsible design theory, artistic shape experimentation and a deeply held reverence for the longevity of artisanal pleating as a design tool. Marcus holds a Bachelor's degree in Fashion Menswear from Central Saint Martins and a Master's degree in Fashion Menswear from The Royal College of Art in London. Marcus has taught and lectured at the Royal College of Art, Central Saint Martins, London College of Art and the University of Westminister. His artistic work has been exhibited extensively internationally - predominantly in London, Paris, New York and Milan.

# **Ivory Tower**

Anne Romme (IBK) Jacob Sebastian Bang (IBD)

The work is part of the project "Islands", an on-going collaborative artistic research project.

The term 'Ivory Tower' is a metaphorical place or a state of mind. A place which offers its inhabitant privileged seclusion or separation from the rest of the world. It provides a clear overview of the world below and an environment of intellectual pursuit disconnected from the practicalities of everyday life.

With this exhibition, an Ivory Tower has is built on the 'Islands' of our ongoing artistic research project. Constructed alongside the continuous, floating monument also represented in the exhibition, our Ivory Tower is an actual structure negotiating materials, gravity and tectonics, and a metaphor for the intellectual freedom to speculate, experiment and dream. When our future landscapes flood due to climatic changes, the Ivory Tower provides refuge and an elevated, privileged position to imagine and develop solutions to the real, material, and practical problems below. Our work takes part in a larger discourse, where utopian ideas offer critical and refreshing views on existing conditions.

The Ivory Tower and the continuous, floating monument are part of a microcosmos. They contain the typologies and programs necessary to form a society - hospital, food production, town hall, recreation, parks, fisheries, sport, undertaker, energy production, an academy, religious communities, illegal settlements, housing, and life from birth to death. Moreover, our work is characterized by the artistic process and experiment in and of itself. It looks at how two architects combine their working methods, similarities, differences, overlaps and new territories. We intend to challenge forms of representation to allow for symbiosis, ideas, formal experiments, unforeseen spatial readings, inspiring cross sections, and new architecture.

Anne Romme is an Associate Professor and Head of Program FINDER STED | TAKING PLACE at the Royal Danish Academy, The Institute of Architecture and Culture. Her work ranges from theoretical inquiries into the commons in architecture to artistic research dealing with ideas of utopia, experimental drawing and model building, digital fabrication and the development of a building system based on pure plate shell structures. Anne holds a PhD degree from the Royal Danish Academy of Fine Arts, School of Architecture, an M.Arch.II from Princeton University School of Architecture, an M.Arch. from The Aarhus School of Architecture, and a B.Arch. from the Irwin S. Chanin School of Architecture at the Cooper Union. She has been teaching, lecturing and exhibiting extensively in Denmark and abroad.

Jacob Sebastian Bang is an Associate Professor and Head of Program 'Helhed og Del' at the Royal Danish Academy, Institute of Architecture and Design. He is a member of The Royal Danish Academy of Fine Arts and the Society of Artists. Jacob's research interests are architecture and representation, and artistic methodology. He works with multiple mediums - painting, drawing, model-making and graphical techniques. He holds an M.Arch from the Royal Danish Academy, School of Architecture. He has been teaching, lecturing and exhibiting extensively in Denmark and abroad.