

2017

*AD Celebrating the Marvelous: Surrealism and Architecture*

## **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 *ENIA*type – 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 Underground, 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.