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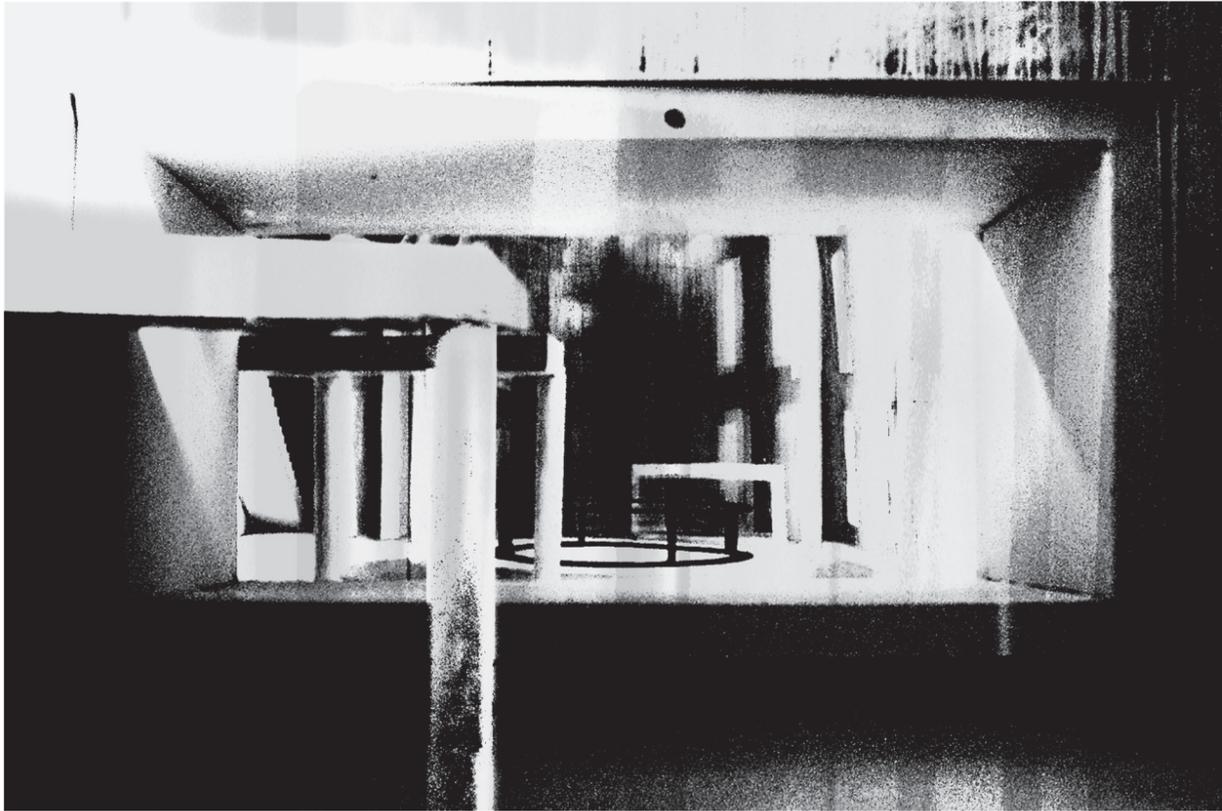
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BEN SWEETING
with PERMANENT WAVER

THE FILTER HOUSE

MATTHEW BUTCHER (POST WORKS) WITH TOM NOONAN



Above: Model view showing view from North Wing Bell Jar into South Wing Bell Jar

Opposite: Perspective at Night of 'The Filter House' in the Landscape at Cliffe Marsh. Tuning to the Shipping Forecast

In the philosopher Paul Shepard's book, *Nature and Madness*, it is argued that occidental civilization was born on the edge of the desert; that it was man's desire to struggle, in fact his need, that enticed invention through the necessity for survival. Technologies of water retention and transportation bore rise to irrigation, the aqueduct and the dam.¹ It seems remote to us, this notion that we would settle in a place of danger to test our resilience, but yet we still choose to dwell in places that are continually under threat from the environment – seemingly secure in the knowledge that our technological invention will secure our safety and, potentially more importantly, our comfort.

'The Filter House' is an architectural fiction, an ongoing proposition, that seeks to address these issues and, in particular, the relationship of our contemporary means of inhabitation to the complex natural environments in which they are sited.² It proposes a house, or dwelling, sited in an extremely volatile landscape, that aims to engage with the idea that architecture and landscape are systems that are intrinsically linked, and to contradict the idea that the home should purely function as a refuge or place of safety or comfort. The project sets out to present an architecture that instead mirrors and informs the character of its occupant as well as the social, cultural and political context that any individual exists in. In this sense, the project draws on the ideas presented by Jonathan Hill in his book *Immaterial Architecture*, notably that the immaterial is as important to architecture as the material when seeking to understand the complex relationship between an occupier and a home.³ The project exists as a series of drawings and models, several presented here, and this text.

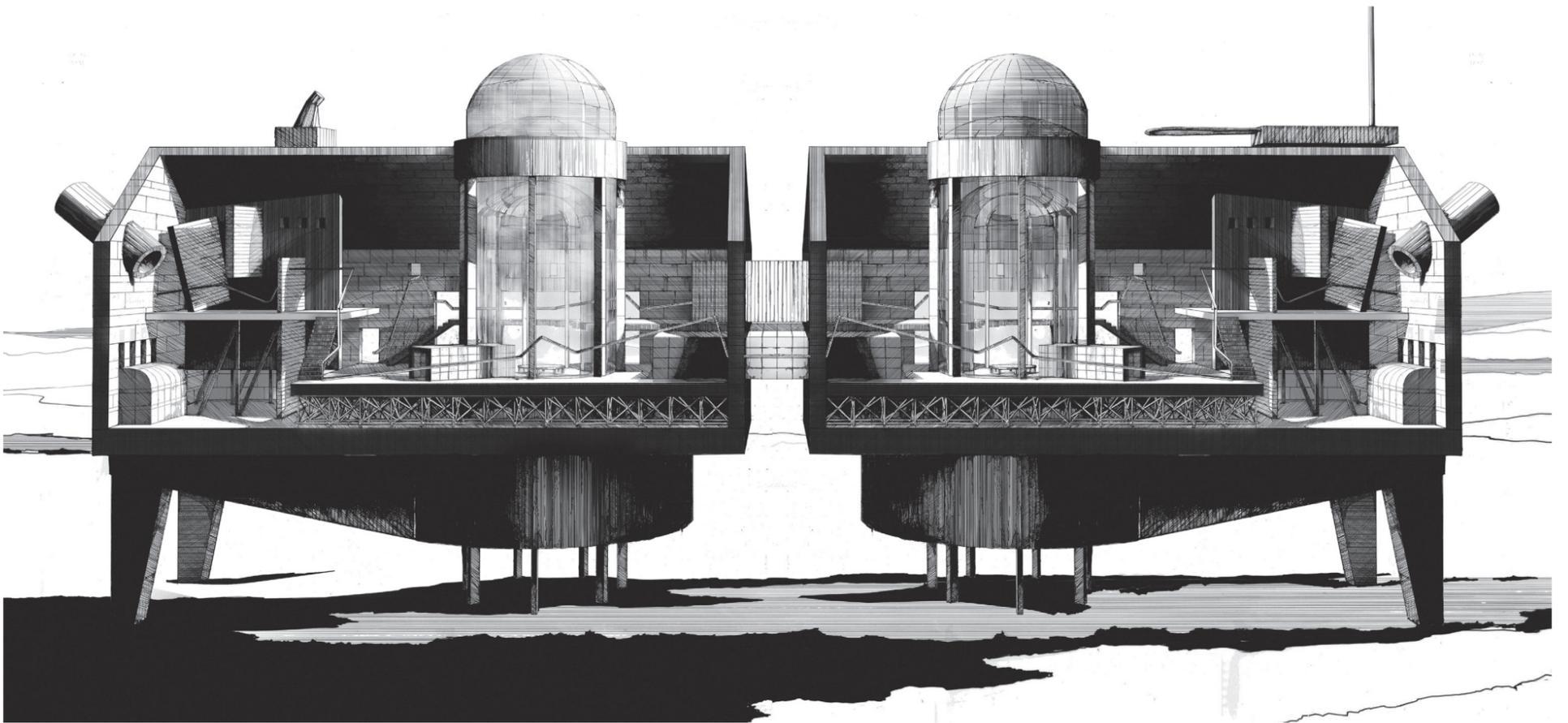
CONTEXT

Like all architectural fictions the site of 'The Filter House' is constructed. All sites of un-built architectural projections exist abstracted from a specific context that exists in time and in real space. In these propositional architectures, sites exist as lines, photographs, shadings or cards – not as ground, air, water, etc. But to allow the project to have more application and resonance in the mind of those engaging with it, the proposed site of 'The Filter House' is based on a specific location, in the apex of the Thames Estuary. The area of the Cliffe Marshes sits next to Cliffe Fort and opposite the town of East Tilbury on the south bank of the Estuary. Historically a salt marsh, the landscape has been continually protected from the sea by a series of increasingly complex sea walls, which have existed there since the Romans occupied England. The current sea wall protects the land from high tide but, due to rising sea levels, this protection cannot logically be sustained. Either the wall is raised or the land will flood.

In 2008 the government agreed with the British Property Federation that insurers do not have to give automatic insurance to houses built within flood risk zones. This causes slight problems for all of the proposed development within the Thames Gateway, a central focus, at least before the recession, for the construction of new homes designed to curb this country's housing shortage. Continuing to build houses in areas at risk of flooding, and then to spend vast resources engineering the protection of this land from flooding, seems vastly problematic.

Potentially the best way to prevent flooding is to give land back to our seas and rivers. Within current strands of Hydrological research it is being

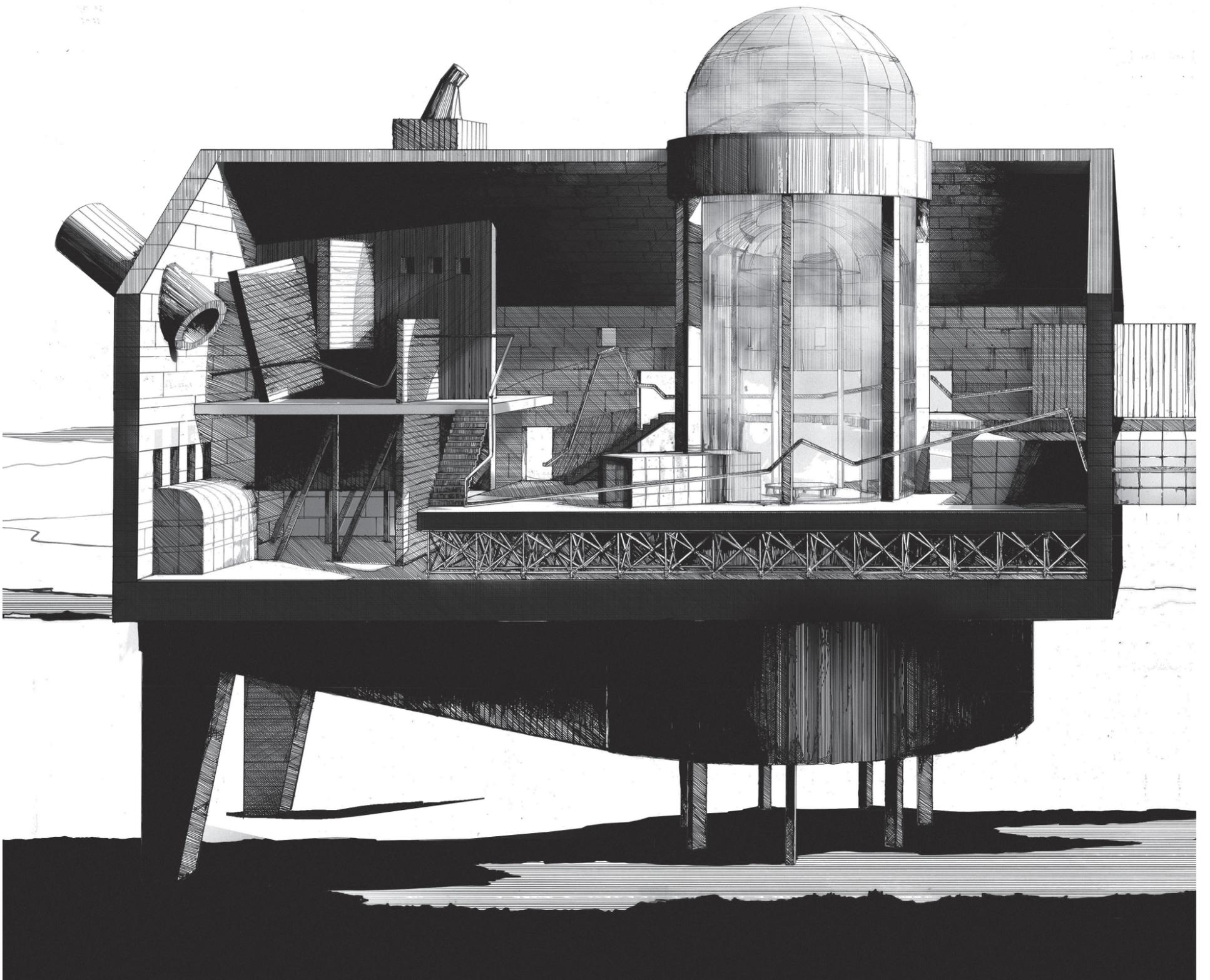




Opposite top: Perspective Section of 'The Filter House'

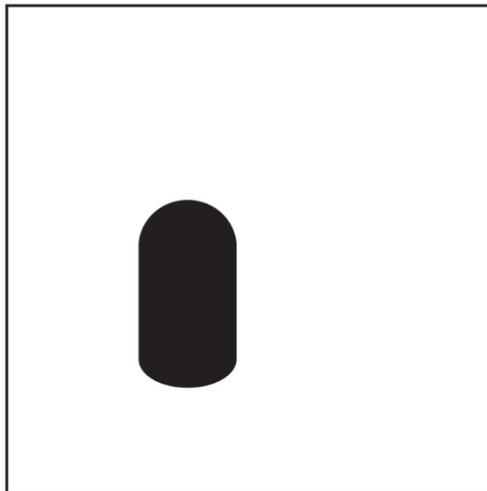
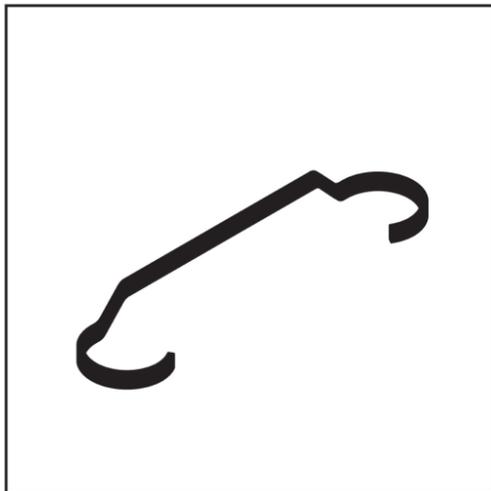
Opposite bottom: Altered OS plan showing ideal location for 'The Filter House' in the Thames Estuary. The doctored map also illustrates what the landscape might look like if the sea wall were removed at Cliffe

Below: Perspective Section of 'The Filter House', detail



Below: 'The Filter House' as if part
of *The Manhattan Transcripts*

Opposite: 'The Filter House' as 'Patio
and Pavilion'



theorised that the best way to protect existing housing in the Estuary from the flood is to breach the sea wall in areas; to create sites where excess tidal waters can overflow, protecting land upstream.

These overflow sites create an interesting problem, politically as well as philosophically, as they acknowledge that we are in fact at risk from flooding, and that to deal with that risk we must succumb to the pressures of our natural environment and not attempt to control unpredictable nature.⁴

'The Filter House' project suggests that Cliffe could potentially be used as one of these overflow sites, and that the house would be situated within this new tidal landscape, proposing a new prototyped dwelling – one that exists with the risk of flood and, further, within the flood.

'The Filter House' is then sited in a new salt marsh at the apex of the Thames in an area of Kent reclaimed by the sea – the sea wall breached, the Thames splayed and the land returned to the tide.

OCCUPATION

So who would choose to live in such architecture, an architecture that for significant parts of the day and even year would remain isolated from the land, perched on a frontier, a first point of call for the rapidly encroaching sea? Frontiersmen, explorers, survivalists, Primativists, environmentalists, isolationists⁵ – individuals that would gain an advantage against the rising in sea levels as they would learn to cope with the pressures of this new desert of salt water.

A QUICK DESCRIPTION OF THE HOUSE

1: As well as being a house, 'The Filter House' would also function as an infrastructure: a Salt Desalination Plant cleaning water for survival. The operation of Salt Desalination within 'The Filter House' would occur in chambers below the main house area.⁶ The salty river water would enter these chambers through vent holes located on the side of 'The Filter House'. Water can only come into 'The Filter House' when the river rises at high tide. The desalination process, in this regard, is only operational at the time when the river is at its highest. Steam produced as part of this process would be controlled and partly processed within the bell jar chambers of the north wing. These chambers fill up with steam and condensation when distillation is occurring within the structure.

2: The house, when looked at along its main section or elevations, looks to be mirrored. Indeed it could be said that the house is formed from two houses, or two wings, that look identical but are mirrored. This is, in fact, correct in every way except that only one part of this mirrored layout contains the Salt Desalination Plant, the north wing (see right section in the main section).

3: Within each house or pair of houses are several key spaces. Each of these spaces are, of course, duplicated.

A: The living quarters, which comprise a series of several slanted concrete walls, are separated from the main structure of the house, but contained within it, and located at the far ends of the interior.

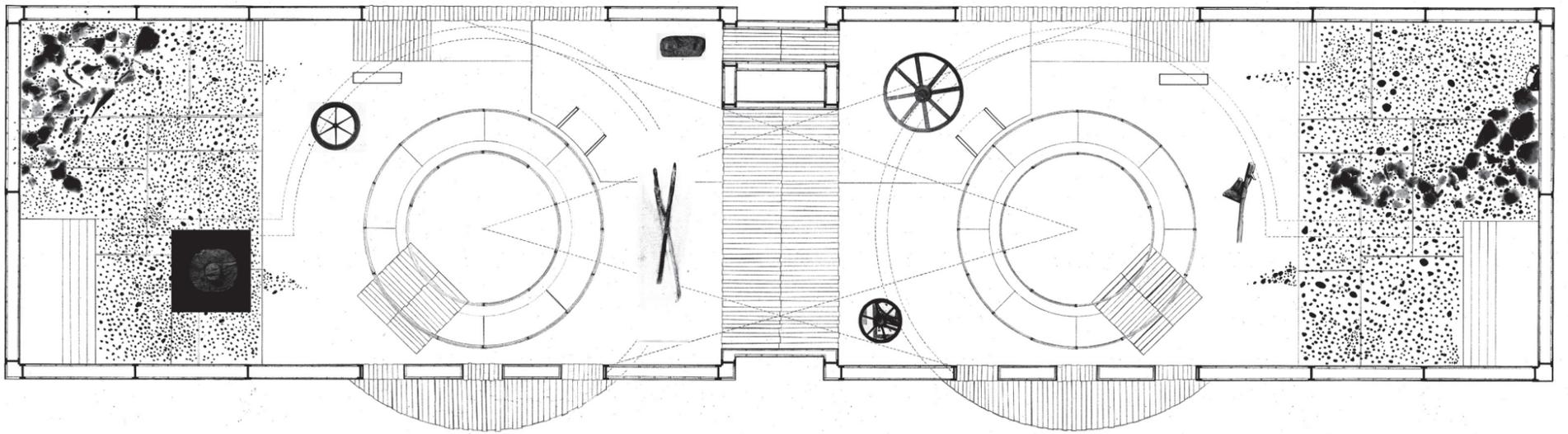
B: The office and flood monitoring rooms are located at the centre of the north wing's bell jar space, but are separated from the desalination steam by a secondary, smaller bell jar that sits within the larger chamber; the steam from the distillation process occupies the zone between the two glass vessels. The space within 'The Filter House' would dramatically change when the filtering process is in operation. Sitting in the office inside the north bell jar vessel, the walls would start to steam up as the water from high tide pours into the desalination chamber. Views into the rest of the house, as well as across the landscape, would be blocked, only reappearing once the tide has fallen. If we read 'The Filter House' as a body or, more importantly, as representative of a mind, or state of mind, the action of steam within the proposed house takes on a more allegorical role. The distortion of views and the creation of a claustrophobic enclosure could be seen to mirror anxieties towards the flood and the fear of the uncontrollable and unquantifiable.⁷

C: The second bell jar, or south bell jar, operates as a dining room and facilitates food preparation. Views across the river from this chamber are also possible and will not be interrupted by the steam in the desalination process.

D: Around 'The Filter House' is a circular pathway which, when accessed, would allow occupants to survey the landscape at 360 degrees – assessing the weather and the movement of the tide.

REPRESENTATION AND REFERENCE

'The Filter House', as stated earlier, is a fiction. It is not a proposal for a structure that would ever be built or, although feasible, could ever be built. In this sense, the project belongs to a long history of theoretical or paper



architectures. Ledoux's utopian visions and Hejduk's 'Mask of Medusa Project' are examples that define this particular genre of architectural practice.

As an illustration of the fiction of the project it is represented in a multitude of divergent ways. In particular the project is drawn with reference to two seminal theoretical works: Bernard Tschumi's *The Manhattan Transcripts* and The Independent Group's installation 'Patio and Pavilion', exhibited in the show 'this is tomorrow' at the Whitechapel Gallery in 1956.

Representing the project with reference to *The Manhattan Transcripts* suggests that if the architecture were to exist, the immaterial nature of elements within the house could be seen to be performing, and performing in relationship to the movements of the tide. Represented in the drawing 'The Filter House as if part of The Manhattan Transcripts' are the three main elements: the movement of the occupants between the bell jar vessels, the steam, and the rise and fall of the tide. Drawn in this manner, these architectural elements are reminiscent of Tschumi's bodies, carving, as well as creating, volume as they move through space.⁸

Representation of the project as if merged with 'Patio and Pavilion' serves a different conceptual function. In particular is the attempt to explain 'The Filter House' through a very particular interpretation of 'Patio and Pavilion' outlined by Peter Smithson. Smithson described the installation as 'a kind of symbolic habitat in which are found...to the basic human needs – a view to the sky, a piece of ground, privacy, the presence of nature and or animals when we need them – to the basic human urges – to extend and control, to move... the things we need: for example, a wheel image for movement and for machines'.⁹

The idea of producing drawings in a particular historical style can be directly attributed to the work of the artist Pablo Bronstein. Bronstein states then when he is drawing he 'role plays' a particular architect or style, adopting relevant nuances.¹⁰ The use of this form of referencing has several key aims within the project. Firstly it opens up the project to parallel and divergent readings, and meanings, that are not necessarily apparent when the project is just illustrated straight. Further, it questions beliefs that architectural histories, as well as the development of architectural styles, are linear.¹¹ And finally the heavy reliance on reference within the work aims to highlight certain issues over authorship, and, in particular, what relevance the search for originality really has in the context of the discipline of architecture when there has historically been such an emphasis on style, or styles, rather than concepts.¹²

1 Paul Shepard, *Nature and Madness* (Athens, Georgia: The University of Georgia Press, 1982) pp.47 – 73.

2 'The Filter House' is an extension of an earlier work, 'The Flood House'. 'The Flood House' was originally started as part of Matthew Butcher's final 5th year Diploma Thesis project at The Bartlett School of Architecture, which was tutored by Jonathan Hill and Elizabeth Dow, with Mark Smout as Technical Tutor. The project is also published in Jonathan Hill, *Immaterial Architecture* (London: Routledge, 2006) pp.198 – 200.

3 Hill, *Immaterial Architecture*.

4 See Deal Hall Essex where removal of the sea defense has led to a restoration of the salt marsh. The idea of removing the sea wall as a flood defense is also outlined in the article 'Netherlands Battens it's Ramparts Against Climate Change' by Colin Woodward in the *National Geographic News*, http://news.nationalgeographic.com/news/2001/08/0829_wiredutch.html

5 The vagueness of this statement is to outline that as architects and designers we cannot design an occupancy or even prescribe a particular type of occupant. The description only suggests individuals who hold certain beliefs that could potentially find a use for such an architecture. Please also see Major Paddy Roy Bates and his creation of Sealand. The principality of Sealand exists on, and in, a Montfort Sea Fort on the Coast of Essex. Bates has declared Sealand as an independent state, but it is not recognised by the British government.

6 The technology for processing salt water into drinkable water is complex and, at this stage in the description of the project, not necessarily worth getting into. But, in principle, the process involves heating the salt water so that the water separates from the salt content, into steam. This steam is then collected, either naturally or using coiling filaments, and then the re-condensed

water is purified through further stages of purification.

7 Hill, *Immaterial Architecture*, p. 28.

8 Bernard Tschumi, *The Manhattan Transcripts* (London: Academy Editions; New York, N.Y.: St. Martin's Press, c1994).

9 Peter Smithson is quoted in the essay by Dirk Van den Heuvel in *Alison and Peter Smithson: from the house of the future to a house of today*, edited by Dirk van den Heuvel and Max Risselada (Rotterdam: O10 Pub., 2004) p. 16.

10 In particular see 'Doorway in the style of James Stirling', exhibited at Herald Street, London in 2006.

11 see Charles Jencks's famous 'Evolutionary Tree of Twentieth-Century Architecture' diagram from 2000.

12 Ibid.