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## Architectural Framing of Atmospheres in the Anthropocene

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*Published in:*  
Emerging Architectures

*Publication date:*  
2018

*Document Version:*  
Publisher's PDF, also known as Version of record

[Link to publication](#)

*Citation for pulished version (APA):*

Chebotareva, P. (2018). Architectural Framing of Atmospheres in the Anthropocene. In W. Unterrainer (Ed.), *Emerging Architectures: The Changing Shapes of Architectural Practices* (pp. 55-59)

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# ARCHITECTURAL FRAMING OF ATMOSPHERES IN THE ANTHROPOCENE

POLINA CHEBOTAREVA

“IF WE CAN UNDERSTAND HOW WE PRODUCE  
THE CLIMATE AND HOW THE CLIMATE  
PRODUCES US – IF WE CAN UNDERSTAND THE  
RELATIONSHIP WE HAVE WITH THE CLIMATE –  
THEN WE CAN ALSO START TO DEVELOP A  
SENSE OF RESPONSIBILITY, A FELT FEELING OF  
RESPONSIBILITY.”

OLAFUR ELIASSON, 2014, P. 102

An architectural practice emerging today faces an epoch of entanglement and complexity. Coined by geologists as the Anthropocene, this epoch is characterized by the substantial impact that human activity has had on planetary ecology and the consequential acceleration of climate change. It is no longer possible to draw a clear distinction between nature and culture, between inside and outside. As sociologist Bruno Latour (2007) elucidates, all local actions have global consequences.

Accordingly, architects have revised their own actions to lessen the effects of construction on climate change. Recent decades have seen massive innovations in building materials, reuse and recycling, reducing construction waste, energy-efficient buildings, and new typologies to increase human interactions. Additionally, on the larger urban scale, new water and waste management techniques have emerged, as well as sustainable infrastructures for bicycles and pedestrians.

During this development, however, the intention of architectural design and the role of the architect has remained unquestioned. Architectural design continues to strive to protect human activity from 'natural' phenomena and secure comfort. Aesthetically focused on the objects of innovation to communicate the new sustainable values embedded in them, architects draw people's attention to possible solutions and projected desirable futures.

In this continued effort to finding solutions to climate change and

securing human comfort, the architect has played an active role. The user, however, has remained largely passive and unchallenged by architectural design (Hill, 2003). In times of the Anthropocene, this raises a problem because people continue to be unaware of their own impact on their surroundings (Latour, 2016).

A recent study on the perceptions of European citizens shows that just over half of the 10,000 asked still do not believe that human actions are connected to climate change (Bollerslev, 2017). A second finding of the study showed that about a third believe that sea temperatures have already risen by 2 degrees Celsius.

Since this change is predicted by scientists to occur in 2100, people believing that this has already happened do not see the problems that the rise in temperature will bring and do not worry about climate change.

It seems that although people know about climate change, they do not have a felt responsibility for the impact of their local actions on a global scale. As Olafur Eliasson states in the opening quote, a felt responsibility might arise if people understand the relationship they have with the climate. In this paper, I propose that architecture could play an active role in mediating such an understanding.

In everyday life, architectural design mediates our attention, affect and actions (Yaneva, 2009). Most often, it leads our attention to the function or material quality of a space or object, supporting interactions between

things and people. But with a shift in focus, architectural design could also mediate interactions between people and the climatic surroundings. Here, the role of the architect is not to define and communicate new, sustainable values or functions, nor is it to improve a site and create a protected, comfortable climate.

Rather, the architect can aesthetically frame the invisible conditions that are already present to stimulate a felt understanding and critical engagement, thus giving the user an active role. A reconsideration of both site and user is presented in the paper to pave the way for an emerging practice that draws attention to the global in the local.

### **The uncanny presence**

The entangled conditions of the Anthropocene push the boundaries of our understanding of architectural site. As philosopher Timothy Morton (2015) points out; "when massive entities such as global warming become thinkable, they grow near. They are so massively distributed we can't directly grasp them empirically. We vaguely sense them out of the corner of our eye while seeing the data in the center of our vision. These "hyperobjects" remind us that the local is in fact the uncanny. Space evaporates. The nice clean box has melted." Following Morton's thought, the local cannot be understood as an isolated space. In the periphery of our local awareness, we sense the uncanny presence of global warming. In some places, Morton argues, we sense this presence more than in others.

Think, for instance, of a large road crossing. Standing on one side of the road your focus is on the red light turning green and signaling for you to walk across. In the periphery of your awareness might be sounds of car engines, smells of exhaust fumes, the motion of other people, perhaps a sense of bustle and maybe a feeling of agitation. However, in your haste across the street, you might not be aware of how these things affect your focus and what you see. Additionally, most likely, the uncanny presence of the global will completely escape your attention. For instance, as you see a car driving past, you might feel the heat of the road caused by the car's speed, but you will most likely not notice how seagulls use this heat to warm up before going on a long flight, and you will also not notice the political discussions that have led to the regulations of car speed on this road. Anything you see, hear or smell in your surroundings is connected to something else further away that you may not see or feel.

Like the crossroad exemplified, any site is made up of a multitude of different scales, both human and non-human (Morton, 2015) – for instance, the macro scale of the climate, or the micro scale of an insect – as well as of the multiple scales of any individual action – for example, the microscale of driving to work, and the macroscale of your car's exhaust fumes polluting the atmosphere. At a site, such as the crossroad, these scales are present and entangled. If architectural design is to bring awareness to the global in the local, it must embrace the multitude of scales and enhance their co-presence. A crossroad, then, can be reconsidered

beyond its functional and habitual nature. It can be redesigned as a place to experience the uncanny presence of the global.

### **Becoming sensitive**

Such a reconsideration of site has an impact on the understanding of the user. Going beyond designing for functionality and future habits, architects can design for a user to become sensitive to the complexity of the environment. Rather than to program an action and communicate a value, the architect can stimulate users' individual exploration and interpretation of site. The focus of design shifts from communicating through an object to mediating through the users' exploration of the surroundings.

There is a great potential in giving the user such an active role. According to ecological psychology, it is exactly through such individual exploration that individuals develop new actions and values (Bang, 2008; Baron, 2008). Stimulating exploration, per psychologist Reuben Baron (2008), can be understood as designing with a tentativeness that demands continuous re-adaptation from the user. Tentativeness and ambiguity, however, are not the property of an object, argues architect Jonathan Hill (2003). Rather, it is the property of the perception of the object.

Our perception is strongly affected by the medium through which we perceive (Gibson, 2011[1986]). This medium can be understood as the atmosphere of a site (Thibaud, 2011).

The atmosphere is all the invisible qualities affecting our experience

– from the wind to the smells, and from the regulations to the feel of the place (Borch, 2014; Thibaud, 2015). In architecture, the concept of atmosphere has been studied in relation to the design of buildings and the construction of new atmospheres through, for example, light, shadow, materiality and movement.

This can be found in the writings of Juhani Pallasmaa, the architecture of Peter Zumthor and, more recently, research and design of Philippe Rahm. However, the possibility of an architectural framing of a site's atmosphere to bring forth the uncanny presence of the global in the local has not been explored.

And it is exactly here that a potential lies for emerging architectural practices in the Anthropocene. In shifting the intention of architectural design from communicating values to stimulating exploration, the architect works with enhancing the presence of the uncanny by framing the atmosphere.

The user becomes an active agent, interacting and interpreting the site to develop a felt understanding of the climate and an increased responsibility.

Thus, working at a site such as a busy crossroad, the omnipresent but invisible global issues can be made felt in our local everyday through architectural design.



ROKKO OBSERVATORY BY HIROSHI SAMBUICHI

### Perspectives for an emerging practice

Drawing attention to the invisible in the surroundings becomes especially apparent in the architecture of Hiroshi Sambuichi. Sambuichi draws inspiration from nature and approaches each site as a so-called energyscape (Lee, 2017). An energyscape is the physical streams of energy in the moving materials of, primarily, wind, water and sun. For each site the energyscape is investigated in all four seasons. The knowledge gained about the movement of the invisible materials is used to give form to the design. Thus, Sambuichi seeks to make the invisible materials felt and perceptible. For instance, in the Rokko Shidare Observatory, completed in 2010, a circular viewing platform is encapsulated by a dome of plaited staves.

The form of the dome and the pattern of the plaited staves allows them to become naturally covered with ice during winter. Thus, the platform not only gives a view of the mountains, but also invites the user to experience the invisible materials of its atmosphere. Another more recent example is the Orizuru Tower – an old office building in Hiroshima which Sambuichi renovated in 2016. On the top of the building is a viewing platform that overlooks the city of Hiroshima. Based on wind studies, the platform is designed as a hilly landscape to enhance the wind so that it can be felt and experienced as an invisible quality of the city.

The architecture of Sambuichi exemplifies how design can make the invisible materials of the atmosphere felt and experienced by the user.

However, the understanding of the invisible materials in Sambuichi's architecture is centered around wind, water and sun.

The Anthropocene calls for a more entangled understanding of nature, where the notion of 'moving materials' could be extended to include the socio-political aspects of a site's atmosphere, such as regulations and pollution. An architecture that brings these 'materials' to awareness could make tangible the global consequences of local actions.

Imagine, for instance, the effect of enhancing the wind flow at a crossroad. The user will not only experience the wind present on site, but also the exhaust fumes, the sounds of cars and, perhaps, the presence of seagulls.

The crossroad becomes a site to experience the entanglement of local actions and global consequences. Such design could not only push the boundaries of architecture, but could help to give people a felt responsibility for their local actions that is needed to make architecture truly sustainable in the Anthropocene.

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SPEAKERS AT THE CONFERENCE, FROM LEFT: KASMIR JOLMA, KRISTIAN EDWARDS (SNØHETTA), WALTER UNTERRAINER (AAA), CHRISTOF MAYER (RAUMLABOR), SIV HELENE STANGELAND (HELEN & HARD), DOINA PETRESCU, IZABELA WIECZOREK, BILLIE FAIRCLOTH KIERAN TIMBERLAKE, RENEE CHENG, ROLAND GRUBER (NONCONFORM), PETER NAGELER (NONCONFORM), ELI SYNNEVÅG (SNØHETTA), PAULA FEMENIAS, STEFAN HOLST (TRANSSOLAR), MURRAY FRASER, CONSTANTIN PETCU, JOEL LETKEMANN, FREDRIK NILSSON, LIANE THUVANDER, ESKE BRUUN, POLINA CHEBOTAREVA, MATTI PIRTTIMÄKI, ANGELA GIGLIOTTI, ELIZABETH DONOVAN, (PHOTOGRAPHER) MICHAEL HENSEL.

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Editor: Walter Unterrainer

Layout: Mathias Kruse Jacobsen

ISBN: 978-87-90979-75-1

First edition, Aarhus 2018

Arkitektskolens Forlag

Arkitektskolen Aarhus

Nørreport 20

8000 Aarhus C

Denmark

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