Exhbition catalogue

Practices of Risk, Control and Productive Failure

Brønshøj water tower May-June 2022 The exhibition is arranged by the Institute of Architecture and Culture at the Royal Danish Academy, in collaboration with the Irwin S. Chanin School of Architecture at the Cooper Union.

The exhibition is supported by the Danish Arts Foundation.







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Exhbition catalogue Brønshøj water tower, spring 2022

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Practices of Risk, Control and Productive Failure

Introduction

The works in the exhibition are made by architects, researchers and teachers at the Irwin S. Chanin School of Architecture at the Cooper Union, New York, and at the Institute of Architecture and Culture at the Royal Danish Academy and their collaborators. They have worked together over the years in different constellations and continuously exchanged ideas about making, teaching and reflection. Their works are not assembled by a common agenda or a thematic field but rather connected by a set of practices that create the cohesion of their common culture.

Their works often combine interpretations of architectural works from different historic periods with new ideas and current problematics. If architecture is conceived as an art form, then it explores fundamental questions across specific contexts, and older works as still relevant to our present understanding of the profession. The historical dimension expands their conception of architecture and offers a critical distance to mainstream agendas.

Their works navigate the diverse and open-ended toolbox of architectural techniques across the new and the old, and the analogue and the digital. They are not preoccupied with technology as the primary driver of architectural invention but treat new technologies as a natural extension of the workshop. Too strong an emphasis on technology belongs to a mindset characteristic of modernity: a new world for a clean slate. Architecture is messy, and consistency is found in the pursuit of problems.

They use scale models to measure their work against a variety of architectural works and practices. They push them beyond conventional representation, sometimes towards greater abstraction and sometimes towards a diversity of materials and scales. They are interested in the interaction between model and context because

it deals with the situated nature of architecture. A given model is always installed in a specific space.

Their practices are developed in an academy and thus closely related to teaching. They explore the ambiguous relation between method and artistic practice, and between teaching and learning. Just as students in some sense begin acting as architects the day they enter the doors to the academy, the architects in this exhibition perceive themselves as life-long students of architecture.

To the extent that we entrust architecture to bring about new, critical views on contemporary problems and challenges, then it may be our corollary responsibility to ensure that our students and we ourselves remain open to risk and the vulnerability of failure. As teachers that also practice, we must ask ourselves whether students would be open to risk if the faculty did not expose themselves to the same set of vulnerabilities. As architects that also teach, we must ask ourselves how our practices can enter into a meaningful exchange with the conditions that characterize academic learning: what mechanisms of control are productive and where is risk well-calculated to challenge which controls are merely coercive and which risks reckless.

If nothing is at stake and everything is controlled, a project will never depart from the expected, nor will it ever venture into new territories to produce new forms of knowledge. However, if nothing is controlled, it becomes difficult to reflect upon and learn from the outcome. Practicing artistic research within an educational institution positions that research on a fertile ground of control, risk and productive failure, and the projects in this exhibition represent a critical encounter with this condition.

Peter Bertram, Anne Romme

16-8

Various Things of Different Sizes" — a Grid of (no) Ideas

"...by nature, the grid is abstract, and when e.g. le Corbusier used it in the beginning of the 20th century it implied strong ideological positioning: the grid started as an ideological opposition to the historical context. New technology originating from early industrial building systems created the plate-column-construction which throughout the 20th century became the most dominant construction form in the world.

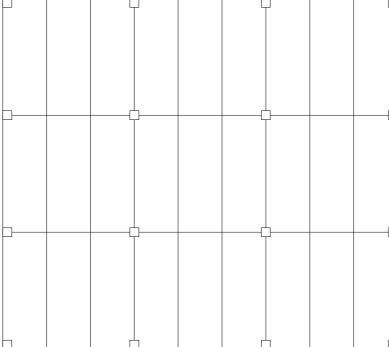
In the same period especially the city centers developed with high degree of complexity becoming a new nature—with increasing levels of infrastructure, density, and heterogeneity.

Numerous exhibitions in Denmark and abroad, e.g., Danish Architecture

Center, Copenhagen, The Norwegian Centre for Design and Architecture,

Nature: 9 Architectural Conditions between Liquid and Solid (2015), Byen,

Oslo, and the Venice Biennale of Architecture. Selected publications: A New



Today the grid is no longer in distinct opposition to the historical - we experience the same buildings in Ørestaden, Tokyo, New York, and

> The grid creates a place-lessness! The pure grid creates an ideal condition, which deletes all local traces: the spaces are so alike, that the site is transformed from a specific locality to a non-place.

the buildings are alike-but-different.

The concrete building systems have the Hennebique system, to being

Beijing. In the rapidly growing city, the urban space and the interior of

developed from being specific, like anonymous and non-specific.

The construction is independent of the design and architecture becomes a curtainwall of tiles or a wallpaper of glass. The grid no longer has an ideological dimension; it is pure pragmatism. In a modern concrete building system, all differences have been eliminated – it is a rationalized version, an anti-vision!

From Abstraction to Figure:

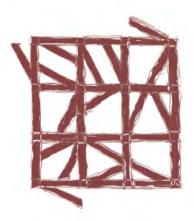
Compared to the complexity of the world, the grid is too simple. By introducing building components that create alternative directions in the grid, a space emerges which is autonomous. It is not a universal condition – and that is its strength and potential! The different elements create local spaces – bushy clusters – which do not point to an order x, y, z but a more heterogenous field.

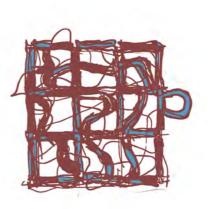
It is not about introducing a systematics of creating differences, but to add a complexity to something simple. All parts are different but alike – the elements are the same, but different enough to be specific."

Notes on "Various Things of Different Sizes" – a Grid of (no) Ideas.

AA, September, 2019.

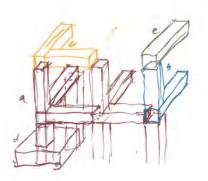








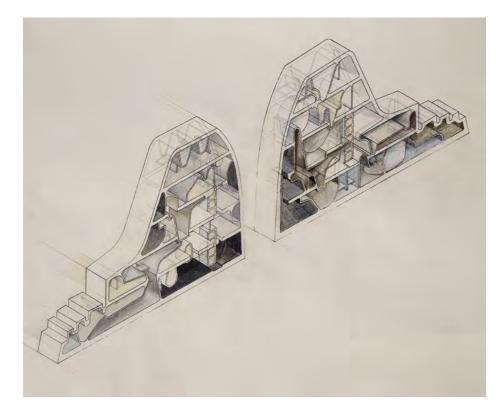




Anders Abraham (1964-2020), PhD, professor and head of the Master's Program in Art and Architecture at the Royal Danish Academy (KA) until 2020. Educated at The Cooper Union for the Advancement of Science and Art in New York, Scholar-in-residence at Cranbrook Academy of Art in Michigan.

rummet og det fælles (2019).

The failed practice of controlling nature



Jacob Sebastian Bang is Associate Professor and the head of program at 'Helhed og Del'. His research interests are architecture and representation, and artistic methodology. He works within multiple media – painting, drawing, model-making and graphical techniques.

Anne Romme is Associate Professor and the head of program at Finder Sted | Taking Place. She also runs an independent architecture practice invested in critical, experimental projects. Her work ranges from theoretical inquiries into the commons in architecture to digital fabrication and the design of a building system based on pure plates shell structures.



The Brønshøj Water Tower was built by Danish architect Ib Lunding in 1928 to serve water to the growing population of northwestern Copenhagen. Although the tower is now out of service, it represents a simple principle that is still being used all over the world: the elevation of a confined body of water high above the water pipes that distribute the water throughout the surrounding community, creating gravity-driven hydrostatic pressure to make water run through the system. This principle is clearly legible in the architecture of the water tower with the water tank suspended above the visitor by a series of robust columns. The cylindrical space, ideal for storing liquid, is clearly articulated in the functionalistic architecture.

In contrast to this ancient principle of controlling nature – from

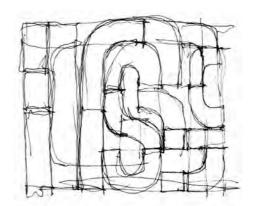
available content in domestic water pipes – insights into the climatic future of our planet have forced us to revisit nature as something much less contained. In recent discourse, water has come to represent an uncontrollable force, a threat to our current inhabitation patterns. Water might not flood Brønshøj Water Tower in its elevated position high above sea-level, but for this iteration of our ongoing artistic research project "Islands", we have found inspiration in the contrast between water as a contained body and as a larger ecology of inhabitation.

water as an unrestrained liquid to

"Islands" is a manifest for giving form to new water-based inhabitation for a flooded future, a system of structures that simultaneously function as flood barriers, mooring platforms and housing, forms that are eaten structures are similar to coral reefs and organisms of algae. Sounds and smells come from the ocean.

Their rhythms are in tune with the tide. They contain seaweed harvesting plants, an obsolete oilrig. a birth clinic and a crematorium at one and the same time.

As we see an urgent need to find models for how architecture and urban developments can



grow organically and gradually, we engage directly in a process which does exactly that. Every piece of work passes between the two of us numerous times. as well as between digital and analogue tools and methods.

> There is no end result. as such. Sometimes, the final object becomes so perforated or fragmented that it disintegrates. Other times, it merges with

> > other islands to become an archipelago or it becomes its own double by being placed

in relationship to a large mirror.

It is our intention to push our methods and materials towards boundaries where the unexpected and, at times, the undesirable occur. Glitches in the transformation from digital to physical are accepted. We intentionally undermine the idea of the single author, the artist genius. We 'destroy' and erase parts of each other's work, and allow for misinterpretation, faults and mistakes. Just as we cannot always control and contain water, our artistic research has failed practices as something productive built into it.

up by internal structures, like a hermit crab or an abandoned cocoon. Morphologically, the

Miniatura

Museum of Architecture in 1:10

Miniatura is a place for discussion and a stage for alternative-thinking and critical architects in Denmark and abroad. Based on the tradition of artist-run exhibition venues, the intention of Miniatura is to develop an exhibition space for a loosely defined association of practices working in the periphery of contemporary architecture. The gathering spot for this endeavour is the Miniatura museum, an exhibition space not tied to a specific location but built in the scale ratio of 1:10 and designed as a flexible building system that promises the exhibitor a high level of freedom in the expression of their vision for

the practice of architecture.

The miniature is the museum, not a representation of something more real. Because the museum is scaled down, exhibitions of visionary projects are made possible with small budgets. Exhibitions in the museum are installed and photographed and then take place online, on this website and through our Instagram profile.

Miniatura lends the opportunity to reach a global audience and can be understood as a crossbreed between a museum, an open archive, a forum for exchanging ideas and a small megaphone.

Museum Architecture

The museum is conceived as a kit of parts consisting of various roomsized floor elements, as well as a large selection of wall elements. The floors can be combined in many different ways and the floor plan can therefore be changed according to the needs of the exhibition, an option not present in conventional museums. In the same way, the rooms can be expanded upwards by stacking the wall elements as required, to display tall architectural models or sculptures for example. The idea is that a flexible system like this will allow for the creation of views targeted for the camera lens without having to account for the museum as a whole. The individual exhibitions are all uniquely organized versions of the museum's building blocks. Therefore, the museum is constantly changing according to the ideas and vision of the current exhibition. Every new layout is documented in a plan drawing, which is added to the Miniatura website and serves as a navigation tool to the incrementally growing museum.

Jonathan Houser and Christian Vennerstrøm are both teaching associate professors.

Houser has been teaching at the Royal Danish Academy since 2015, alongside running an independent practice and, in both regards, engaging in a variety of projects across the scales and disciplines of art and architecture.

Vennerstrøm has been teaching at the Royal Danish Academy since 2019, alongside running the cross-cultural design establishment Bahraini-Danish, together with Batool Alshaikh and Maitham Alumbarak.





Anthology of Apertures

It is through the windows of the house, that we experience the landscape outside. The shape and placement of the openings define what we see of the surroundings. Inside the house we are presented with a section of the landscape, whereas we experience the landscape as a unity when we are outside.

A photograph of a landscape is traditionally created by the format of the camera – depending on the negative size or type of image censor the photograph can be either square or rectangular, horizontal or vertical – in the proportions of 24x36, 6x7, 6x6 etc.

In my ongoing series *Anthology of Apertures*, the architecture itself creates the framing of the image.

The house becomes the camera.

The apertures are 1:1 portraits of the landscape, as it is seen by the house itself thorough its windows. Each aperture is a representation in true scale of the view of the house.

The apertures connect to the early photographic processes, where a light sensitive emulsion was applied to glass negatives and exposed to light.

In the Water Tower the apertures are placed on the floor, becoming droplets of light and landscape in the spiralling space of concrete, darknes and absence. The apertures reconnect the tower with the landscape as they recall the absent horizon.



Visual artist, architect Ph.D. Editor-in-Chief of the Danish magazine Landskab. Since 1997 I have been documenting the contemporary landscape, understood as the all-dominating cultural condition that has developed as 'the Earth has become a field of totality for human manipulation', in the words of the Danish sculptor Willy Ørskov. Selected exhibitions: *Places* (2011), *Outside the Rush* (2013), *Land* (2014), *Anthropocene Archive* (2017), *DANSK. Conceptual Danish Photography* (2019). Selected publications: *An Everchanging Monument* (2012), *The Power of Circumstance* (2020), *Hindsholm* (2022).

Anthology of Apertures

Aperture No. I – Casa Malaparte, Adalberto Libera (I), 2018.

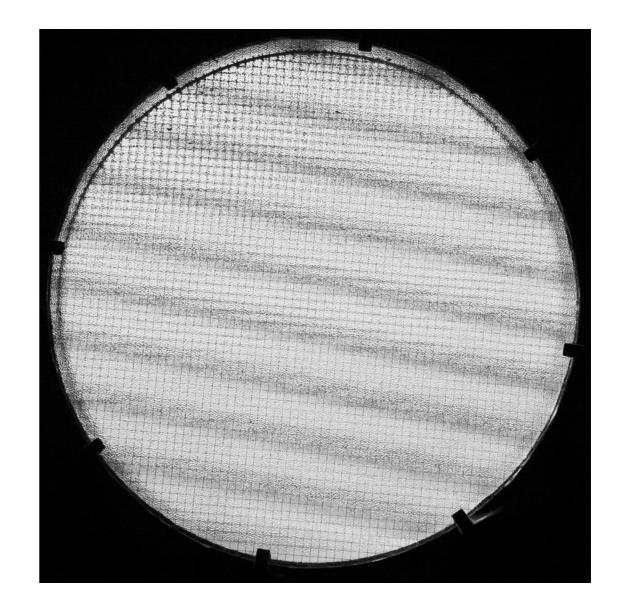
Aperture No. II – Tegner's Museum, Rudolf Tegner (DK), 2018.

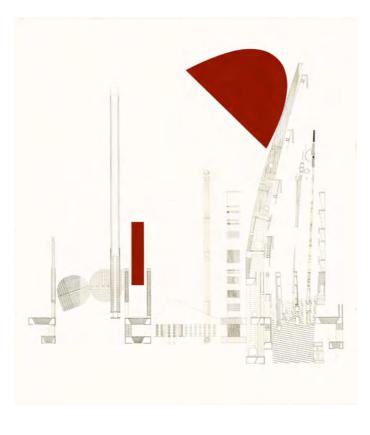
Aperture No. III – Villa, Chr. Kampmann (DK), 2021.

Aperture No. IV – Summerhouse, Arne Jacobsen (DK), 2021.

Aperture No. V – Tea House, Alvaro Siza (P), 2022

Aperture No. VI – Water Tower, Poul Holsøe & Ib Lunding (DK), 2022





David Gersten is an artist, architect, writer, and educator based in New York City. He is Distinguished Professor and Director of Interdisciplinary Learning at The Cooper Union for the Advancement of Science and Art, where he has taught since 1991 and has served as Associate Dean under Dean John Hejduk. Gersten is the founding Director and President of Arts Letters & Numbers, a non-profit arts and education organization dedicated to expanding the experiences understood as education. He works in collaboration with international organizations, educational and cultural institutions, and education policy groups including UNICEF, the United Nations Academic Impact division and recently presented a keynote address entitled "Unlocking the Creativity of Youth" at the UNICEF-EXPO and at the Chancellors Summit at CAFA in Beijing. He is a member of the Board of Directors of Big Picture Learning.

see to the bottom. At least I briefly thought I could. But it is of course impossible for metal to become transparent. Actually, I was seeing to the top." The Foundry Man took a piece of carbon and drew on the wall. "This is a section of a crucible." He drew the two curved sides of the vessel and the bottom. Then he drew a horizontal line through the middle. "The crucible is symmetrical along its horizon-

Archive of film effect on the world

全球形分类形性系统

Film Archive Archive de imagenes

Lugar para baser camaria

Archive de imagenes

Film Stage

String

Archive de peliculus

Film Stage

String

Archive de imagenes

Lugar para baser camaria

Archive de imagenes

Lugar para baser camaria

Eccole de Canema

Maturation Section

Section de la Maturation

Lecole de Canema

Eccole de Canema

tal axis. If the bronze is full to here," he darkened the horizontal line of symmetry within the crucible, "when it turns to liquid it will reflect everything above this line." The Foundry Man had understood a unique characteristic of poured bronze. Liquid bronze reflects everything around it. As it is being poured, all the images in the room—the walls, the floor, the ceiling—all of the people present at the pour are captured in the moving metal. The Foundry Man continued, "We built the Red Cyc with red clay mixed with fuel oil and chalk. We spread this mixture into a catenary structure, forming a thin shell covering the ground.

for a day and then we lit it on fire. I put the torch to the edge and the fire ran fast across the surface. It burned with tremendous force, and very hot. We could not get near it for two days. When the fire went out, we had the Red Cyc. Watching in silence as the Red Cyc was built, the Gardener felt calm. He was moved by the effort being made to care for him and the community. As a gardener, he collaborated with the Sun, the soil and the water to extract life from the Earth. But his distance as a farmer brought other things into focus. He learned about light, and how it bent between the Sun and the Earth. He learned how plants actually migrate like people or birds, how whole forests are walking across continents searching for places more suitable for their growth. This occurs over an imperceptible, long period of time. Even history is too quick to record the walking trees. As turning Sun's gun barrel revealed the figure of its crack, the Gardener's Turn revealed the figure of his crack. It was no longer his distance from the land that allowed for the landscape's enlargement or his attachment to the soil that nourished two natures. Rather, it was the attachment of the Red Sun of a second nature that maintained the distance. The Gardeners figure was Two Trees, a double nature linked through light. Echoing and rising from deep in the earth of the Glass Factory the farmer nourished Two Trees: one that film attaches itself to, one that is moved by that attachment. They are built of steel and glass.

When the entire catenary was full, we let it dry

Sculpture Park

A New Urban Imaginary

The John And Mary Pappajohn Sculpture Park (JMPSP) Des Moines, Iowa Agrest and Gandelsonas Architects*

The John and Mary Pappajohn Sculpture Park, (JMPSP) is a development of one of the major urban places proposed by Agrest and Gandelsonas Vision Plan I of 1990, the Gateway Park, as a gateway to Downtown Des Moines.

The JMPSP is the permanent locus of a major world class collection of contemporary sculptures donated by John and Mary Pappajohn to the Des Moines Art Center to be exhibited in Gateway Park,

The strategy of the design is to address not just the art but the city as well. with a new topography by means of an undulating surface. that stands in contrast with the context and provides various sequences for perceiving the sculptures. Some will see the sculptures from their cars entering or exiting the city, and others experience the park from within.

Scale, views and human interaction are essential to the design concept. virtual "rooms", through mounds that as "waves" as a counterpart create partial visual enclosures where clusters of sculptures are placed to be discovered and focused on. Parabolic waves rise

from the ground to a height of 8 feet at the highest point, descending in a natural slope' that open the views defined by the parabolic slanted concrete retaining walls. allowing for a variety of visual experiences through sequences of discovery through concealment and exposure. The Park becomes an extraordinary point of attraction at night as the concrete walls lit from below become reflecting surfaces that create together with the sculptures lighting, a new atmospheric urban experience.

* with RDG Landscape Architects

**original photo by Mark F. Khang

Diana Agrest, FAIA, is an internationally renowned architect, theoretician, author, educator and filmmaker. She is well known for her unique, pioneering and influential critical approach to architecture and urbanism practice, theory and pedagogy. She is a founding partner of Agrest and Gandelsonas Architects. Her designed and built projects globally have received numerous awards. She is a fellow of the American Institute of Architects and Distinguished Irwin S. Chanin Professor at the School of

Architecture of The Cooper Union.

Her books include: Architecture of Nature/ Nature of Architecture 2019; The Sex of Architecture, (edit. Agrest, Conway, Weisman); Agrest & Gandelsonas: Works; Architecture from Without: Theoretical Framings for a Critical Practice; A Romance with the City, etc.

Her work has been exhibited in museums, galleries and universities

She has written, produced and directed the feature documentary film "The Making of an Avant-Garde: The Institute for Architecture and Urban Studies 1967-1984"

The Image

The photographic image by
Diana Agrest is based on another
photograph** manipulated creating
an atmosphere that alludes to
the many different narratives
opened by the physical, social
and cultural juxtapositions of
the city, the architecture, and the
sculptures themselves in their own
poignant interconnections and
silent dialogues depending on the
viewpoint, recalling the silence and
the lonely bodies in the city asleep
of so many films and books creating
another imaginary for the city.



Peter Bertram is an architect, Ph.D., associate professor and programme leader of the master's programme Art and Architecture at the Royal Academy, Copenhagen.

Filippa Berglund is an architect, scenographer and associate professor at the master's programme Art and Architecture.

Høgni Hansen is an architect and associate professor at the master's programme Art and Architecture. He works at the architecture office Selmar Nielsen Arkitektur. The project has been developed for a site in Kyoto on the corner of two small streets.

It has no clear thermal boundary between inside and out. Inhabitants move between layers of the building in accordance with the rhythms of the day and changes of the wind, sun and heat. The smallest layer is their clothes or perhaps the kotatsu under which they warm their legs.

In the autumn, they erect a tentlike structure in the largest space to create a warm zone in the area that is most exposed to changes in the weather. The wires of the tent help the house withstand the pressure from strong winds. When the heat returns in the spring, they dismantle the tent and assemble the stiffening elements into slender columns that strengthen the walls.

The project pays hommage to the Japanese architects Kazuo Shinohara and Kiyonori Kikutake. It is informed by the spatial abundance in the modest structure of Umbrella House by Shinohara and by the ambiguity of Kikutake's metabolist dreams in Sky House. Surpringsingly, Kikutake once said that he saw himself as a feudal landowner and that Sky House was really an attempt to escape the city and save a plot of land. In reference, the largest space in our project has an earthen floor like a memory of a lost garden.

The house is transversed by different forces. It resonates with the wind, light and heat, and it trembles together with the earth beneath its feet. It is lifted by diagonal columns to be flexible during earthquakes and to facilitate the movement, traffic and parking below.

It uses generic materials and standard elements. It is assembled from uneven parts and contains smaller houses within its whole. No single idea or structural principle controls it. It must do with what is available and appears to balance on the point of falling apart.

Our ecological era is obsessed with the creation of resonance and haunted by dreams of the apocalypse.







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Sporadic Architecture

Small Architectures for Travelers

Small Architectures for Travelers

Re-occupation of a XVII Farmhouse Tower.

The project called for the structural consolidation of a XVII century farmhouse tower, for long time uninhabited and left in extremely precarious conditions by an earthquake (1976), and for its transformation, together with the adjacent separated twostories smaller structure, in a dwelling, a kind of retreat, for a single occupant. The historical nature of the artifact suggested also the maxium reduction and concentration of the interventions.

On the ground floor, inside the smaller building, the connective structure of the concrete "bathtub" necessary to unify the shallow underfoundations and footings of the original perimetral walls allowed for the articulation of a domestic landscape produced by the "imprint" of the body of the inhabitant descending into the ground: a sleeping platform, a toilet, a sink, a bathtub are carved out of monolithic concrete mass.

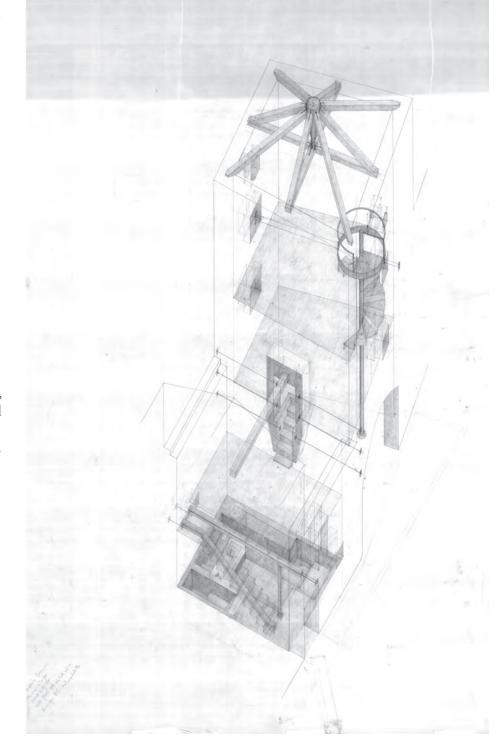
Upstairs, a portal-like element in reinforce concrete is inlayed in the wall between the small house and the tower. With its tie-rods this is the stabilizing element of the central wall of the complex; the opening, the result of the action of those very same tie-rods functioning as divaricators, connects the two buildings allowing for the insertion of a stair bridging the difference

elevations of the two floors: the particular solutions to the two approaches to the stair define it as an interior, as a space in itself, an unstable center as transitional space; the architrave of the portal consists of a composite steel bean tied to the armature inside of the concrete and supports the ridge beam of the roof of the lower building.

Because of the structural characteristic of the lower floor of the tower unable to support in a secure and stable manner the weight of a metal spiral stair leading to the top floor, its central structure is anchored directly to the ground, and stabilized at the top by means of a metal ring tight to three of the walls of the tower.

On the top floor a upside-down bottle-shape element with radiating fins provides to the stability of the original oversized, but typical for these type of constructions, wooden roof structure.

The architectural exploitation of the structural requirements and the pursue of the intersection between the structural (the tectonic) and the programmatic (the body), was assumed as the focus of the design, with the objective of creating multifunctional nodal elements functioning simultaneously at different programmatic levels and with the intention of rejecting the traditional totalizing nature of the architectural project. The body of the inhabitant, occupying the single micro architectures, and navigating the space between them, can continuously rewrite the spatial narrative of the existing structure, as a traveler traversing a landscape.



Distinguished Professor Adjunct, Cooper Union

Zuliani is an architect and an educator. He graduated 'summa cum laude' from the Università IUAV di Venezia. He has lectured extensively in Europe and in the United States and has been teaching at the Cooper Union since 1985. His recent publications include: La Città Implicita (2008 and 2015); End Games: Notes about John Hejduk's Architecture (2014): One. No-one. One Hundred Thousand: The Cooper Union of John Hejduk, Raimund Abraham, Peter Eisenman ... and many Others (2012); Evidence of Things Unseen (2006).



MOTHERBOARD

a collective territory



Motherboard—the central point for connections and memory is simultaneously a physical table in 1:1, a representation of the Hangar in 1:33,3. View of the tabletop.

The table: we gather around it to share meals, ideas and disagreements, play games and make plans. It is a tool for civilizing human interaction, and it is the most common-day object framing our daily routines and rituals, as well as functioning as a stage for starting wars and negotiating ceasefires. It is an architectural gesture, a construction lifting the ground to establish a framed territory for social interaction.

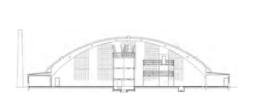
"Motherboard" — a central point for connections and memory — is simultaniously a physical table and a scale model of the former seaplane hangar at Holmen in Copenhagen, which now houses 150 students of architecture. The spatial gesture of the hangar, its large, open and flexible space, invites us to experiment with teaching formats and encourages a culture of collaborative practices. "Motherboard" is the beginning of a conversation about this shared territory. It is an object, a memory and a place for making things — together.

The table can be folded and extended into various positions, thereby changing the social dynamics around it. It is portable, which makes it possible to establish the hangar territory in various external contexts. We ask: can the table hold a memory of a unique culture that can be unfolded elsewhere. What makes 'a culture' and what roles do space and objects play?

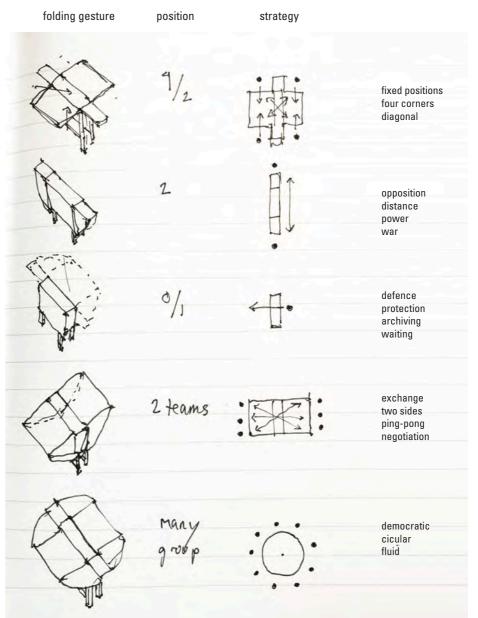
Ida Flarup and Maria Mengel are architects and associate teaching professors at the BA programme Finder Sted/Taking place in the seaplane hangar at Holmen.

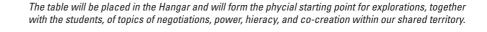
Alongside their teaching collaborations at the academy, they have founded the studio VAERK>STED and co-founded the exhibition space Modtar Projects, focusing on craft and direct spatial sketching in 1:1.

The Danish word 'omforandring' can be seen as a common denominator for their practice. It translates as 'change' and 'transformation' but also carries connotations of craft and can therefore be explained with words like alter, reorganize, renovate, adapt, repair and modernize.



Section of the Seaplane Hangar













Productive Objects:

Healing Domestic and Urban Experiments

This project is a direct reflection of my fascination with architectonics, effects of trauma and the intimacy of elements. At the onset of the pandemic lockdown, our daily rituals became abruptly compressed into a sequence of spatial limits within our domestic framework.

Having lived through another isolating parallel during my childhood in war torn Bosnia and Herzegovina [1992-1995], these domestic compressions became the inspiration for the forthcoming sequence of experimental objects, where the normative aspect of isolated [and usually singular] domestic functions was challenged. By intentionally maximizing their architectonic

potential through combination of multiple functions within a single form, these experiments create a field of hybrid elements such as stairs [exercise] and windows [ventilation/light] in parallel with everyday domestic objects such as beds, tables and chairs.

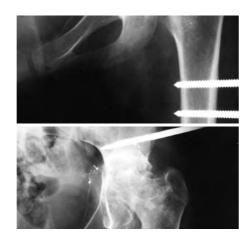
These experimetal objects hold multiple domestic rituals and functions at a critically health-conscientious time, while intentionally blurring architectonic boundaries between public and private thresholds where a bed can also function as a nourishing dining table for the city of New York, creating an environment of playfulness and healing.

Central Park, a pre-existing urban scale object is chosen as their ideal site. Since 1857, it has served programatically as a healthy object of New York that is visibly inclusive and accessible to all social and economic strata of our society, becoming once again a cherished place for New Yorkers looking for an escape at the peak of the pandemic influx.

The tectonic intimacy of these small-scale elements is amplified through quantity to create a larger urban effect.

The atmospheric [and healing] effects of nature such as the lush open fields and lakes of the urban park are used to situate and atmospherically activate this new sequence of intimately scaled objects within its 778 urban acres, in tandem with pre-existing traces of Central Park desks, benches and chairs, providing a tapestry of healing domestic urbanisms.

Mersiha Veledar is a practicing architect and an educator. She has lived in New York since she was fourteen years old, where she found refuge through The United Nations following her survival of war-inflicted injuries in Bosnia and Herzegovina. Graduate of The Cooper Union and Princeton University, she has been teaching and coordinating a range of award-winning studios and research seminars since 2005 at The Cooper Union that are grounded in the development of architectonics, fabrication, and finding novel ways of living. The genesis of her professional work and studio pedagogy originates in her "Architecture can Heal" Thesis which received numerous awards for development of universal elements common to all cultures.





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Photogrammetry models are constructed from images. They are, however, the thinnest of models; colored points, not solids, nor surfaces, nor lines, just non-dimensional dots triangulated into clusters of spatial locations. More precisely, they are arrays of colored instances rendering visable sampled electromagnetic radiation. Furthermore, when we as architects engage these objects, we view them as images on screens. They are images of models of images.

This phrase is a coupling. Most digital representation in architecture consists of images of models. These images can be manipulated to look like drawings, or photographs, or graphic illustrations depending on

the conventions of representation privileged. In other words, their appearance and reception depend on which "model" of images the designer seeks to engage. For architecture, the primary model has been that of surface edges denoted through lines projected to planes. This mode of representation comes with tools and techniques, it values certain qualities and obscures others, it ties into disciplinary discourse, and is regulated by professional protocols. It is important to emphasize, however, that this is only one kind of model for imaging.

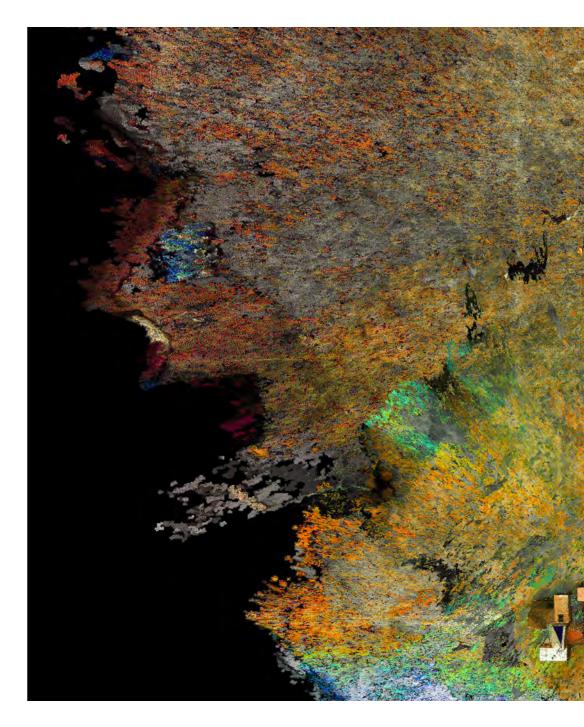
Photography proposes other conventions for thinking through images.

The photograph brings with it its own discourse around realism and deception, technology and objectivity, reproduction and dissemination. The most common assumption is that photography captures a moment from the past and reproduces it as an image for a future gaze. In this, the vector of time moves from "the real" to "the representation." Architecture considers photography primarily within this paradigm; the photo documents the built building. The architectural rendering is beholden to the same model, it is a documentation of a future built reality. But there is another possibility to consider. Kaja Silverman argues that photography operates analogically. It images a reality running parallel to embodied perception. In this model of imaging, the photograph's value as true or false, document or fiction, are inaccurate assessments. Instead, the photo is simply a different mode of sensing. To consider the photogrammetry as an analogy opens a potential to consider imaging not as a document of a frozen consistent past, but as an ever developing present. This shift in model allows architecture to not only ask what we can do with an image, but also speculate on what worlds are

anticipated modeled after images.

Michael Young is Partner at Young & Ayata and an Assistant Professor at The Cooper Union.

Kutan Ayata is Partner of Young & Ayata and an Associate Professor and Vice Chair at UCLA AUD.



26

St. Peter's Inverted Crucifixion:

Down to Earth, looking up to the heavens

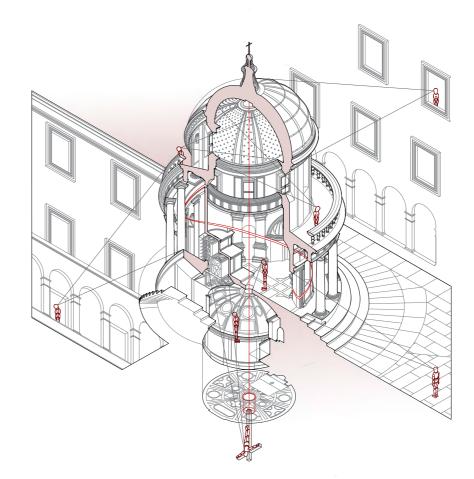
The altar of the Tempietto, located on axis with the entry into the courtyard of San Pietro in Montorio, appears to be composed of monolithic pieces of marble. It is distinct from the conventional altar conceived as a free-standing piece of furniture. Encrypted into the logic of the building's architecture, the altar is set against the outer wall, further thickening the mass of the load-bearing structure. Consistent with Robin Evans's article "Perturbed Circles" in The Projective Cast, the position of the altar contributes to the effect of multiple centers achieved in this building, and its de-centering underlines the importance of this

choice. Indeed, the altar is not only monolithic, but the inverse. It is composed of a series of thin marble slabs, behind which a cavity allows for a clerestory window into the crypt. The altar serves as the window's frame, and thus the two are co-dependent.

As partial as it may seem, the sectional detail of this altar reveals something about this building that not only subverts the conventions of its time, but also requires a form of representation beyond the normative techniques of drawing. Due to its curious spatial reciprocity, the figure-ground relationship between the space of the clerestory and

the form of the altar is so tight that the building is exempted of the poché characteristic of the structures of this period. If the mass of a traditional wall is meant to provide structural support for a building, it is also the means by which ancillary spaces such as niches and other figural voids can be carved out. The Tempietto does away with this mass altogether, ingeniously conjoining the two functions by using one as the alibi for the other—the altar gives light, and the clerestory offers mass.

This telltale detail of the Tempietto also exposes the difficulty of drawing complex circumstances that require simultaneously looking up and down, if only to show two facets of something inextricably bound together. For this reason, this small structure offers the ideal opportunity with which to advance a form of representation whose purpose is not to illustrate what is already known but to expose the inner workings of something that can only be unearthed forensically. This drawing is the result of the "flip-flop" technique, coined by Daniel Castor in his 1996 book Drawing Berlage's Exchange, where he demonstrates how this drawing type produces a beguiling form of visual ambiguity that



enables the eve to invert the perception of foreground and background. Not dissimilar to El Lissitzky's Abstract Cabinet 1927 drawing, Castor's isometric, constructed from a tri-fold 120-degree angle of projection, is distinct in its balanced bias towards the X, Y and Z axes all at once.

The architectural application of this technique resides in the latent alignment between the conventional bird's eye and worm's eye views, the latter often attributed to Auguste Choisy. If the bird's eve view exposes the world of the roof, the worm's eye reveals the inner workings of the dome, effectively

Donato Bramante conceived of both the Tempietto and St. Peter's Basilica a few years apart, making their conceptual connection somehow inevitable. The Tempietto, a martyrium dedicated to St. Peter, is a folly of sorts—at once a model, a mock-up and a miniature building in its own right with the gravitas of spatial, formal and linguistic tropes that advance the discourse of its time. In its crypt, a pit on center with the oculus, is purported to be the receptacle within which St. Peter's cross would have been planted upside down, looking up at the dome as it were. In light of the eventual dual-shell construction technique adopted for St. Peter's dome, one can understand the absolute necessity of looking up and down simultaneously, because the domes are not only symbolically divided but structurally semi-autonomous. By extension, even though the Tempietto is a single-shell structure, the flip-flop technique in this drawing demonstrates the instrumentality of also looking inside and outside simultaneously.

two different symbolic realms.

CREDITS: Nader Tehrani, Katherine Faulkner, Lisa LaCharité, Mitch Mackowiak

For his contributions to architecture as an art, Nader Tehrani is the recipient of the 2020 Arnold W. Brunner Memorial Prize from The American Academy of Arts and Letters, to which he was also elected as a Member in 2021, the highest form of recognition of artistic merit in The United States. Nader Tehrani is the Dean of The Irwin S. Chanin School of Architecture at The Cooper Union in New York. He is also Principal of NADAAA, a practice dedicated to the advancement of design innovation, interdisciplinary collaboration, and an intensive dialogue with the construction industry.

And yet, the gathering of potatoes and that of flowers are obviously not similar. When one gathers potatoes, one knows exactly where to look and when the work is done. The gathering narrows down to the 'picking up', and the chronology of the labour is strictly tied to the spatial expanse of the field. The labour can be planned, time consumption calculated and tasks carried out.



Gathering dust



Georgian wall ornament

gathering, shrinks. What grows instead is the roaming and rambling of the search. This rambling even encompasses the purpose or result of the gathering: one's aesthetical criteria for the bouquet change with every flower picked and with every twist of the route. There was no initial plan, an ideal bouquet, and then its fulfillment or realization, and yet, some strange image, a bouquet-ness, initiates the gathering in the first place, something guides the gathering subtly even before the first flower has been picked. This image is far more vague than a plan; it is rather an internal and shapeless image. It is a peculiar type, maybe not unlike an expectation, a mood or a feeling. The unpredictability

of the gathering is inherent in this

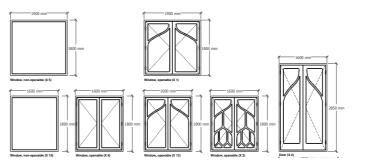
When gathering flowers, the mere

'picking up', the fulfillment of the

Peter Møller Rasmussen is an architect and PhD student at the Royal Danish Academy. In his PhD project, he deals with exposedness, uncertainty and risk in rural dwellings, including i.a. both traditional and contemporary precarious forms of housing in the Danish countryside and vernacular Georgian wooden construction.

Josefine Bols is a student at Architecture & Landscape at the Royal Danish Academy. The fascination with traditional building customs and Georgia's unique cultural heritage has shaped Josefine's studies, both from home and from Tbilisi.

Thanks to Pernille Vincents for valuable help in this project.



Window types, overview

type. It is at once no particular bouquet and all possible bouquets. Similarly, no clear point in time or space determines when the job is done. However, all roaming comes to an end, and all flower bouquets have a size.

The scatteredness and dispersedness of the field is retained in the bouquet. Is it not true that the unity or simplicity of a bouquet comes across as a proliferation (rather than a narrowing down) of possibilities? The multiplicity of the route, its turns, places, environments and worlds, is present in the bouquet, which is a bundle of minor choices. A bouquet is a collection with an inherent incompleteness: it never claims to be a botanical overview or to exhaust the range of possible bouquets. And yet, half a bouquet is still a bouquet, half a rambling is still a rambling... As a thing, the bouquet is complete at every moment, however simple, however paltry.

In practices of gathering, there is both pushing forwards and turning back, there is play, groping in the dark, roughness and the element of chance. Gloom is also there, as well as grace and luck. There is the performance of simple tasks, gathering what needs to be gathered, the discarded as well as the adored.

And there is being exposed: to the elements, to people, to the risk of failure and to losing your way. Therefore, gathering is always hopeful. It dares, out of necessity, to hope for the unhoped, for that which could never be fully anticipated or planned in advance, for that which arrives, just like joy, without wage or contract.



North and south facades



Interior view, Big Sori

This mode of expectation is very far from the mere foreseeing of the fulfillment of our plans. It is, in the words of Lana del Rey, 'remembering that the world is conspiring for you and to act in a manner as such'.

Hope, in this sense, is a mood, an attunement, a certain trustful attitude towards change and the future. The 'strength' of hopefulness is not to be mistaken for the 'force' to shape the stuff of creation to our will. Rather, it is the courage to face and appreciate the turns of things, of events and of our lives as fundamentally open and undecided.

'Big Sori' is our name for an abandoned and unfinished school building constructed towards the end of Georgia's Soviet period. The model in this exhibition is part of a project for re-inhabiting the building.

The Flower Kiosk

Lewerentz: a mother: a daughter

The constructed, the embodied, an imprint of time. Here, the outer and inner spaces interplay, light and shadow draw the lines of their dynamics; here, time and body entwine, like an archive of memory.



Our collective B O D Y is kneaded and carved – sculpted into shape. Each layer carries traces of the bodies and lives that form our interlaced place, our belonging over time, with the voice of the body and its composed language a grammar of proportions, scale and interrelations. We sense its relation to place, the external and internal landscapes where our bodies and lives are framed, interlaced into a here and now.

In the landscape of E X T E R N A L S P A C E, a condensed movement is created in composition with the constructed body. The movement and its dynamics span the room, both horizontally and vertically. Here, boundaries can be blurred and freedom finds its way in. In crevices, shafts and passages, mazes of imagination and reality

are formed. Through the boundless external space, the winding movement of thought and body is enabled, the memory, the body's thought. Mazes of imagination and reality are formed. Through the boundless external space, the body is enabled, the memory, the body's thought.

ensues; everything stops for a few seconds, eyes are directed through us towards a distant time, a place where life's beginning once embraced us.

Petra Gipp is an architect based in Sweden and a member of the Royal Swedish Academy of Fine Arts.

Her work seeks a seamless blend of architectural and sculptural expression. The casted models and sculptures sit at the core of her architectural expression and provide one of the central methods to the architecture office that she founded in Stockholm in 2009.

Her well-known works have won many awards and have been published and exhibited extensively, including four times at the Venice Architecture Biennale.



Productive Failure

A Matter of Choice

"Nature's inadvertence has its own charm, its own attractiveness. The way loaves of bread split open on top in the oven: the ridges are just byproducts of the baking, and yet pleasing, somehow: they rouse our appetite without knowing why.

Or how ripe figs begin to burst, and olives on the point of falling, the shadow of decay gives them a peculiar beauty."

— Marcus Aurelius: Meditations

Failure is inherent in the very act of hand drawing. No matter how exquisitely executed, there is something wrong with every drawing ever made. Here is the painter Delacroix describing his practice:

"I must make many sketches and take my time. That above all is where I need to make progress ...
The main thing is to avoid that
infernal facility of the brush.
Instead, make the medium difficult
to work with—that would be
completely new. Make the medium
resistant, so as to conquer it
patiently. The artist who aims at
perfection in everything achieves it
in nothing."

Delacroix is purposefully setting up a scheme for difficulty; a tactic for failure. And why? To what end? I return to Marcus Aurelius' speculation that in inadvertency, the thing not expected, the flaw, the moment of decay, we find possibility—perhaps something completely new.

In the act of drawing a mark is made on a pristine surface leading to another mark and another. It is a risky business. What will come of it? Perhaps the marks agglomerate to something in the wrong position—must be erased, modified. Added to, subtracted from. Struggled with, reassessed, and finally considered finished—more or less. A colleague, I am told, once described The Advanced Drawing Seminar as "Dirty Drawing." I believe it was not meant to flatter. However, it gave the title for a chapter in my book, Architects Draw. I quote from it here:

Imagination lies in the realm of memory and dreams, deeply rooted in the facts, forms, events and spaces of our actual lives. Flights of fancy take off from that which can be touched, tasted, measured and observed. We dream in images ...

[We seek to translate our fleeting images, and our observations to paper.] The "dirt" in the chapter heading refers to the fallout from charcoal, pencil, pastel, pen and ink wash; it is the fingerprints, smudges, erasure, spatters, and drips of wash. It derives from the repetitive process of searching through drawing, of sifting through layers to find the gold-the essential element. The struggle to conquer a particular medium is only part of the endeavor-it is the struggle to find resonance between the visual world as it engages our eye and the realm of our imaginings.

Like the process of creative writing in which the author writes and rewrites again and again, the drawing process goes beyond merely correcting or expunging lines or tonalities that seemed tentatively embraced in the first study. It simultaneously leads to rethinking and ... [at times] altering the direction of the intended work, itself.

So what is being said here regarding risk, control and productive failure? I would propose that the free hand engaged in drawing travels in a landscape constantly reconfigured by these three coordinates.

Not infrequently I've told students I promise to teach them nothing useful. In the Advanced Drawing Seminar students are asked to create a folio of drawing on themes of their own choosing. Often enough we wander in the desert for some weeks. Sometimes it is in the odd corner of a page of sketches that a thesis is discovered. The inner surface of an orange rind leads to the unfurling of a landscape. A small portrait sketch evolves into studies of dreadlocks sculpting a head. Scale can be insignificantly tiny-small shards of glass and the reflections and shadows they cast suggesting monumental dimensions-the fumes of Niagara Falls contained on a finite piece of paper. What are the skills needed? What media best suit the project? Invention demands stumbling failure if you will.

The term "drawing" implies stretching, pulling, but not yet arriving. It implies yearning. We draw an arrow—it has not yet been shot. It might reach its target - or not. We are drawn to one another but we have not yet embraced. A talk I will give may draw to a conclusion, but I still might be speaking.

In the space between the image yearned for and the stumbling, tentative, sometimes mistaken attempts to get there, in such inadvertencies lies the surprise, the possibility for invention, for something entirely new.





Susan Ferguson Gussow Professor Emerita, Cooper Union

Gussow is a figurative painter who works in a wide range of drawing and painting media. She is a graduate of The Cooper Union, Columbia University and holds a Masters of Fine Art from Tulane University. Professor Gussow has served on the faculties of both the School of Art and The Irwin S. Chanin School of Architecture at The Cooper Union. Professor Gussow's work is widely represented in the collections of various museums around the world. She is the author of Architects Draw, Princeton Architectural Press, 2008.



There is nothing ordinary about the interior spaces and structure of the Brønshøj Water Tower. We became aware of this on our first encounter during winter in preparation for the exhibition. The space is full and empty at the the space. Sounds from our feet and ground meet and our subdued conversations keep flowing and Dim light flows in from circular



The Danaides by John William Waterhouse, 1903, detail

same time. A tall forest of concrete columns on 2x2 pyramid bases fills bouncing round and round until the space is full of a restless humming. openings spiralling upwards.

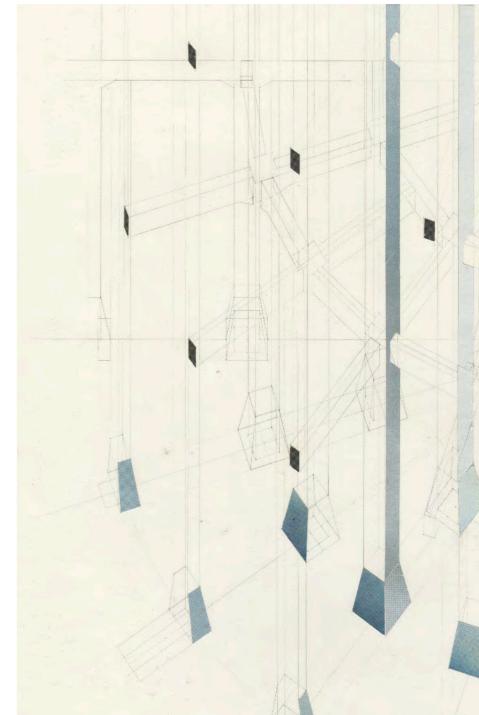
The enormous structure was built with the purpose to hold a massive water basin up high to increase water pressure. The space beneath is secondary. It just happened.

This contribution to the exhibition (title) invites the tower to participate. Colleagues and visitors are invited too.

During the exhibition, a series of encounters will unfold, both situated and collective encounters with and within the Brønshøj Water Tower.

We bring recording devises and media that are slightly off, strangely big or unhandy different from our ordinary tools we know so well — in order to let us stumble a bit and help us to open up and be permeable, to listen deeply and respond intuitively — to hear the building speak. We will go behind our own backs to avoid being clever. We will act first and think later.

My role is to facilitate these encounters of co-participation.



Tine Bernstorff Aagaard is an associate professor at the Royal Danish Academy.

She started teaching in 2010 at the Aarhus School of Architecture and from 2014 at the Royal Danish Academy. In 2012, she was involved in founding the interdisciplinary school Arts Letters & Numbers, Upstate New York, and was a fellow until 2017. Her interest in creating the framework and space to ask and embody questions collectively and 'in the flesh' flows back and forth between her teaching and own practice.

TYPE 288, 289, 290

The models investigate approaches to the densification of detached tract housing neighbourhoods from the 1960s and 1970s — a theoretical field of development for the protection of an endangered architectural type.

The Danish tract housing of the period, seen as a 'framework for the good life', has outplayed its role in contemporary housing estates. The houses rarely live up to today's demands for size, floor plan, room height and indoor climate.

Many of the early and relatively modest houses are located on attractive grounds near big cities. Increases in the housing market over the years have created great value for the individual owners.

resulting in the development of new, larger and more upto-date catalogue homes.

After half a century, many of the early houses are therefore facing demolition.

The detached house plots in these neighbourhoods are subdivided into small units, in accordance with the smaller houses of the time. Today, dispensation is given for building larger houses on the small plots, resulting in a shift in density in the area.

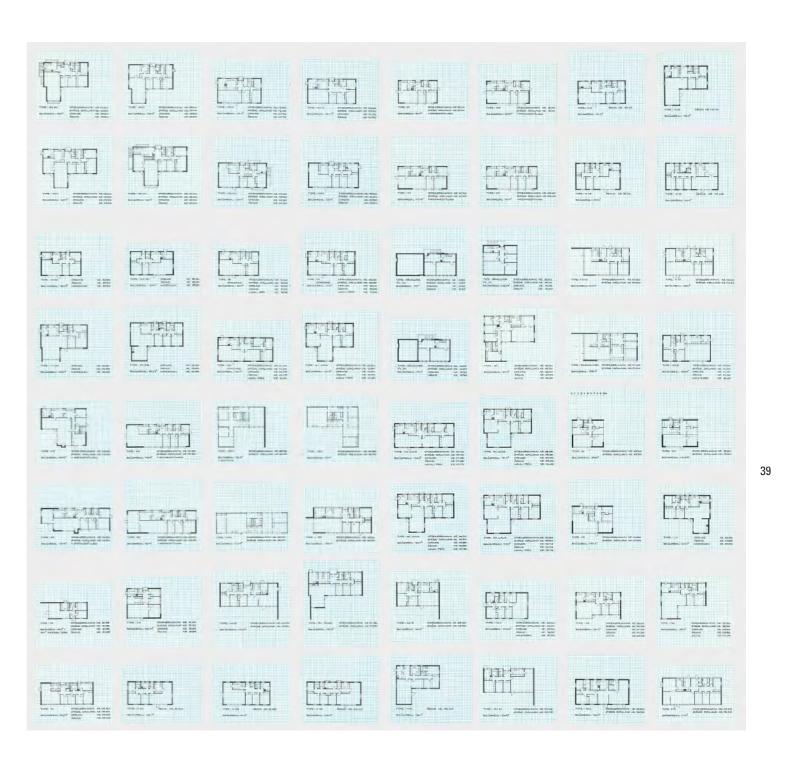
The models have been developed through a diagrammatic reading of the most pronounced floor plans of the 1960s Danish tract housing and suggest three new types of houses with open floor plans and several stories.

The models are part of a larger work dealing with tract housing from the 1960s and 1970s.

The work examines how to categorize houses from the period with the aim to crystalize an architectural type. With the hypothesis that if the tract house is to be viable through time, it must have an architectural and cultural value beyond its programmatic function and political agenda – since these tend to change over time. However, the architectural clarity characterizing the category is not to be neglected and draws a clear image of an architectural type.

Thomas Harboe and Tobias Fennö are Copenhagen-based architects active in teaching and research at the Royal Danish Academy – master's programme – Art and Architecture.

 $\label{eq:Besides} \textbf{Besides teaching, they have their own architectural practices.}$



Fluidity and Containment

What does practices of risk, control, and productive failure entail? Our question occurs here in the context of artistic research in architecture, yet is risk, control, and productive failure something particular to this kind of research? Does it describe any kind of practice? Or does it describe artistic research in architecture to a larger extent in comparison with other practices – if practices are understood as processes, methods, or even of habits – for instance, the practices of medicine and law, the practices of cleaning and cooking, or the practices of daydreaming and falling in love?

Perhaps risk, control, and productive failure – just like their antonyms: safety, chaos, and unproductive success – describe not only certain practices but can be seen as elements of an ontological exploration of action. Our question points to the relationship between the foreseeable and the unforeseeable, in terms of process and in terms of result. A consideration of how to balance or rather how to shift dialectically between risk and safety, chaos and control leading to something that somebody thinks is a failure or a success, not only as such but in relation to something and hence as being

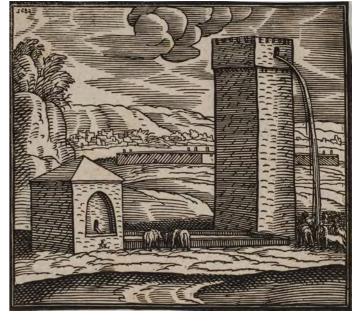
either productive or unproductive. Materiality and sociality present themselves as horizons on which our question is positioned. These practices have material implications, they may even result in what we consider as works, that is, exactly the work of somebody and something which works. And those practices and works occur in social contexts, perhaps even in what is sometimes called cultures.¹

Traces of a common, cross-continental culture may indeed be identified in the works presented in this exhibition. Dialectical measures characterize several of the works. It reminds me of John Hejduk's famous nine square problem; this simple exercise of exploring formal characteristics that several of the participants in this exhibition would perhaps have encountered themselves as students or teachers. As Hejduk states: "The nine square falls between two poles, one of complete fluidity and one of complete containment." It is illustrated by Hejduk with a hand-drawn diagrammatic sketch showing the sixteen square footprints of the pillars of a nine square, contrasted by a single serpentine line undulating in and out between

all the pillars of the periphery of the square, thereby forming a strange, tentacular creature, not unlike the head of Medusa herself. To Hejduk, fluidity and containment are the two significant and basic poles. Anders Abraham later developed these poles into an architectural theory of his own, describing not nine squares but nine conditions of architecture between liquid and solid and relating these conditions to a contemporary urban situation, what he would describe as a new nature, our post-nature-culture-dichotomous situation.³

I find it highly fascinating that these ideas should be allowed to resonate in the spectacular interior space of the Brønshøj water tower. For is a water tower not exactly an apparatus which is all about fluidity and containment, the liquid and the solid? This temporary collection and stalling of the mass and the movements of water. Is the containment of water, this fluid element, a practice of risk, control, and productive failure? In fact, could the water tower itself be considered a metaphor for artistic research in architecture, an emblem, an image?

Let us look at an image of a water tower: A woodcut by the Danish artist Melchior Lorck, dated 1582. We don't know where Lorck saw this tower – if anywhere at all, it might be an entirely imaginary scene. This tower is also quite different from the Brønshøj water tower, since the water streams directly from its top in a single iet down to the ground where horses are gathered. The architectural composition is rather simple, consisting of a well with an arched niche and a pyramidal roof, a rectangular through, from which two horses are drinking, and the taller, rectangular tower from which the stream falls. Here, the tower is not only a device for containing the water, but also for letting it escape, the tower as facilitator. Further back we notice a large, low building, perhaps the stables in which the horses are kept. And in the background: more buildings, maybe a town in front of the mountains. Seen in this perspective,



Melchior Lorck. Landscape with well, watering-trough, and a tall, rectangular tower from whose top water is streaming. 1582. Woodcut. Statens Museum for Kunst. Public Domain.

the tower reaches above the mountains and into the sky, nearly touching the cumulus clouds. While the water must somehow have been pumped to the top, the tower also connects the water to one of its own sources: the watery clouds in the sky. Lorck's tower not only contains the water but also facilitates and connects. Concurrently controlling and letting flow.

At times, the relationship between fluidity and containment is reversed. Deluges swallow and erase buildings, landscape, and lives. The terror of the deluge epitomizes the uncontrollable energy of water, indeed its risk. An etching made in 1651–52 by the Dutch artist Reinier Nooms also known as Zeeman (*sailor*) is inscribed L'EAU (*water*). It is part of his series visualizing the four elements. This is what water is like: fluid, in movement, destructive. Troubled waters, tearing apart a ship, its masts and sails torn out of position. Sea and sky merging. Only as closer look reveals the real dread. This is not a regular storm, for

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Martin Søberg, PhD, is an art historian and Associate Professor at the Institute of Architecture and Culture at the Royal Danish Academy. His field of research includes architectural theory, artistic research, and poetics. He is author of the research-based monograph *Kay Fisker: Works and Ideas in Danish Modern Architecture* (Bloomsbury, 2021) and co-editor of several

books including Architectures of Dismantling and Restructuring: Spaces of Danish Welfare, 1970–Present (Lars Müller Publishers, 2022), The Artful Plan: Architectural Drawing Reconfigured (Birkhäuser, 2020), and Refractions:

Artistic Research in Architecture (Architectural Publisher B, 2016).

amidst the waves the roof of a house appears, onto which some tiny human figures have climbed for escape and rescue. Further away, a tower, tall and slender, behind it more towers. An entire town has disappeared, perhaps following the destruction of a protecting dike caused by the tempest. A sailor would surely be familiar with the temper of water and knowledgeable of how to ride its waves and streams, that is, to respond to its energies. Only the structuring frame of the image can contain this violent fluid element and facilitate it into the confinements of our imagination.

While Reinier Nooms' water was entirely unrestful, water appears in a state of utter calm in a gouache by the Danish artist Johanna Fosie, made between 1748 and 1759. It is a study a purple and white primrose in a glass of water. The single stalk forms an arching green diagonal through the glass and points to the cast shadow in the lower right-hand corner. The amorphous group of flowers contrasts the clear conic shape of the glass, the water has settled within this shape and brings life to the flowers, allowing them to bloom for at least a while longer. Glass and water, equally transparent, allow the paper to shine through, contrary to the opaque purple of the petals. Plant and water controlled by the

human gestures and the shape of the glass, fragile, sensitive to surrounding elements, yet the flowers are also just about to escape the brim of the glass, pouring themselves over the edge, just like the water in the opposite corner seems to seep out of the glass in the form of a watery shadow. Although the fluid element per se, water, appears to be completely contained, Fosie allows fluidity to mark itself in alternative ways: as pouring, spilling, oozing, leaking, or soaking parts.

A final image, letting us return to the storage of water. Giovanni Battista Piranesi's etching *Plan and section of the reservoir in the vineyards of the Jesuit Fathers in Castel Gandolfo* from 1764, presents the pole of fluidity as well as the pole of containment. It includes not a nine but a twenty-eight square grid, the tall pillars of which appear to be carrying rounded arches. The section is particularly intriguing. A subterranean structure, the reservoir is buried underneath the slopes of a mountain, covered in trees and shrubbery. Below this messiness of plants and earth lies the cathedral-like spaces of the reservoir, the section spanning the length of seven arches. Most curiously, however, the pillars are intersected by a rather strange horizontal strip of land, perhaps as to indicate the slant of the



Reinier Nooms. *Water.* 1651–52. Etching. Statens Museum for Kunst. Public Domain.

outside topography. This irregular strip features plants and even tiny human figures, one of whom seems to be wildly gesticulating. The strip indicates a connection between the outside landscape and the secluded space of the reservoir, like a stream of water flowing through these sacred halls, yet water itself is completely absent. Here, at the brink of the Enlightenment, nature already opposes culture in the shape of functional architecture, yet this opposition, in the eyes of Piranesi, appears to be only temporary. Nature returns, new amalgamated conditions arise.



Johanna Fosie. *Study of flowers in a glass of water.* 1748–59. Gouache. Statens Museum for Kunst. Public Domain.

As these visual examples suggest, fluidity and containment can be positioned in a dialectical relationship, yet they are not equally significant. Containment is a temporary state, while fluidity may be conceived of as a profound ontological principle. In his book *The Life of Plants*, the Italian philosopher Emanuele Coccia argues that:

Fluidity is not a state of aggregation of matter: it is the way in which the world constitutes itself in the living and in front of it. Fluid is any matter that, regardless of its solid, liquid, or gaseous state, extends its forms into an image of itself, be it as a perception or as a physical continuity. If all living beings cannot exist other than in a fluid environment, it is because life contributes to the constitution of a world of this sort, perpetually unstable and constantly caught up in a motion of self-multiplication and self-differentiation.⁴

What does this imply to the practices of risk, control, and productive failure? Architecture, as an act of containment, may be part of attempts to constitute a world. Yet only by relating such measures to the recognition of the fluidity in and through which we exist, can architecture be truly *productive* in the original sense of the word: a practice of bringing forth.

Endnotes

- For more on this, see Martin Søberg, "En lille del af arkitekturen," Magasin for Bygningskunst og Kultur 1 (2021), https://bygningskunstogkultur.dk/nr-1-2021/lille-delaf-arkitekturen.
- 2 John Hejduk, *Mask of Medusa*, ed. Kim Shkapich (New York: Rizzoli, 1985), 38.
- 3 Anders Abraham, *A New Nature: 9 Architectural Conditions between Liquid and Solid* (Zurich: Lars Müller Publishers, 2015).
- Emanuele Coccia, *The Life of Plants: A Metaphysics of Mixture*, trans. Dylan J. Montanari (Cambridge: Polity Press, 2019), 30–31.