

Title and brief Description	Surrealist Thames-side Piers
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Additional Information	

Originality

Surrealist Thames-side Piers challenges the relationship of our multiple of grounds when constructing building in architecture.

Rigor

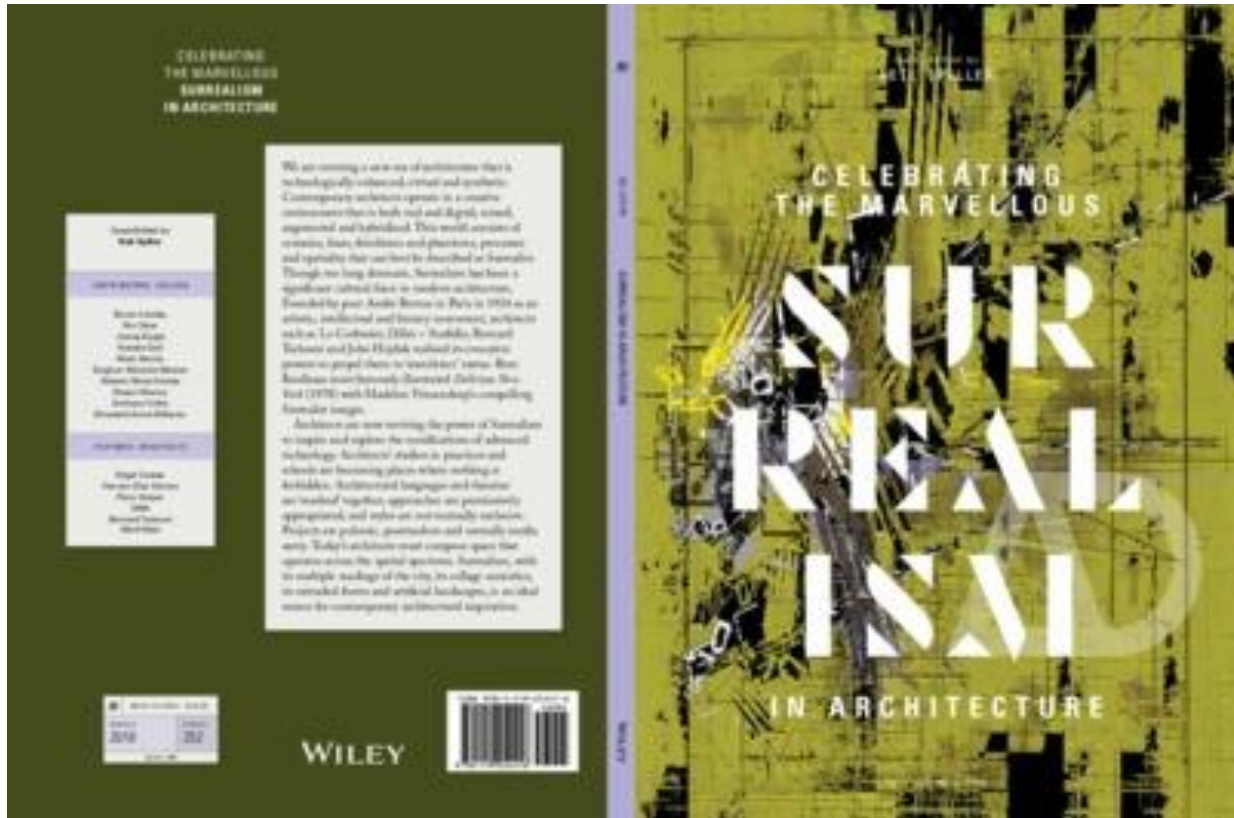
The project uses a new methodology in the construction of drawing in architectural design and the detail of a '26 rule translation' in how a drawing can communicate architecture through drawing.

Significance

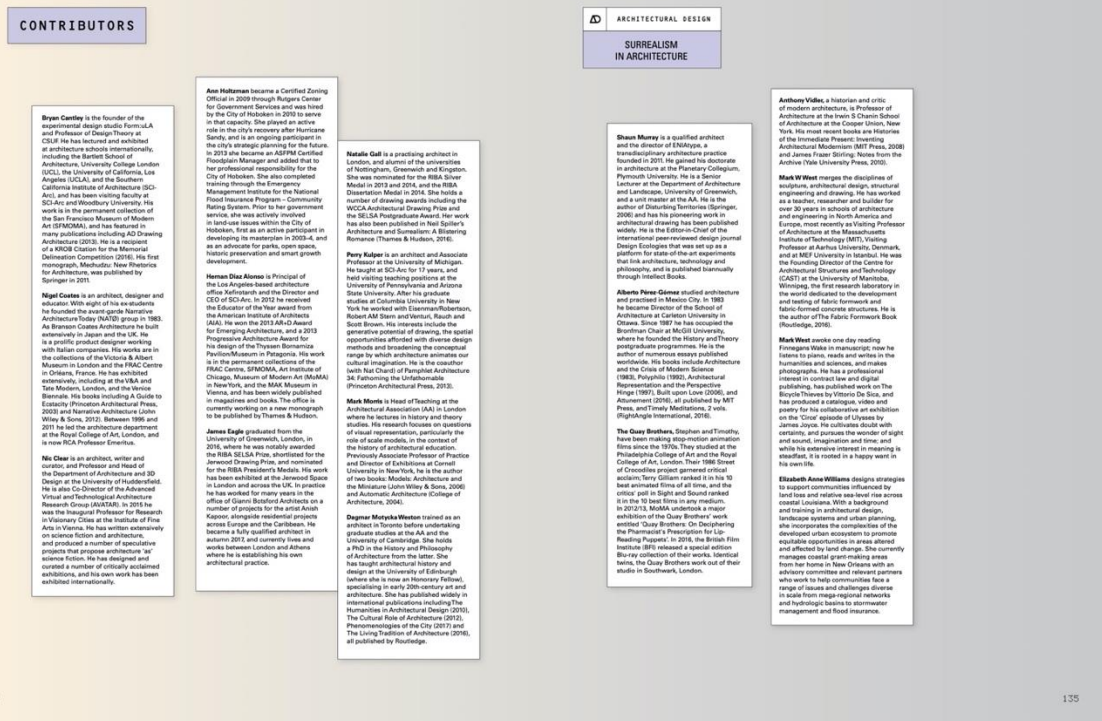
The author has been invited to exhibit in Shanghai and I was invited to become a member of 'Figurations Research Group' at the Bartlett School of Architecture which presents an annual conference. Taking Lyotard's notion of the figural as a departure point for traversing realms of

history, theory, design, research and pedagogy, through writing, drawing, film-making and performance, crossing the real, the fictional and the imaginary. The members include: Professor Nat Chard, Professor Jane Rendell, Dr. Robin Wilson, Professor Frederic Migayrou, Dr. Nada Subotincic, Dr. Sophie Read and Dr. Shaun Murray. Another outcome of this article that I was invited to present at the Drawing Architecture Research Group in the New York Times Building on 4-6th April 2019. The members include: Professor Michael Webb (Providence), Professor Perry Kulper, US, Ann Arbor (University of Michigan), Professor Bryan Cantley, US, Los Angeles (California State University), Dr. Natalija (Nada) Subotincic, Canada (University of Manitoba), Professor Nat Chard, UK, London (UCL Bartlett School of Architecture), Professor Neil Spiller, UK, London (Editor AD), Professor Marc West, Canada (Surviving Logic Atelier), Dr. Shaun Murray, UK, London (ENIAtype, University of Greenwich), Dr. Riet Eeckhout, Belgium (KULeuven), Professor Mark Smout, UK, London (UCL Bartlett School of Architecture), Professor Laura Allen, UK, London (UCL Bartlett School of Architecture), Professor Peter Cook, UK, London (UCL Bartlett School of Architecture), Professor William Menking, US, New York (Pratt Institute, History and Theory), Professor Michael Young, US, New York (The Cooper Union), Dr. Mark Dorrian, UK, Edinburgh (University of Edinburgh), Dr. Arnaud Hendrickx, Belgium (KULeuven).

Surrealist Thames-side Piers (documents, dissemination and Impact)



Murray, Shaun 2018. The front and inside cover of the publication Architectural Design, Celebrating the Marvellous, Surrealism in Architecture on April 2018.



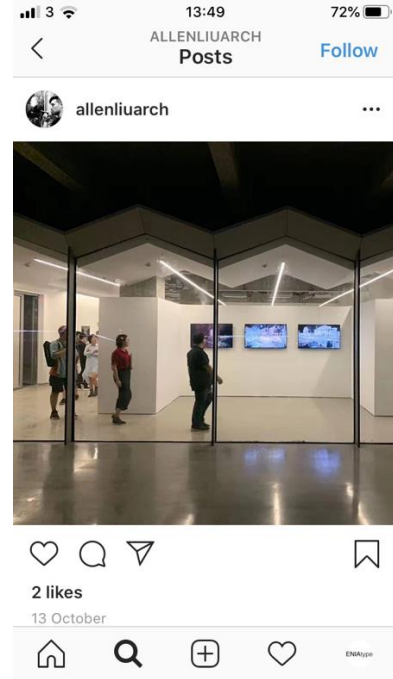
Murray, Shaun 2018. The contributors of the publication Architectural Design, Celebrating the Marvellous, Surrealism in Architecture on April 2018.



Murray, Shaun 2018. Exhibition to contribute the publication Architectural Design, Celebrating the Marvellous, Surrealism in Architecture at University of Greenwich on April 2018.



Murray, Shaun 2018. Exhibition to contribute the publication Architectural Design, Celebrating the Marvellous, Surrealism in Architecture at University of Greenwich on April 2018.



Murray, Shaun 2019. Images of Exhibition in Shanghai to contribute to Surrealist Thames-side Piers Project in Shanghai on November 2019.



Murray, Shaun 2019. Poster of Exhibition in Shanghai to contribute to Surrealist Thames-side Piers Project in Shanghai on November 2019.

ARTICLES

Greenwich architect showcases work in Shanghai



A University of Greenwich architect's drawings are on display as part of an international exhibition in Shanghai.

📅 22 October 2019



Murray, Shaun 2019. Article on University of Greenwich website to contribute to Surrealist Thames-side Piers Project in Shanghai on November 2019.

Dr Shaun Murray's drawings are being shown in the 'Sensorium' exhibition in Shanghai from 01 October to 30 November. 'Sensorium' is part of the Shanghai Urban Space Art Season 2019 (SUSAS), a series of exhibitions examining waterfronts.

The drawings feature two abandoned piers on the River Thames and are part of a project called Tellurian Relics, which investigates architectural space using the experimental practice, ENIAtype – an interdisciplinary practice which unpacks the complexities of the environment through architecture.

A senior lecturer at the university and the director of experimental design studio ENIAtype, Dr Murray said: "The design of architecture is more than the formation of discrete objects in space. It is also about the choreography of highly complex spacetime entities that are both organic and inorganic. Through my work, I have developed techniques that facilitate the understanding of this complex architectural space, using the experimental practice – ENIAtype.

"I am proud that my drawings are being exhibited internationally, and that as part of the University of Greenwich, my colleagues and I, are continuing to develop new collaborations."

Dr Murray is part of an international group of



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– ENIAtype.

"I am proud that my drawings are being exhibited internationally, and that as part of the University of Greenwich, my colleagues and I, are continuing to develop new collaborations."

Dr Murray is part of an international group of architectural artists who meet bi-annually to discuss the production and exhibition of architectural drawings.

In 2020, Dr Murray's drawings will be on display in New York at The Cooper Union, and in 2021, they will be shown in Los Angeles at the A+D Museum.



Murray, Shaun 2019. Article on University of Greenwich website to contribute to Surrealist Thames-side Piers Project in Shanghai on November 2019.

Document

Tellurian Relics

Surrealist Thames-side Piers

Shaun Murray

The Tellurian Relics project begins with the provisional premise that our environment is composed of a multiplicity of grounds, but that these are generally unforeseen since they arise with the emergence of the species that forms them. Ground and species are one. Through an understanding that objects cannot be fully explained in terms of their material constituents and the energy within them, 'objects' seems to be something over and above the material components that make it up, but at the same time it can be expressed only through the organisation of matter and energy. It is also possible to distinguish that different participants have different Umwelten (the environmental factors), collectively, that are capable of affecting the behaviour of an ENIAtype architecture), even though they share the same environment. This paradox enables architecture practices to go beyond shaping geometry, to shaping the internal structure of material. Two abandoned piers, in the River Thames in London, are used as the context for this investigation. The enquiry considers the piers as a harbinger for a more meaningful ecology of telluric (of the earth) dynamics, whereby the relationship of the multiple Umwelten can be tuned into through participants. Through this approach to design in architecture, the architects would become the editors of the environment, with this project exploring the complexities of tribological advances, friction and lubrication and wear, of ground in relative motion.

The project unpacks a telluric architecture over three periods of time, one pier that is splayed into a triptych of enia-drawings with three reconfigurable architectures of foreground, mid-ground and background. Enia-drawings are drawings that have four layers of interacting parts focused on ecological, notational, instructional and aesthetical elements. The application of different technologies enables the collapse of drawing onto buildings – a collapse that bifurcates the designing of buildings where drawing is building and the design of buildings is drawing. The diversity and complexity of all the components in an ecological study requires studying organisms within their environments. Through an ecological model in architectural practice, it is possible to connect many fields and areas of expertise, and in so doing to illustrate holistic

aspects of components and their relationships to one another within their spatial community. To view ecology as a model is to integrate the design into the ecology of the place.

The global issue of 'urban compression' in the future of our cities has led us to investigate new interventions that operate through intuitionism and novel methodologies of practicing architectural design in our built environment. Advanced tribological strategies through enia-drawings strive to capture, reduce and redesign future buildings in London. This initiative proposes an extended city reconstituted from its own ground materials through tribological advances. All the enia-drawings in this article aim to reveal triboluminescence, which is the optical phenomenon in which light is generated through the breaking of chemical bonds in a material when it is pulled apart, ripped scratched crushed or rubbed. The concept remakes the city by utilizing all the materials entombed in the ungrounding process of construction. Integrating advances in additive printing techniques, geotechnical instruments and ground penetrating radar, the materials exhumed from the ground below and above the piers can be crafted to construct different material combinations to serve different purposes in the design. From the abandoned piers, readings were taken of the chemical and biological compositions from above and below the ground surrounding the pier, to propose a new idea of the ground as something different to what it has become through the use of advanced technologies. Below the piers, bathymetric studies (to reveal underwater topography) and ground-penetrating radar surveys inform assemblages, forging links, severing links and doing so out of immanent potentials and tendencies within the network in such a way as to generate new potentials. The purpose was to use the rock below the piers as the principal structural material, with little disturbance during excavation, and to provide as minimal a support system as possible for the telluric architecture. For this purpose, determinations of geological and geotechnical conditions existing below the piers and simulation of these circumstances were used for appropriate excavation and support systems as necessary. Rock mass classification systems and numerical analysis methods were used together to form a subterranean opening below the piers. Above the piers, remote-sensing devices were employed to gauge temperature, wind strength and humidity over three periods of time, to suggest weather itself as a construction material and to develop a new building process of friction force which is independent of velocity once motion starts. No matter how fast you push two materials together, it will experience the same amount of resistance.

The architecture of 'Surrealist Thames-side Piers' presents the notion that the whole of the architectural process is a performance. We are constantly caught between the act of making and the experience of making – and involved within the doubt of both.

Telluric Relics operates as a semiotic particle accelerator. It crashes fragments together that have little obvious affinity and even negative, or mutually repulsive valence, fusing them momentarily – but repeatedly – into unstable super particles, amidst explosions of cryptic debris. Exploring the fraying of ecology into design through the strategic insertion of incompleteness, replaces the ideal of a discoverable archetype with an emerging design theory or *ENIAtype* – a learning procedure that is under construction.

What if architectural design were no longer legitimated through a promised structure or even a mere imagined one, but was instead to reach absolute continuity, in which construction constructed itself?

Figures:

(File name: 170703_1_jetty01)

Shaun Murray, *Autochthonic Construction within the First Acupuncture: Exhumation of the Unground*, 2017.

A view of the pier from Clove Hitch Quay in a North West direction at Battersea Reach, River Thames in London.

(File name: 170703_2_jetty01)

Shaun Murray, *Autochthonic Constructions within the Second Acupuncture: Ineffaceable illumination with Fruiting Bodies*, 2017.

A view of the pier from Clove Hitch Quay in a North direction at Battersea Reach, River Thames in London.

(File name: 170703_3_jetty01)

Shaun Murray, Autochthonic Constructions within the Third Acupuncture: Butchering Openness and Vertical Digging, 2017.

A view of the pier from Clove Hitch Quay in a North East direction at Battersea Reach, River Thames in London.

(File name: 170703_3_Photogram)

Shaun Murray, Autochthonic Relic, 2017.

A photogram of a relic revealing a type of niche construction that has the possibility of navigating back and forth with discretely fitted custom-designed handles of sponge-like complexity.

(File name: 170707_Bathymetry0)

Shaun Murray, Bathymetry drawing, 2017.

Plan of two abandoned piers at Battersea Reach in the River Thames in London are used as the context for this investigation revealing bathymetries and the archaeology of the autochthonic relics.

(File name: 170703_Bathymetry12)

Shaun Murray, Chthonic Relic: Suspended as a Spatial Telluric Mandala, 2017.

Larger scale systems and the feedbacks that operate within them, movements of information through the looped arteries that connect them in a wider patterned schematic or ecology –

towards the coexistent and continual relationship between one of its objects and the object itself – a kind of telluric Mandela – of forms operating inside other forms, whereby scale is not the property of the object but the property of the tool.

(File name: 170703_Chthonic Relic07)

Shaun Murray, Autochthonic Relic: Cavity Resonator, 2017.

Materials within materials – embedding and weaving multiple materials into complex patterns – going beyond shaping geometry, to shaping the internal structure of materials – with unprecedented fidelity through specifying microstructure with micrometre-scale precision

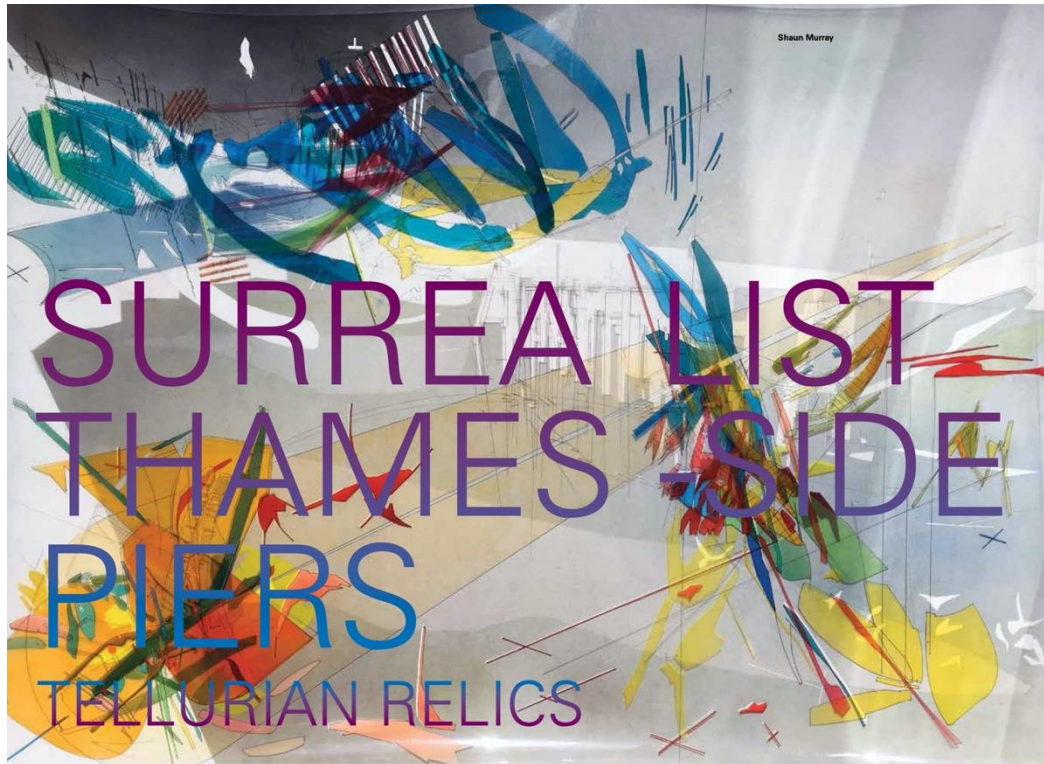
(File name: 170703_relic02)

Shaun Murray, Autochthonic Relic: The Built World Vaporises in Soft Apocalypse, 2017.

This is the recursive handrail where the participant is slowly adapting and augmenting the architecture through occupation. The handrail is thus composed of participant actions; it is recursive over its various boundaries.

Biography

Dr. Shaun Murray is a qualified architect and the director of ENIAtype, a transdisciplinary architecture practice founded in 2011 and gained his doctorate in architecture at Planetary Collegium, CAiiA hub of Plymouth University. Shaun is a Senior Lecturer at the Department of Architecture and Landscape, University of Greenwich. He is the author of *Disturbing Territories* published by Springer in 2006 and has been published widely on his pioneering work in architectural drawing. He is the editor-in-chief of the international peer-reviewed design journal entitled *Design Ecologies*, which is published biannually through Intellect Books. *Design Ecologies* is a design and research journal that was set up as a platform for state-of-the-art experiments that link architecture, technology and philosophy.



Shaun Murray

Shaun Murray, *Autobenthic Construction within the First Apupuncture: Excavation of the Underground, Tellurian Relics, 2017*

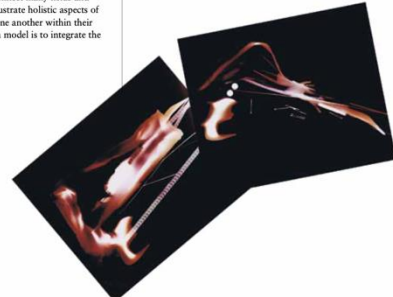
View of the pier from Clive Hill Quay in a northwesterly direction at Battersea Reach, on the River Thames in London.

For Shaun Murray – an architect and architectural teacher at the Architectural Association and University of Greenwich – the design of architecture is more than the deployment of discrete objects in space. Rather, it is the marshalling and bottom-up choreography of highly complex space-time entities that are both organic and inorganic. So objects become ‘things’ of indeterminate duration, highly networked, always reconfiguring and morphing. Murray has developed notations and drafting techniques that facilitate his understanding of architectural space and which he uses in his experimental practice – ENIAtype, based in London.

The Tellurian Relics project (2017) begins with the provisional premise that our environment is composed of a multiplicity of grounds, but that these are generally unforeseen since they arise with the emergence of the species that form them. Ground and species are one. Through an understanding that objects cannot be fully explained in terms of their material constituents and the energy within them, ‘objects’ seems to be something over and above the material components that make it up, but at the same time it can be expressed only through the organisation of matter and energy. It is also possible to distinguish that different participants have different *Umwelten* (the environmental factors, collectively, that are capable of affecting the behaviour of an ENIAtype architecture), even though they share the same environment. This paradox enables architecture practices to go beyond shaping geometry, to shaping the internal structure of material. Two abandoned piers, in the River Thames in London, are used as the context for this investigation. The enquiry considers the piers as a harbinger for a more meaningful ecology of telluric (of the earth) dynamics, whereby the relationship of the multiple *Umwelten* can be tuned into through participants. Through this approach to design in architecture, the architects would become the editors of the environment, with this project exploring the complexities of tribological advances, friction and lubrication and wear, of ground in relative motion.

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Autobenthic Relic
Photogram of a relic revealing a type of relic construction that has the possibility of navigating back and forth with discretely fitted custom-designed handles of sponge-like complexity.

Shaun Murray, *Autobenthic Construction within the Second Apupuncture: Interfacable Disconnection with Floating Bodies, Tellurian Relics, 2017*

View of the pier from Clive Hill Quay in a northerly direction at Battersea Reach.

Autobenthic Construction within the Third Apupuncture: Batching Openness and Vertical Staying

View of the pier from Clive Hill Quay in a northeasterly direction at Battersea Reach.





Shawn Murray,
Bathymetric drawing,
Tellurian Relics,
2017

Part of the two abandoned jetties at Battersea Reach, on the River Thames in London, which are used as the context for this investigation, revealing bathymetric and the archaeology of the abandoned sites.

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Chthonic Relics:
Suspended as a Spatial
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Larger scale systems and the feedback that occurs within them, movements of information through the layered entities that connect them in a wider patterned sub-systemic or ecology, towards the consultant and continual relationship between one of its objects and the object itself – a kind of telluric Mandala of forms operating inside other forms, whereby scale is not the property of the object but the property of the tool.



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The model shows the recursive handrail where the participant is slowly adapting and augmenting the architecture through occupation. The handrail is thus composed of participant actions, it is recursive over its various boundaries.

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