# INTERSTICES **17**

*RETURN TO ORIGINS*

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**INTERSTICES 17**
*Journal of architecture and related arts*

editorial / ANDREW DOUGLAS

# The turn of beginnings

Fig. 1 Albrecht Dürer (circa 1496). Man with an auger [Drawing, Musée Bonnat, Bayonne, Wikimedia Commons]

This issue of *Interstices*, having adjourned specific thematic guidance for the first time since 1990, assembles about an open call. Yet attending, if not constraining this opening, we suggested an auxiliary or piloting prompt—*return to origin*. Like all *auxilia*, it sought to "aid, help, support"—in this case, the thinking of possible contributors (Auxiliary, n.d.). We hoped that thinking *return* and *origin* might offer a point of dehiscence in an otherwise open contributory field, indeed a means of opening productively the 'open' itself. If augmenting mechanisms, for which dehiscence (particularly in its botanical sense) can be thought emblematic, ambition a certain acceleration and surity in fertility or growth, they no doubt resonate etymologically with the older term *augere*—an *augur* being, in the context of ancient Rome, the dispenser of ritual and the interpreter of omen associated with events at their inception or origin, whether that be in the planting of crops or in the founding of cities (Dehiscence & Augur, n.d.). The augur wills prosperity by listening and looking in on the original murmur and lie of things, and then interjecting a catalysing break that sets up everything that comes to be as *after*. Arjun Appadurai, thinking about the role of inaugerating ritual in the context of a society's ongoing commitment to the mitigation of risk and contingency, emphasises its "retro-performative" action in which *wholes* are established after the fact out of *dividual*, ready-to-hand parts or facets (2016: 116). As an anxiety-diffusing action, the "backwardation" of ritual must necessarily manage the inherent instability of the dividual components it calls on in the production of determinant social wholes—hence the need for a repeated turn to beginnings (116).

A homophone with different etymological affiliation and meaning, the term auger offers a further way into this issue's *auxilium*: to the extent that the term names a device for hole boring—particularly a hole for the hub of a wheel—it foregrounds an agency that lies with a particular type of turning. The spiral screw of the auger, in fact, enacts a resting turn that voids or subtracts by passing an opening through or into. In contrast to the centrifugal character of *augere*—its expanding, productivist motivation— the tooling effect of the auger is to centre, literally to spear or pierce into the wheel a nave or passage suitable for a restraining axle (Nave, n.d.). Implicated in this notion of centrality is of course the word navel and, with it, the umbilicus that draws on the Greek term *omphalos*—a

Fig. 2 Anonymous (n.d.). Augur [Engraving, Nordisk familjebok PNG—2005, Wikimedia commons]

world-turning navel as Zeus in Greek mythology is said to have enacted at Delphi in his appropriation of chthonic forces from on high (Vernant, 2006: 179, Leatherbarrow, 2004: 124).

The call in this issue, opened in accordance with a *return to origin*, carries then a complex range of orientating possibilities. As editors, we were concerned to instigate, too, a reorientation or return to an earlier cluster of motivations founding *Interstices* itself—a principal one being the publication of student works (see Jenner, 1990: 2). "The Spaces Between", as *Interstices*' first introduction titled itself, saw in the intersecting of academic and professional practices a reorientation of architectural thought, one that would eschew the overly prevalent commercial justifications in favour of an undertaking that would risk, in the context of an absence of "centre and origin" in architecture generally—and with scarcely an architecture culture locally—"'speaking into the void'" (2). The gap or interstices between things and ideas offered, as Hubert Damisch was said to have observed in Viollet-le-Duc, a protean "space between" the matter and form of architecture where 'truth' and its styles of appearing might arise (2).

Rising up, out of the in-between, is a gesture that draws close to the work of both *augere* and the auger. As Tom Conley suggests in relation to cartographic practices emerging in the European Renaissance, origination finds a potent marker in the protuberance/void that is the human navel, being as it is an anatomical and analogical figure for corporeal beginnings, of centering, of maternal loss, and appropriative self-making or auto-inauguration (1996: 9). As covered "blind alley", "one-eyed hole", or "anti-abyss", it marks before and after—a time-before-(self)knowing, but also the point from which a cardinalization or relational

orientation of the subject becomes imaginable (9-10). No less, it leaves traces of maternal hospitality and its absolute hosting—a hosting which, while irrevocably departed from, persists as a site for return that ultimately leaves the question of origin as such unthinkable.

## Reviewed papers

Simon Weir, in the essay, "On the Origin of the architect: Architects and *xenía* in the ancient Greek theatre", not coincidently locates the origins of early Greek understandings of the architect in the demands for hosting and hospitality, associated particularly with religious festivities. As he argues, the term *xenía*— complexly drawing together entities as diverse as "host, donor, guest, friend, stranger, mercenary, and simply man"—exceeds any simple English equivalent; yet it is key to a cluster of material and ethical factors accompanying the emerging role of the architect (p. 10). To the extent that hosting is inseparable from a making space for strangers, and from the structures that shelter such spaces, architects were held to guide and lead groups towards the common good, to select sites for the sanctuary and placement of guests, and materialise these places publically, not just privately.

Sean Pickersgill's contribution titled, "*Super Architects* and dream factories", proposes that origins be understood as a point of not yet realised complexity, and that a will towards world-making in graduating architecture students—particularly as exhibited on the website *Super Architects*—presents a notable form of origin myth for contemporary architectural practice. While the heterogeneous profusion of worlds brought into being by graduating students in culminating studio/thesis projects may demonstrate motivations other than work-ready ones for some, Pickersgill suggests that they might better be understood as extending a tradition of the *Grande rhetorique* in architecture—of which the French Beaux Art system of architectural education is but one strand. On the other hand, a mobilisation of these projects today via sites like *Super Architects* points to a new democratisation of an old motivation, "an experimental relationship to orthodox practice" (p. 18). Considering the utopian underpinnings of such experimentation, the paper proposes an initial schematization of the facets exhibited by such countering projects.

Sarah Treadwell, in "Working with Cixous: The cleaner's grey drawings", brings together a series of "drawn paintings" and "word pictures" that meditate on the labour of domestic cleaning (p. 32). Reminiscing on acts of house cleaning via the words of Hélène Cixous, the paper captures the complex folding of past and future that arise when looking back on beginnings. Concomitantly, the paper charts little-considered acts and persons that sustain home and homeliness: drawing, as prop and prompt that drops away in the effecting of architecture, but also cleaners, as in-between occupants who maintain and sustain, without full admittance into home life as such. Extending Cixous' question asking "what is a painter?", and the answer that she/he is a "bird-catcher of instances", Treadwell posits the cleaner herself as a painter, whose surface attentions to interior residues effects a parallel productive economy of attention (p. 38). Drawings, in sequence with the writing, build out of swabs and rubbings spanning the range between the abject and the affectionate.

Jeremy Treadwell's paper, titled "The rua whetu joint: Detail in origin", notes a

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tendency to counter the uncertainty of contemporaneity by pursuing questions of origin given historically—a phenomenon consistent with Appadurai's consideration of *backwardation*. His paper proposes a variant route—an engagement with an architectural detail that carries with it a macro-scale and cosmological significance. Considering the shifting nature of the junction between the poupou (wall posts) and the heke (rafters) of wharenui (large, nineteenth-century Māori meeting houses), a noteworthy convergence of technical and cultural elements is shown to evolve with what is known as the waha paepae and rua whetu joints. More complex geometrically than the Western mortise and tenon correlate, these joints are pivotal in forming the interior volume of the wharenui, itself a cosmological modelling of mythological and ancestral origins. The paper tracks the implications of a generalised shift towards the rua whetu joint, in line with both the cultural need for housing larger gatherings and the technical demand for the integrity of large structural elements.

In the final paper of the reviewed section, Ashley Mason's "Craters: Between cleared and constructed, between absent and present" an aerial photograph by J. R. Eyerman of a meteor crater in Arizona (said to have informed the editors or curators of the 1953 London exhibition titled "Parallel of Life and Art") is drawn into a larger conversation about presence and absence opened up by the site of the exhibition and its place in the bomb-damaged city. Drawing out implications of absence (or clearing) and presence (or construction), the paper mediates on the placement of what is marginal in traces or what amounts to the presence of absences. Navel-like, the crater's evidencing of a presenced absence and an absent presencing offers, as Mason concludes, a mixed and mixing figure for all inquiry into acts of siting.

## Invited contribution

2016, a terribly tumultuous year in multiple ways, was further saddened by the unexpected death of architect, educator, and contributor to *Interstices*, Rewi Thompson. As colleagues and friends, Ross Jenner and Patrick Clifford offer review and reflection on Rewi's contributions to architecture, education, and life.

## Reviewed postgraduate creative design research projects

In this issue, we launch a new peer-reviewed section—the design research of recently completed postgraduate students. In calling for such projects, we offered the same open prompt from which the reviewed papers were selected. To better showcase the collaboration between researchers and their supervisors, submitters were asked to include with their project documentation a synopsis of the research framework and agenda coauthored with a principal supervisor.

Of the four projects featured in this issue, the first is by Rachel Sari-Dewi Murray (with Sam Kebbell from Victoria University of Wellington), titled "Wetland square, market pier: Designing for heritage in the New Zealand regional landscape". The project embodies the notion of return by reasserting the significance, and the collective urban potential, of indigenous wetland and swamp forests, the vast majority of which have been lost in Aotearoa/New Zealand due to agricultural and town reclamation. Working with a site in the Kāpiti Coast District, north of the capital Wellington, the project entails the reconstitution of a threatened

wetland into a new town square and a market pier. Conceived as an archetype for alternative wetland sites, the speculative proposal reasserts indigenous waterway networks and travel routes, ecological resilience, landscape heritage, and colonial settlement forms, all in a quest to rethink the European town square and its societal focusing. The project is remarkable for its nesting of detailed concerns and site specificity within ever-larger scales of critical significance and connection.

The second featured project, Penelope Forlano's "Resurfacing Memories: Mnemonic and tactile representations of family history in the making of new heirlooms" (undertaken with the assistance of Dianne Smith of Curtin University) tracks temporal return at a different scale and with more intimate materials. Depicting a furniture project—a hallway cabinet titled "The Unforgotten"—the project pursues an ecology of persistence by considering the role and nature of heirloom significance and "person-object custodial relations". Wondering how intergenerational attachment might register with furniture in the age of short-term products, Forlano's hallway cabinet draws in (in the sense of containing), and draws from (in the sense of signifying), maternally poignant materials bequeathed by the client's mother—silk lace embroidery, hand-written poetry, newspaper cuttings, and hand-drawn diagrams of embroidery never completed. As both store and signaller of these artefacts, the hallway cabinet itself is shaped and impressed materially with aspects of these artefacts, thereby becoming a salient, invested thing that spans generations and the time in-between, but, critically also, time to come.

Grace Mills', "A new agora: A project(ion) on the sub-centre" (also undertaken with Sam Kebbell from Victoria University of Wellington) is the third project in this section. Begun in late 2011, this project addresses the then particularly urgent question of Christchurch's reconfiguration after the earthquakes of 2010 and 2011. With much of the central city damaged and uninhabitable, Mill's project asks, counter to an official will to focus a rebuild on the centre, what can be made of Christchurch's latent polycentrism? Focusing on one sub-centre—the suburb of Sumner—it enacts a two-pronged doubling back on settlement origins: the first being a little-used sports field that had initially been identified, though not enacted, as a central village green for the nineteenth century's community being established there; the second, the festive and trading public communal hearth in Ancient Greece—the agora. Bridging these divergent social forums, the project tests and inserts a series of commonplace forms of public/landscape architecture typical of postcolonial Aotearoa/New Zealand—the sports grandstand and the park pavilion. Exploring the potential synthesis of these forms, and their transformation in response to a raft of intensified programmatic possibilities, the project generates an extraordinary energized public urban architecture, sufficient, Mills hopes, to seed a new Christchurch polycentrism, and to assist architecture with a means back into an essential conversation about the urban possibilities of cities.

The final project in this section is Yasser Megahed's, "Practiceopolis: Journeys through the contemporary architecture field" (with Adam Sharr and Graham Farmer of Newcastle University, UK). In this exceptionally ambitious project, Megahed undertakes nothing less than a map of the entirety of contemporary architecture practice and its affiliations with the building industry. Figured first as a metropolis and then pictured in a broader geopolitical terrain, the project

transports both satirical and idealising wills. As an imaginary city—complete with places and institutions indicative of narratives of practice—centred on the island of Constructopolis, and represented mostly, though not entirely, in overview, it ambitions a complete placement and fixing of professional relations, but also the comic shifting of those relations into urban form—perhaps something like the "concept city" Michel de Certeau (1988) writes of when thinking of cities seen from on high, or what Thomas More conceived of as the in-between, no-place of *Utopia*. Critical to the project as Megahed writes, is the production of a "*critical instrumental approach*" capable of picturing the "incompatibilities and collisions between technical-rational culture and critical culture" (p. 100). Key with this critical instrumentation is seeing and valuing practices as diversely exhibiting political values irreducible to the technical-rational remaking of culture.

## Reviews

A series of reviews draws this issue to a close: Mark Southcombe on Julia Gatley and Paul Walker's *Vertical living: The architectural centre and the remaking of Wellington* (2014); Michael Milojevic on Mirjana Lozanovska's *Ethno-Architecture and the politics of migration* (2016); Sarah Treadwell on Mark Dorrian's *Writing on the image: Architecture, the city and the politics of representation* (2015); and, lastly, Michael Davis on Peggy Deamer's edited book, *The architect as worker: Immaterial labor, the creative class and the politics of design* (2015).

Overall this issue captures the ranging thoughts of designers, writers, and thinkers opening onto an augmenting call to return to origins—a return, like an auger's screw, that turns upon itself without ever meeting itself in closure. The vacancy of the auger's extraction, like the tremulous future-proofing wrestled by augurs from the contingent circumstances of beginnings, and their retro-performative reassertion, suggests something of the unfinishable constructions we assemble over the interminable turn of beginnings.

Lastly, the editors dedicate this issue to Bruce Mitchell Petry whose abrupt and sad departure punctuated its production.



Fig. 3 Sue Gallagher (2016). Bent Auger [Silver jewellery, photo by Cornelius Geraets]

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SIMON WEIR

# On the origin of the architect: Architects and *xenía* in the ancient Greek theatre

## Introduction

Seeking precedents for a language to explain architecture's political and ethical functions, this paper is a historical case study focussed on the earliest ancient Greek records of architecture. This study reveals the ethical principle of *xenía*, a form of ritualised hospitality permeating architecture and directing architectural practice towards accommodating the needs of people broadly labeled foreigners. It will be shown that xenía in ancient Greek architectural thinking was so highly valued that even a fractional shift elicited criticism from Demosthenes and Vitruvius.

This paper will use the definition of *xenía* given by Gabriel Herman in *Ritualised Friendship and the Greek City* (1996), then add the four distinct kinds of foreigners given by Plato in *Laws*, and consider the hospitality offered to these foreigners by architects. Some forms of architectural hospitality such as hostels are closely tied to our contemporary sense of hospitality, but others are contingent on the cultural priorities of their day. When ancient Greek authors considered residential architecture and xenía together, it was explicitly in the context of a larger political framework about xenía and architecture; for Demosthenes and Vitruvius, architectural investment in residences showed diminished respect for xenía.

The more unusual alliances between architects and *xenía* appear in the theatre, both in characters on stage and in the theatre's furniture and temporary structures. Two early significant appearances of architects onstage in Athenian theatre were uncovered in Lisa Landrum's 2010 doctoral thesis, "Architectural Acts: Architect-Figures in Athenian Drama and Their Prefigurations", and her 2013 essay "Ensemble Performances: Architects and Justice in Athenian Drama" which references Aristophanes' *Peace* and Euripides' *Cyclops*. In each case the characters described as architects are not engaged in building or construction, but are seeking to act justly and further a common good while enmeshed in complex situations with foreigners. Finally, the evidence of architects working offstage in the sanctuary of the theatre, explained in Eric Csapo's 2007 essay "The Men Who Built the Theatres: Theatropolai, Theatronai, and Arkhitektones", are combined with inscriptions to again locate *xenía*. Together these examples outline the varied moral and material expectations of architects, and elucidate one of architecture's foundational ethical virtues.

### *Xenía*

*Xenía* was a long established ethical custom of the ancient Greek world. None of the extant forms of the Greek word *xenía* (ξείνία) have a direct translation into English—instead we find host, donor, guest, friend, foreigner, stranger, mercenary, and simply 'man' or 'you' as the nearest equivalents. None adequately captures *xenía's* ancient Greek meaning, and nor does the English cognate. The prefix of 'xen' in *xenía* is seen elsewhere in English with *xenophilia* and *xenophobia*, both of which bear a negative connotation. In ancient Greek, *xenía* was benign and pervasive, as Herman (1996) explained, bringing to mind a fellow traveler, not a foreign adversary.

The concept of *xenía* may be translated as hospitality, however the Latin root from which the words host and guest are derived, draw attention to the separation of giver and receiver. *Xenía* equalises the guest and the host. A clear example occurs in Sophocles' *Oedipus at Colonus*. Blind and destitute, Oedipus appealed for aid from Theseus, who duly replied,

> [...] never would I turn aside from a stranger [ξένης], such as you are now, or refuse to help in his deliverance. For I know well that I am a man [ξένον], and that my portion of tomorrow is no greater than yours. (262–267)

As well as a pervasive ethical disposition, *xenía* also described a personal relationship between adults from different social and geographical groups who perform filial obligations, typically hosting and the exchange of gifts. Strangers, henceforth *xénoi*, from different cities meet either by introduction or through a service or gift, like providing help to a shipwreck survivor, which as Herman wrote, "put the beneficiary in a state of indebtedness, from which state the beneficiary could only redeem himself by a display of submission and loyalty" (1987: 48–49).

In broad strokes, strangers are *xénoi* to each other, though in a civic context, *xénoi* are people who visit a city and need to be hosted. In *Laws*, Plato described four kinds of *xénoi*, all especially sacred (1.632d). Two kinds of *xénoi* come as ambassadors from other communities and must be hosted by appropriately senior officials; *xénoi* who visit for festivals should be hosted at the temples where "priests and temple-keepers must show them care and attention", and seasonal travellers who come to trade must be hosted at the "markets, harbours, and public buildings" by city officials (12.952d–953d).

Two of Plato's *xénoi*, the visiting officials and the *xénoi* who visit for festivals, attend the theatre. The evidence of *xenía* in the theatre will be explained after noting how the architecture for these seasonal traders appeared at the intersection of a larger political debate between civic and residential architecture.

### Accommodating *xénoi*

Much of the accommodation for visiting *xénoi* included commercial hostels and private homes. Visiting *xénoi* from any of Plato's groups might have found accommodation for themselves in hostels. These buildings have been described by B. A. Ault in "Housing the poor and homeless in Ancient Greece", and include hostels resembling stoas, a hostel and bath complex appropriately named "*Xenon*", and hostels in sanctuaries known as *katagógia*—some of which Ault thought to have hosted "officials of some sort" (2005: 152).

Looking to the hosting of *xénoi* in residential architecture and noting a surprising phenomenon, the connection between architects and houses is missing from the earliest Greek literature. While side remarks by Plato and Xenophon confirm the existence of architecture as a business, residential architecture is far from certain (Plato *Lovers*: 135c; Plato *Gorgias*: 455b; Xenophon *Memorabilia*: 4.2.10). A sense that the absence is not accidental can be felt in the *Economics*, where Aristotle tells us that householders considered the construction and maintenance of their home as their own business, extending into the hosting of visiting *xénoi* (1.1345a).

Centuries later, Vitruvius noted the emergence of *beautiful* homes in ancient Greece, by which he probably meant *architecturally designed* homes. These residences were permitted only if public business were carried out there (6.5.2). Clarifying, he praised households that did not engage architects. Vitruvius reiterated this preference in beginning his book on residential architecture with a shipwreck anecdote, reminding the reader of *xenía*. In the anecdote, when a shipwrecked philosopher finds a town with splendid public architecture, naturally there are educated people there ready to assist his return home. When the philosopher's companions set out ahead of him, they asked of what message to send his children. The philosopher replied by saying that, unlike a shipwreck, the best gift one can give children is invulnerable, proclaiming "education" as that gift. The context of his anecdote implies something far more specific. Vitruvius was beginning his book on residential architecture with the polite reminder that the best communities produce great pubic architecture, not great houses (6. Introduction).[1] In his anecdote, Vitruvius echoed a sentiment famously expressed by one of ancient Athens' most distinguished orators, Demosthenes. Looking back to earlier and nobler times, Athens was,

> [...] wealthy and splendid, but in private life no man held his head higher than the multitude. Here is the proof that [...] the sort of house that [...] those distinguished men of old lived in [...] is no grander than the common run of houses. On the other hand, both the structure and the equipment of their Public buildings were on such a scale and of such quality that no opportunity of surpassing them was left to coming generations. Witness those gate-houses, docks, porticoes, the great harbour, and all the edifices with which you see our city adorned. (23.206–208)[2]

To support his claim, Demosthenes specified the same buildings Plato required for seasonal trading *xénoi*: "gate-houses, docks, porticoes, the great harbour" (n.d). What Demosthenes and Vitruvius described is a curious and unfortunate descent. The need for an ethical principle that functioned like *xenía* did not change, but private homes became more luxurious, and the architecture devoted to these trading *xénoi* fell into disrepair.

## Architects of *xenía* in the theatre:
### i. Aristophanes' Trygaeus and Euripides' Odysseus play architect

The other associations between *xenía* and architecture, beyond accommodation and contemporary conceptions of architecture, occurred in the Athenian theatre. Two instances of characters acting as architects identified by Landrum occur in Aristophanes' *Peace* and Euripides' *Cyclops*. As will be shown, *xenía* appears in each, intensified in opposing ways.

Aristophanes' *Peace*, the comic final act appending a trilogy of tragedies, according to A. W. Pickard-Cambridge's *The Dramatic Festivals of Athens*, was performed for the theatre competitions at the City Festival of Dionysus, or simply the Dionysia (1953: 64). Aristophanes' use of a form of the word ἀρχιτέκτων refers to the political and social events of the day, especially Athens' engagement in the Peloponnesian War. Contemporary historian, Thucydides, wrote that negotiations for what would eventually become known as the Peace of Nicias extended into the Dionysia of 421B.C.E. (V. 20). During the festival's suspension of regular life, Aristophanes debuted his comedy, *Peace*.

In the plot, a farmer named Tyrgaeus travels to the heavens to plead with Zeus to end the war with Sparta. Trygaeus soon learns from Zeus' messenger Hermes that the goddess *Peace* has been imprisoned by Ares in a nearby cave. Seizing his opportunity, Trygaeus tries to rescue her. Realising the scale of his task, Trygaeus calls on all the Greeks to assist him, and they arrive as a chorus. With our notion of *xenía* and *xénoi* established earlier, Trygaeus' full supporting cast were comprised of "farmers who traveled by sea, carpenters, handicraftsmen, denizens, *xénoi* [ξένοι] and islanders" (Aristophanes: 297). Excited at this opportunity, the workers fill their time with dance and song, but when the heavy labour of removing the large boulders begins, the disorganised group achieve almost nothing. The men then appeal to Trygaeus using the word "architect" as a verb and imperative. In Landrum's translation, "So, if it is necessary for us to do anything, direct us and architect" (2010: 19; Aristophanes: 305). Trygaeus directs and organises the groups, *Peace* is freed, and Trygaeus returns to Athens with appropriate ritual and celebration in the play's celebratory final act.

In "Performing *Theōria*: Architectural Acts in Aristophanes' *Peace*", Landrum sees Trygaeus' journey as a mirror of the audience's experience of the Dionysia. In *theōria* one takes a journey and encounters new ways of thinking, "not only beholding divine spectacles at an involved distance, but also participating directly in a rich variety of interrelated social, political, and religious activities: such as intermingling with strangers; conducting diplomatic exchange." (Landrum 2013a: 32). The process of *theōria*, of surrounding oneself with *xénoi*, depicted onstage and occurring as the communal *theōria* of the audience, heightens the sense of *xenía*. Furthermore, Aristophanes' inclusion of *xénoi* in the chorus reinforces their inclusion within the community.

Like *Peace*, Euripides' *Cyclops* was the final comic act following a trilogy of tragedies performed at the Dionysia.[3] The play retells the story of Odysseus' encounter with Polyphemus, the *Cyclops* well known to the Athenian audience from Homer's *Odyssey*. Odysseus and a few men arrive on a small island seeking food and fresh water—the archetypical *xenía* moment. When Odysseus arrives on the island, Euripides' account differs immediately from Homer's, with Odysseus encountering friendly satyrs before returning to Homer's version where Odysseus and his men are captured. Unlike Homer's version, Odysseus appeals directly to "Zeus Xenios [Ζεῦ ξένι᾿]… look upon these things" (Euripides: 354).[4] Odysseus asks the assistance of the satyrs to overcome the *Cyclops*, in Landrum's translation, "Be silent now—for you know my scheme completely—and when I command, be persuaded (to follow) the architects" (2010: 134; Euripides: 477–8). When the moment arrives, the satyrs withdraw in comedic fear, but heroic Odysseus blinds the *Cyclops* and makes good their collective escape.

Between *Peace* and *Cyclops*, Athens had renewed its war with Sparta, and suffered catastrophic losses. Homer doesn't name the island of the *Cyclops*, nor clearly describe its location. Euripides sets Odysseus' landing at the foot of Mount Aetna on the island of Sicily. For the audience, this would have brought to mind a disaster that happened in Sicily seven years earlier. Responding to their Sicilian ally's request for assistance against the attacking Syracusans, the Athenians broke the Peace of Nicias and set out to Sicily. Within two years, the entire expedition, over 10,000 soldiers and 200 triremes with their oarsmen, had been killed (Thucydides: VI–VII). This was the largest armed force the Athenians ever assembled and their largest loss. Contemporary historian Thucydides wrote that 7000 captured Athenian and Sicilian soldiers were imprisoned in a quarry cut into the earth, abandoned and left to die (VII, 87). It is in this gruesome context that Euripides retold the story of Odysseus and *Cyclops* trapping and eating his men in a cave on the side of Mt Aetna in Sicily. The consolidation of a link to *xenía* from *Peace* and *Cyclops* mirrors this aspect of Athens' changing military successes, and sends a message to the audience that the Syracusans are not *xénoi*.

As a metonym for enacting *xenía*, Odysseus' instruction to the satyrs is an amusing turn of phrase, simple and common enough to avoid confusing or disturbing the satyrs. And finally, like Trygaeus, by acting on *xenía*, Odysseus acknowledges that his *xénoi*, in this case the satyrs, belong to his immediate community.

### Architects of *xenía* in the theatre:
### ii. the sanctuary of the theatre's elected architect

Depending on inclination and timeliness, three of the *xénoi* Plato mentioned likely attended the theatre. Plato indirectly specified one: many of the "*xénoi* who visit for festivals" would come for the Dionysia. The employment of architects in overseeing hostels as part of sanctuaries, or *katagógia* as noted by Ault above, is likely. Finally, the evidence of architects located in the sanctuary of the theatre refers to a figure who routinely acted according to *xenía*.

The theatre architects and some of their duties are seen across the following sources. An inscription documents an architect being instructed, under the influence of *xenía*, to assign theatre seats for a guest at the Dionysia (Mc.K 1974: 322–3). Posed as a rhetorical question, Demosthenes directed an almost identical request at Aeschines about how he handled a group of Macedonian ambassadors, "[should I have] ordered the architect not to give them reserved seats in the theatre?" (18 28).[5] The corresponding speech by Aeschines reveals that such accommodations in the sanctuary of Dionysus were not at the discretion of the architect, but of the senate: Demosthenes had "moved in the senate to assign seats in the theatre for the Dionysia to the ambassadors" (2.55).

A similar example is found in an inscription honouring Kallias of Sphettos with an assigned seat in the front row at the new stone theatre: "he shall have a front seat at all the contests which the city holds, and that the duly elected architect in charge of sanctuaries shall assign him the front seat" (SEG 28, 60, II. 96–9; Shear 1978: 6).

While stone-carved *stelai* record politically significant *xénoi*, namely those 'strangers' assigned privileged theatre seats, there is little evidence of the many other *xénoi* visiting the city, sitting further away from the stage during the busy

days of the Dionysia. These "elected architects in charge of sanctuaries" likely gave hospitality to visiting *xénoi*, overseeing both the construction of the theatre and perhaps many other short-term amenity buildings. However, as Csapo explained, architects only appear in records about the theatre after it was built in stone, extending a general trend throughout the ancient literature that, although architects are described as leading groups and selecting sites, the building material associated with their special skills is stone (2007: 98). So, besides whatever *xénoi* the sanctuaries' existing masonry buildings could accommodate, the architect's role in the erection and dismantling of temporary timber structures remains unclear.

## Conclusion

As Athens grew from town to city, it because increasingly diverse, and the separation between foreigner and local, which *xenía* honoured, became ever more difficult to distinguish. With each passing century, *xenía* became more of an antiquated notion, perhaps reminiscent of nobler, and certainly simpler, times. However, though the distinctions of *xenía* become more difficult to discern, *xenía* is a principle addressing constant human needs and recognises both the vulnerability of travelling and a community's need of peaceful and profitable relationships with foreign guests.

In the two instances of architecting on stage, the presence of *xenía* in each situation is easily recognised. By way of a verb, Trygaeus 'architects' *xénoi*, directed them to assist in producing *Peace* as *the* essential political premise. Aristophanes meanwhile has Hermes remind us of producing architecture (605–18), and where Trygaeus directs his community towards peace, Odysseus enforces *xenía* through violence, justified by his imminent danger. In each case, the architect organises labour into projects for the collective good that they would not otherwise accomplish. As Landrum noted, these protagonists "are each qualified as 'architect' while acting as an exemplary proponent of justice, peace and social order" (2013b: 254).

While reflection on *xenía* and different *xénoi* may assist a designer today in acknowledging otherwise voiceless users of public and private architecture, there remain systemic problems. As the ancient Greeks saw, *xenía* unambiguously mandated altruism towards the archetypically abject shipwreck survivor, but this group is so rare that it did not need mentioning in Plato's *Laws*. The virtuous cycles of hosting and being hosted function smoothly enough for ambassadors and foreign friends, and the sanctuary of the theatre extended itself towards *xénoi* in many ways. Yet perhaps due to a portion of political moral self-licensing, some *xénoi* remained in abjection. Combining Demosthenes' observation with Plato's categories of *xénoi*, Demosthenes and Vitruvius found fault in the city officials who neglected the architecture for *xénoi* without ambassadorial status or friends at their destination, that is, *xénoi* with neither political power nor advocacy. They imply in earlier years that architects and officials knew to be vigilant in respecting *xénoi* through all kinds of architecture. This marks the one piece of education Vitruvius reminded his readers was most valuable, and one thing that truly survives a shipwreck.

Endnotes

[1] For an overview: Weir, S. (2015) Xenía in Vitruvius' Greek house. *Journal of Architecture 20, 5.*

[2] Also: Demosthenes, *Olynthiac* 3.25.

[3] The date of the performance of Euripides' *Cyclops*, is disputed. See: O'Sullivan, (2012).

Scholarship is divided between two plausible dates during the Peloponnesian War, 424 B.C.E. and 408 B.C.E., either a few years before, or thirteen years after Aristophanes' *Peace*. The earlier date sets this satyr play as the fourth act of Euripides' *Hecuba*, which also features Odysseus and a villain who is blinded. See The Date of Euripides' *Cyclops*. *The Journal of Hellenic Studies, 182*, 161–172, Seaford (1982) who argues for the later date based on detailed metrical analysis.

[4] *Zeus Xenios* also found in Plato, *Laws* 5.729e–730a, 8.843a & 12.953e; Hesiod, *Works and Days: 225*, 327; Homer has Menelaus invoke Zeus with a lengthier term; Homer, *Iliad*. 13.622–625.

[5] Author's translation, no known English version translates ἀρχιτέκτον as architect.

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SEAN PICKERSGILL

# *Super Architects* and dream factories

## Local and/or general

The most recent and comprehensive study of architectural education in Australia, Papua New Guinea, and New Zealand was undertaken as part of an Australian Learning and Teaching grant awarded to Michael J. Ostwald and Anthony Williams in 2008. Ostwald and Williams had the difficult task of gathering up the spectrum of approaches to teaching architecture across all of Australasia and to analyse these for consistencies. Significantly, they report a special status for design studio, and in particular the nexus between graduating studio and the core competencies defined for architecture graduands within the terms of the AASA (Association of Architecture Schools of Australasia), plus the various local practice boards who manage the registration process for graduands to become registered practitioners.

One of the principal assumptions of the report was that studio remains the core syncretic subject in which the various parallel skills of architectural education came together and were expressed. In a report mindful of the broad range of activities of architectural education, the design studio was nevertheless afforded a special mention within the report recommendations:

> The design studio is the focus of architecture programs in Australasia. The studio is where knowledge integration takes place; arguably an architect's most important ability. (Ostwald & Williams 2008: 36)

In many respects, this is probably as it should be given the importance of consistencies in architectural practice which require a common pattern of organisational procedures, needs and behaviours. One expects architects to practise consistently within regional economic parameters, and one expects architectural educators and students similarly to approach education in a manner that is mindful of this reality. The studio then is the agreed model for emulating professional practice, particularly as a student matures through their programme of learning and becomes closer to graduating. In parallel, there are ambitions to address and teach more ambiguous qualities, such as 'creativity', however the nature and role of this value are less clearly understood, if universally desired.

Building on their 2008 study regarding architectural education, Askland, Ostwald

and Williams (2011) posed a more developed set of questions in a later paper regarding the status and identity of creativity (149–156). Reviewing the same, or a very similar cohort of educators, it is clear that again studio is the location where 'creative' practice is understood to be exercised, and where students learn a variety of approaches. The problem-based learning model of studio work encourages forms of interaction between educators, students and amongst student peer groups that value and reward innovation:

> Moreover, they illustrate a vision of creativity—and of teaching creative design—underpinned by a desire to expand students' creative potential by building their embodied understanding of creativity, their ability to think laterally and use their knowledge and skills to solve complex problems. (2011: 156)

None of this conflicts with any generalised discourse on the nature of architectural education when viewed through the lens of pedagogical mission statements and the like. Yet the broad nature of the analysis omits any detail capable of distinguishing what might be problematic in the conduct of design studio, particularly that of graduating students. What then do we make of the many graduating projects that seem to have become more visibly exotic, relative to the highly managed programme of competency and compliance called for by professional life? Further, what is being pursued in these projects that makes them so deliberately and fictionally disengaged from our current reality and which evoke states of affairs far beyond everyday experience?

This paper will consider precisely these questions. It will, firstly, interrogate graduating project work as processes of world-building that reveal themselves to be complex meditations on possible worlds and philosophical states. Secondly, it will attempt to categorise the indicative approaches found in these exercises of world-building. The reasons for approaching these issues in such a way is as much methodological as it is respectful of the indissoluble idiosyncrasies of the work presented. The aim overall is to find in these idiosyncrasies underlying tendencies that might contribute to a framework for attending to them more critically.

Take for example Sunny Qin's narcotic and delirious "Paradise of Paradises" project (Qin, 2014; see Fig. 1), or his equally marvellous "City of Mainkon" (Qin, 2014; see Fig. 2), which demonstrates the presence of an idea—that paradise is a material reality and the result of a collective wish fulfilment in a "post scarcity and post singular" universe (2014). Whatever the fine-grained analysis of the rationale behind the project, gained through scrutinising the febrile relationship between the text and image animating the work, it is clear that Mr Qin's ambition for the projects is not to illustrate the forms of competence that pass for a job-ready graduate architect. And while he may now be interested in the conventional process of design and manufacturing resultant in built work, we know that, as a student, his preoccupation was with evoking an image of a place, or a state, that contained some recognisable threads of the literature of paradisiacal environments.

However, perhaps the most pertinent of the initial questions that might be asked are, why are projects such as this attempted within architecture schools? Do they represent the persistence of traditions preceding a modernist concern with social immediacy and material technologies? Historically, there has been a consistent

tension between the pragmatic and the fantastic in the conduct of student architecture projects since the establishment of the French *Beaux Arts* system of the 17th century. Peter Collins (1966) however notes that, by the 1960s, a trenchant criticism of the form of florid speculation that these schemes demonstrated ultimately led to the abandonment of the *Grand Prix de Rome*, the signature award for creativity within the academy.. This criticism seemed to validate many of the discussions regarding the politicisation of the effects of architecture, most powerfully in comparisons between work by students at the AA and those of the Unité Pédagogique No. 6 in the late 60s (see for instance, Pawley and Tschumi, 1971: 336–366).

Despite being separated by fifty years, this moment in history should seem familiar since the debate within architecture schools regarding the character and direction of graduating projects has not really changed significantly. It demonstrates the classic structuralist trope of form and content within a dyadic argument in which changes in form occur. While the difference between Kahane's 1966 effort and Qin's 2015 piece are clear, the content remains consistent inasmuch as they both occupied an experimental relationship to orthodox practice.



Fig. 1 Sunny Qin (2014). "Paradise of Paradises: The Library of Paradises" [Render, S*uper Architects*]

Fig. 2 Sunny Qin (2014). "City of Mainkon" [Render, *Super Architects*]
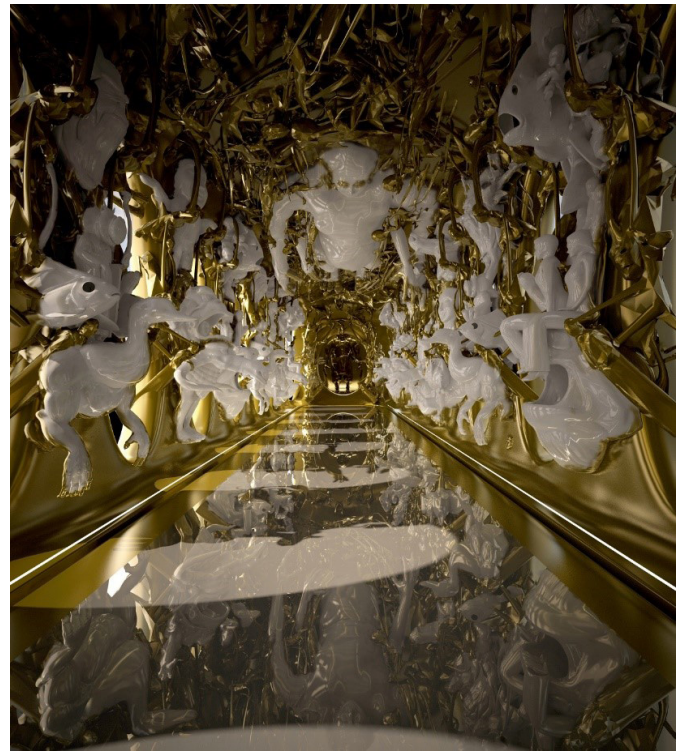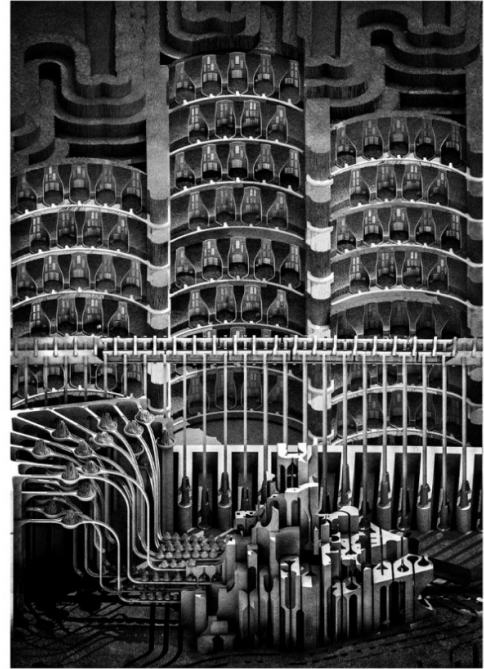
## Original showing: *Super Architects*



Fig. 3 & 4 Pamela Toh (2015). "Soil City" [Render, *Super Architects*]

The evolution of experimental student work has only recently attained a broader visibility beyond that afforded by the curated forms of publications associated with architectural schools, for example, in the United Kingdom via the Bartlett and the Architectural Association, and within the United States, via the Harvard Graduate School of Design or SciArc. This is not to say that such work has not been produced outside of these institutions, or been the product of intense effort in other quarters—but the visibility of this material has been an issue. In many respects this appears to be the consequence of two parallel conditions of the work: its sheer abundance; and its status as a form of juvenilia. The briefest survey of the work captured in the Bartlett annual review, for example, reveals an abundance of thematised approaches. *Bartlett 2015* documents 28 different studios with a wide variety of subjects of study. This diversity exponentially increases when the number of student projects per studio is considered.

Similarly, it is assumed that the work constitutes a form of juvenilia that disqualifies it from serious consideration. If the work is not directed to possible solutions that have immediate efficacy in 'real-world' circumstances, their principal role is as a rhetorical demonstration (*progymnasmata*) of intellectual agility and communicative sophistication (Fleming, 2003: 105–120). Studio then is an exercise much like the rhetorical exercises of antiquity where student work only occurs, and has any relevance in, the artificial world of education.

Finally, there are tangible differences of academic credibility between the work produced at the level of graduate students and the established genre of visionary *fabula* that stems from mature practitioners. This lineage extends from the illustrations of the *Hypnerotomachia*, through Piranesi, Sant'Elia and Chernikov to more recent work by Lebbeus Woods, John Hejduk, early Daniel Libeskind, and

Zaha Hadid, to name a few. This work, arguably because of the legitimating process of scholarly study, is generally considered to have demonstrated theoretical complexity specific to their historical moment. Further, if we think of less famous practitioners such as Ben Nicholson and Lars Spuybroek, for example, the value of the innovatory aspects of their work seem to be tied to their (arguably lower-tier) status within the intellectual economy of the academy (see Nicholson, 1990, Spuybroek, 2004). Following this arc, the work of students and graduates, because it is unknown, may be presumed to be derivative of the world-view of more established theoretical expressions, and consequently of lesser academic credibility.

But is it? Much undergraduate and graduate work is symptomatic of dominant contemporary discourses on the role and value of the historical and contemporary avant-garde. What is unquestionable is the abundance of material produced at this level and the vast heterogeneity of 'worlds' they attempt to invoke.

This is potentially where the work submitted and published by the website *Super Architects* can be thought significant and worthy of consideration. The site brings together student and recent graduate work that fits into a tradition that seems to revive the idea of the "*grande rhetorique*". However, it does so through the organic process of user submissions and the circumstantial interests of the editorial board. The website, according to its own mission statement, is an anonymous collective of interested parties that support the cultivation of the new. They say:

> S//A is an unprecedented democratizing force that's willing to revitalize and provide a platform for architectures' emerging counterculture; therefore a network for a new breed of thinkers/doers, who continue to render alternative, unconventional, and experimental ways of reconstructing what architecture might mean in/for the future... (http://superarchitects.world/pages/about/)

The schemes do not demonstrate an even level of invention, which is understandable given the relatively moderate and inclusive level of editorial curation. Some schemes demonstrate a level of competence and thematic focus that is consistent with professional practice and could, conceivably be built without too much of a challenge to contemporary interests. Some, however, demonstrate a degree of invention and intention that challenges the values outlined above with respect to the profile of creativity within the design studio in the Australasian reports. The great value of the site, and ones like it, is that its content comes without an overt curatorial bias in the first instance, or a concerted public identity that is managed to create consistency, or to demonstrate specific success of an educational program. Its life is dependent upon the efforts of the community that uploads material for publication.

The manifesto itself is suitably generic to cover the general aim of supporting an emergent movement of architecture graduates sharing an interest in pictorial and thematic richness. This has, as we shall see, allowed the editorial collective to commit to a particular philosophy of the rhetorically fantastic. So, for this reason, a closer understanding of what the open concept of "alternative, unconventional and experimental" actually denotes will be pursued in a more fine-grained analysis below.

## Theories on the impossible

At a first level of analysis, it warrants asking to what extent do these works, with their world-building propensity and will to view the given differently, draw on and contribute to, or extend, a broader tradition in architecture concerned with the utopian. An examination of utopian impulses in European architecture from the seventeenth century has been undertaken by Manfredo Tafuri (1976, 1987) in his highly refined Marxist review of the relationship between cultural production and Capital. Tafuri's studies on Piranesi and avant-garde modernist practice specifically, and on utopian thinking in general, dominates the intellectual field in these forms of architectural analysis.

But the question should also be—does the model of a totalising vision apply anymore in the ongoing issue of 'what to do'? Tafuri, and the debates on post-modernism, predated the changes in cultural practice arising with forms of economic consciousness linked to the sustainability movement, and also the impact and opportunities of proliferating engagement arising with digital culture. Utopian theory then, if it is appropriate to characterise the emergent student work as being 'utopian', seems to have emerged *after* the interregnum of post-theory discussion on the exhaustion of totalizing narratives of architectural meaning and purpose (see Frichot, 2009). What does provide a bridge between these historical moments—the cultural Marxism of the 1980s and 90s, and the contemporary plethora of visionary material—is Fredric Jameson's analysis of utopia in *Archaeologies of the Future* (2005). Jameson's own engagement with Tafuri, and the question of utopian architectural production, is complex since Tafuri's insistence that all form is tied to the totalizing and reifying aspects of capitalism results in the pessimistic conclusion that architecture has no role other than to confirm the presence of power and unequal social relations (see Day, 2012). Jameson concentrates upon the literary tradition of science fiction in *Archaeologies of the Future*, but the understanding of architecture's role as utopian, filtered through Tafuri and cementing the plausibility of the utopian imagination, is a core concern of his.

Jameson differs from Tafuri insofar as he does not concentrate on the pessimistic instrumental relationship between architecture and dystopic futures *as a project*. Within *Archaeologies of the Future*, architecture is present as a fundamental condition within the utopian condition, but is not discussed as a problem to be solved. For example, when he investigates a specific condition, such as Charles Fourier's utopian thinking, he does not consider it appropriate to extend his analysis of architectural production past Tafuri to a specific example such as the *phalanstère*. He does however suggest that 'structure', in the sense of structuralist anthropologies and their material, is a core aspect of utopian thinking (2005: 228). But, as Gail Day has noted, the mode of theoretical analysis within architecture that follows the scholarship of Tafuri and Jameson remains committed to the idea that utopian thinking is overtly a demonstration of resistance and emergence, not progress. She argues:

> Tafuri represented a "critical refusal of utopian speculation", which seemed to threaten the progressive purpose that Jameson especially attributed to utopian thought (and which still remains central to his intellectual endeavour). (2012: 60)

So if Tafuri and Jameson do not wish to propose architectural 'structures' that

might support or encourage changes in social inequities in the broadest sense, Jameson does still see seriousness in the literature of the imagination in science fiction. The benefit of studying Jameson's engagement with utopian thinking is that it gives considerable intellectual credibility to the thematic and intellectual consistency within the speculative ontology of this literature, a condition that ultimately has specific relevance to a component of the Super Architects material considered here. The question is whether the world-making and temporal displacements, if not out and out futurism in the student and graduate work, is something other than a melancholy rehearsal of the impotence of architecture to design a utopian future, or if it may have other, unarticulated values and motivations at work? The points below are intended to provide some indication of where this discussion might head. They are intended to capture some of the principal themes that seem to be consistently present in current speculative architectural work, and to give some indication of the categorical co-dependency of ideas that are opened in Jameson's approach to science fiction literature, except with a focus on the world-view (*Weltanschauung*) of critical architectural practice.



Fig. 5–8 Samee Sultani (2014). "Mute Peregrinations Through a Narrow Conduit" [Renders, *Super Architects*]
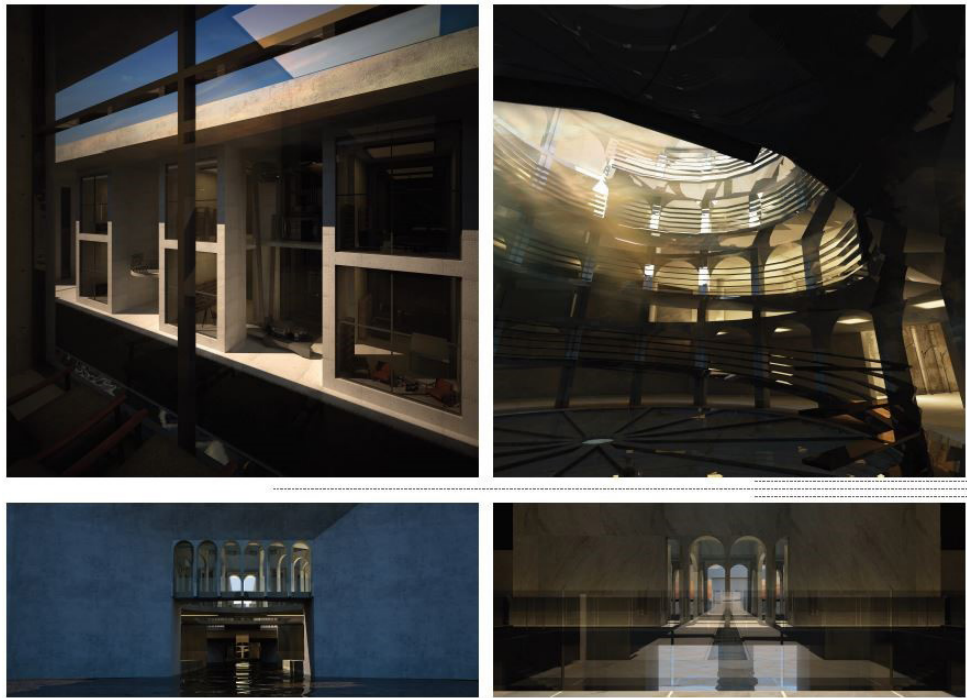
## Some notes on approaches

Looking across the breadth of the schemes listed on Super Architects, some thematic issues emerge that are worth isolating. In the main they demonstrate issues that involve questions of counter-factuality and historical materiality, of technology and its instrumentalities, and, of possible ontologies and the organic limits of the human body. The schemes involve some form of impossibility at a general level, or are idiosyncratically self-reflexive to the point of hermeticism or monomania. Nevertheless, it is possible to develop a few characteristics that apply to much of the work.

### Counterfactuality

1.  Projects are not recognisably and immediately feasible in that they infer an impossibility/or some lacunae of plausibility.

The schemes generally incorporate conditions that depart from the everyday by framing questions that are different from issues pertaining to commonplace, typological familiarity (a school, an office building etc.)—for instance, Sunny Qin's work concentrates on the aggregation of ideas of paradise, Samee Sultani's proposal (Figs. 5–8) is for a museum of ambiguity in Sydney, and Pamela Toh's project (Figs. 3–4) looks at the storage and management of topsoil in urban London. All of the schemes rely on an initial premise that ultimately inflects the decision-making process for proposing material and economic conditions that will be shown to be ultimately plausible in the scheme. The schemes are therefore tasked with making the strange or impossible present and legible. To do this, they must create a world condition or state of affairs that draws on some understanding of what may have been historically present, but which has changed for reasons that are sometimes explicit. This counterfactual condition then supports the emergence of a premise based upon impossibility and implausibility.

Counterfactuality and the possibility of parallel fictional narratives that employ aspects of the 'real', transformed by possible alternate 'states of affairs', is the substance of modal logic in philosophy explored for example by Saul Kripke (1972) and David Lewis (1973), and in studies of fictionality by Lubomir Doležel (2000). The particular nature of counterfactual thinking in modal philosophy is to speculate on the logical possibility of an event for which there is no material evidence of its occurring. For example, the idea that Germany and Japan won the Second World War is not materially true, but is logically sensible. What then happens when the logical consistency of this problem is generally not the concern of the philosopher, but is of intuitive interest to persons interested in theories of fictionality? In theories of narratology, the core question arises—how do we suspend belief and believe in something we know not to be true? This proposition is pivotal in theories of fictionality, possible worlds, narrative theory, meta-narration and meta-fiction (Hühn *et. al.*, 2016). The work curated within Super Architects, it can be argued, amply and comfortably demonstrate an engagement with these same theoretical questions.

2.  An historical material condition is implied, inasmuch as a project presents a state of affairs '*in medias res*'.

The term *in medias res* denotes a literary convention in which a narrative commences in the middle of the events it depicts. The narrative is usually in the present tense and without an elaborate construction of historical developments that have led up to this point. In terms of the temporal experience of the work, there is an emphasis usually on the viewer simultaneously discovering the project, as a reader might discover the major aspects of a narrative, or of a traveller being introduced to an exotic location in a travel description. Within an architectural scheme, the reality of its conditions is made immediately apparent because the images produced present a totality that is *already* real. The viewer is immediately placed in the temporal and spatial reality that the project frames and, as part of the narrative that the project controls, the complexities of the project are unfolded as it explains the world conditions it proposes.

This condition is acutely important in recognising the level of (dis)engagement of the work from theories of the future that typified questions of theory in the examples above concerning Tafuri and Jameson. Temporality is not the function of historical forces alone; it is also the reified and most palpable moment of 'now'. Taking the issue of counterfactuality in point 1 above, it could be one of several temporally immediate conditions (or 'nows'), but it is clearly one in which we expect the performance of the project to take place. In this respect, the 'nowness' of the projects is its synchronic and diachronic profile, suspended at the moment the author-architect believes it is most powerfully communicating its qualities and intentions. What circumstances are assumed to have led to this point, and what will transpire, is captured in the chains of causation the project implies.

3. The state of affairs involves a series of counterfactual propositions about agency and effect.

The world-making associated with the state of affairs induces causal chains within the work. Often the project description will summarise a series of catalysing conditions that have led to the circumstances of the project, but there are also implicit agencies and effects in the work that can be recognised. In Pamela Toh's work (Figs. 3–4), this is a series of environmental events that have initiated a crisis in food production and management. In others there are conditions of political instability or economic relations that can be identified. Causation then is an important transitive condition within the work, as it addresses the dynamic environment that the project exists within. Sometimes these effects are the product of human endeavour enhanced or situated within the project's architecture, or sometimes they are the outcome of instrumental technologies that the project initiates or supervenes.

Often the issue of causation is related to questions of scientific processes that are relevant to architectural practice. Whether it be a condition of environmental crisis in which various peak conditions have overtly occurred such as exhaustion of resources, or one in which potential energy resources or information and data management can be organised for more enlightened ends, the projects define ways in which this might come about. Generally, as a consequence of the point above, the exact explanation of how the science of this condition occurs is only lightly explained, if at all. The operative condition is one that just exists as a paradigm to be confronted or worked with, rather than explained. Architectural practice is therefore caught up in this confrontation.

Dominic Dickens' "Dead Drop City", (Fig. 9) a community of crypto-anarchists, behave in ways that are highly orchestrated. As he says:

> The secretive society live and work on their purpose built [sic] site in East Greenwich, manufacturing a range of goods through a series of cottage industries. The products manufactured range from the Dead Drop City Manifesto in the printing press, radical crypto-anarchist propaganda, and 'digital bricks' or the building blocks for a new city which contain data information storage on which the Dead Drop City Manifesto is loaded and can be accessed by passers-by. Raw materials are mined on site to allow the city to operate and produce these goods independently. (Dickens, 2014)

The programme of actions and their effects are identified through Dickens' design process. At times he presents the city's functioning as a hegemony,

immutable in its processes. At other times the project imagines the catalysing effects of the architect/viewer as a presence that inflects these processes.

Fig. 9 Dominic Dickens (2015). "Dead Drop City" [Render, *Super Architects*]
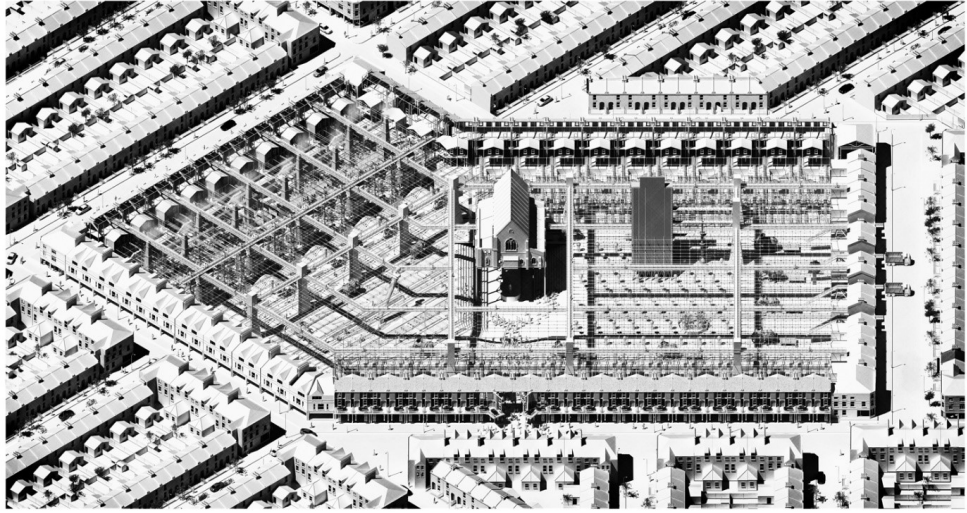
### Technology

4.  The ontology of the project suggests forms of existence in which maximally (dis)advantageous choices are being made, or need to be made.

In the first instance, most of the projects that exhibit the aspects that we have already outlined also often require that their users or inhabitants follow certain types of practices. As a core aspect of the imagined circumstances in which these projects can occur, there is a concomitant pressure on the users to behave in ways that confirm the dominant effects of the architectural project. Thus, like Foucault's identification of the disciplinary cultivation of 'life', demonstrated in his studies of prisons, hospitals and other discursive structures, forms of life are mooted to develop as a consequence of material conditions (architecture's disciplinary function) that condition the evolutionary development of an organism (see Hirst, 1993: 52–60). Conversely, emancipatory architectural projects can be analysed for their properties as discursive formations of types of liberating behavioural, and thus epistemological, practice. While all architecture demonstrates a degree of this condition, conceptual projects deliberately exacerbate and exaggerate this as a condition of their effect. One of the conditions for existence within the projects is that it demands behavioural disciplines that are different from conventional norms. Whether it is the crypto-anarchists of Dickens' project, or those of more anonymous users, projects assume and compel users to fulfil the project's implicit behavioural instrumentality.

In this respect, a number of the works within Super Architects sit beyond Tafuri's pessimism precisely because the existential conditions they imply are ontologically distinct from the historical material conditions he critiques. Much like the pharmacological experiments of *Alice in Wonderland*, the limiting case is the tolerance of the body to withstand an alternative version of the self. Architecture then is the material means by which the undertaking of these maximally enhanced and altered ontological states are made recognisable.

Jameson speaks of this economic moment, the design and production of an urban-scape of the imaginary, when discussing Tafuri's and Cacciari's analyses on the impulses of modern urban planning:

It is also useful to turn this rather different meditation on temporality [...]—that of Tafuri and Cacciari, who see this neutralized future as a form of insurance and of planning and investment, a new kind of actuarial colonization of the unknown. It is thus not merely to deprive the future of its explosiveness that is wanted, but also to annex the future as a new area for investment and for colonization by capitalism. Where Benjamin observed that "not even the past will be safe" from the conquerors, we may now add that the future is not safe either. (2005: 228)

Here the colonisation of capitalism described by Jameson, devolves in certain projects into micro-economies that exist only as half-lives of an idea. Each project gathered in Super Architects proposes and plays out an 'economy' of cause and effect. Yet they are no more, or less, serious than the revolutionary project of socialisation imagined by co-operative society. Within the discourse of what constitutes a 'serious' question for architectural imagining, the economics of the Super Architects work is perversely uneconomical because of its commitment to the 'un-safe' effects of the sublime. For example, Armstrong's "Thermoelectric City" (2015) proposes a gargantuan technological and economic structure, the *raison d'etre* of which is simultaneously to overwhelm the viewer while promising the liberative effects of systematised technological production.

6.   Projects valorise technological fixes to existential questions.

This is one of the more explicit and overt conditions within speculative projects, particularly those concerned with environmental conditions that seem to require interventionist solutions. Employing forms of analysis and communication that are common to architectural research—diagrams, data maps, cause and effect fields—these propositions valorise technological solutions. Often this involves suppressing aspects of the other conditions identified here, such as scientific probity, credible economic modelling and social behaviourism, in order to explore the potential technological outcome.

Fig. 12 Daphnie Costi (2014). "Tubascular" [Render, *Super Architects*]
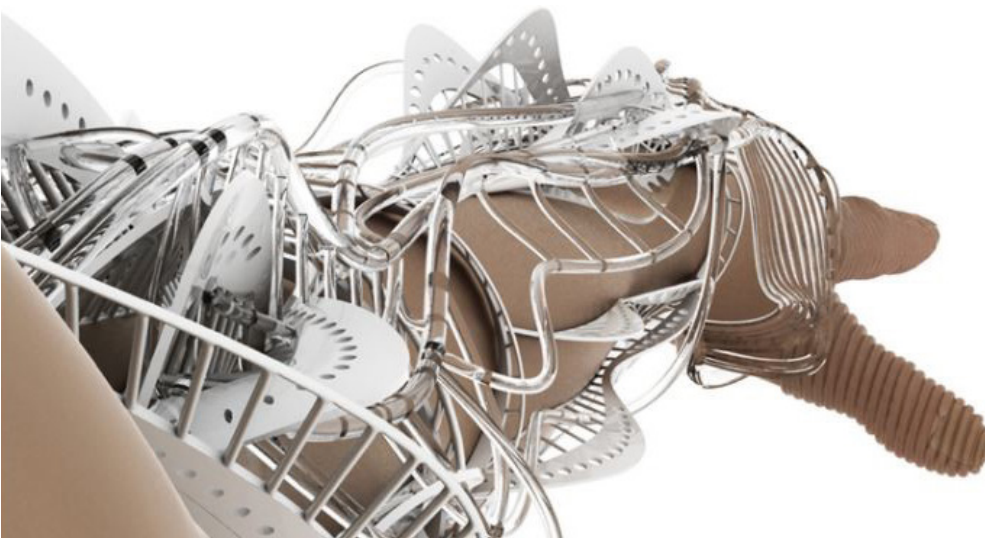
Often, considering these propositions objectively, the technological conditions are closer to propositions that mythologise its relationship to the human condition. Martin Heidegger's "Question Concerning Technology" (1977), though rarely cited, succinctly frames the qualia of this position. As Heidegger notes, technology is a bringing-forth of humanity's instrumental relationships and foregrounds the metaphysical implications of this condition rather than the logistics of power generation and management. At a more intimate level, and consistent with the scope of technology generally imagined and visualized by Super Architects projects, is the deployment of tools, particularly in the sense of Heidegger's encomium on 'tool-being' (*Zuhandenheit*). Architecture is a complex gathering of tools, and is a collective tool itself, that works on the world. The status of tools as purposive 'objects' that interact with the world, changing its material conditions while recognising the object-oriented nature of such an interaction, remains an important but rarely stated characteristic of the most speculative architectural projects (Harman, 2002). While directed at an aestheticisation of a mechanical prosthetic, Daphne Costi's "Tubascular" project (Fig. 12) is arguably more about the ambiguous status of the self as both "tool being" and as object (Costi, 2014). In this sense, projects engaging with technology tend to do so by deploying tools to construct worlds. While any of the Frankenstein fables of human/technology interaction rehearse the pleasure and horror of this encounter, the clear premise is that architecture is the outcome of this process of ontological construction (Gandy, 2010).

### Ontologies

7.  The organic limits of the body and its prosthetic augmentation are questioned.

In almost all projects there is the assumption that the worlds created are nominally inhabitable. Even Sunny Qin's seemingly impossible to occupy world bears human connection. Despite his paradisiacal world existing outside of conventional spatial and temporal limits, it nevertheless retains traces of the dreamscape and reverie—human reveries—that initiated it. Further, the work is dependent on our engagement with it as a proposition. Not only does its intelligibility rely on Mr Qin's depiction of it, but its functioning rests on a questioning of the philosophical trope embedded in it.

More generally, the relationship between architecture and human scale is a commonplace of architectural theory. From issues of proportional *concinnitas*, to those that hypostatize prosthetic technology at an architectural scale, there seems to be a clear motivation in many Super Architects projects to bring into measure the differences between organic and inorganic conditions, as suggested above. Furthermore, the design approach that utilises organic processes to 'grow' built structure, as a host for human activity, also explores the limits of biological and technological understandings of sentience. Natalie Alima's "The Bio Scaffold" (Fig. 13) proposes a complex structural paradigm that is grown rather than constructed and Costi's "Tubascular" project (Fig. 12), as we saw, explicitly proposed an architecture of the body that supports and weaponises the human-machine relationship (Alima, 2015; Costi, 2014).
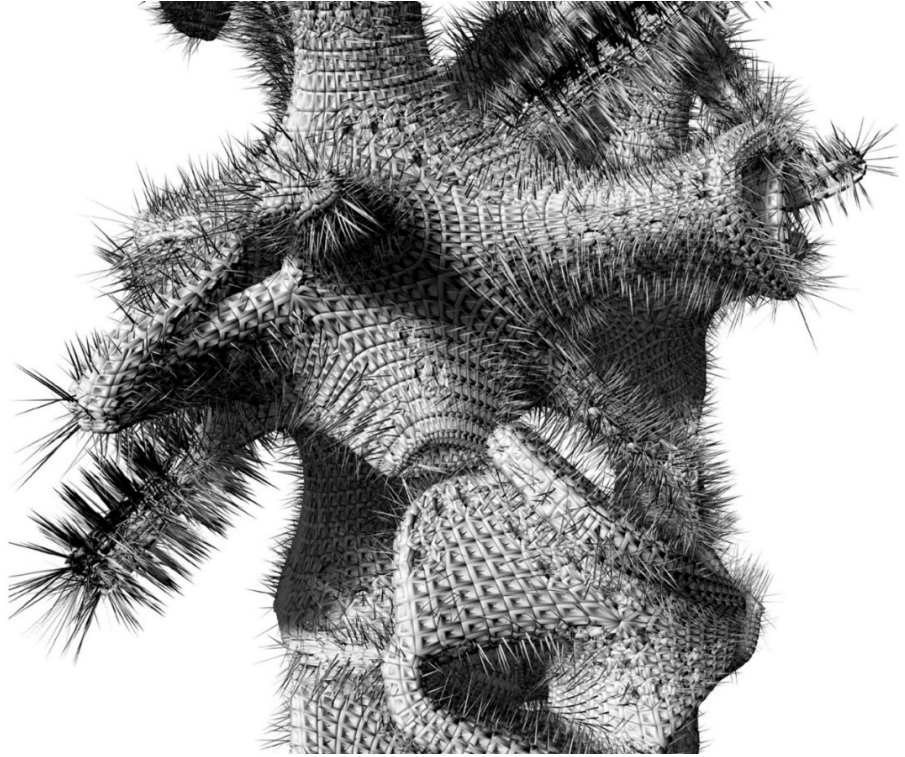
Fig. 13 Natalie Alima (2014). "The Bio Scaffold" [Render, *Super Architects*]

8.  Behavioural and psychiatric pathologies may motivate the projects, but these are amplified beyond the personal. They are taken as both collectively relevant and politically significant.

Given points 4 and 7 above, it is evident that many projects mobilise compulsive and obsessional factors to disrupt conventional programmatics and to instil in them alternate worlds of unconventional, if imaginable, behaviour. Concomitant with this strategy is a broader questioning of behaviour, free choice, and freewill, themselves inseparable from the issue of ethical choices. This is politics at its most visceral and, when combined with propositions that involve transformations of economic relations, it is clear that there are many political questions to be answered in many of these projects, though their authors rarely address these issues explicitly. Perhaps if they did, many of the projects would never reach completion.

Obsession and repetition, while typically indicative of pejorative psychological conditions when taken as a premise for an architectural project, work to counter normative expectations of balanced responsibility in projects. Yet, as Andrew Benjamin argues, repetitious return is the very essence of memory and its mobilisation—a mobilisation that is itself central to architecture and its critical dimensions:

> At its most minimal, however, the implicit work of memory is the work of repetition. Repetition inscribes. What this means is that it is only in terms of repetition that an account can be given for how and in what way any new project is architecture's work. The doubling of repetition occurs because not only does repetition announce the possibility of a continual reiteration of the given, there also has to be an allowance for a form of repetition in which architecture can sustain a specific critical dimension. (2000: 43–44)

Along these lines, the promotion of obsessive behavioural expectations within architectural projects can be seen as a form of communicative 'bracketing' that bring forward the philosophical purpose of the project. Like the insistent presence of certain behaviours in the sketches of Le Corbusier—looking, reclining, exercising, being-absent—the work presents its argument most clearly through repetition.
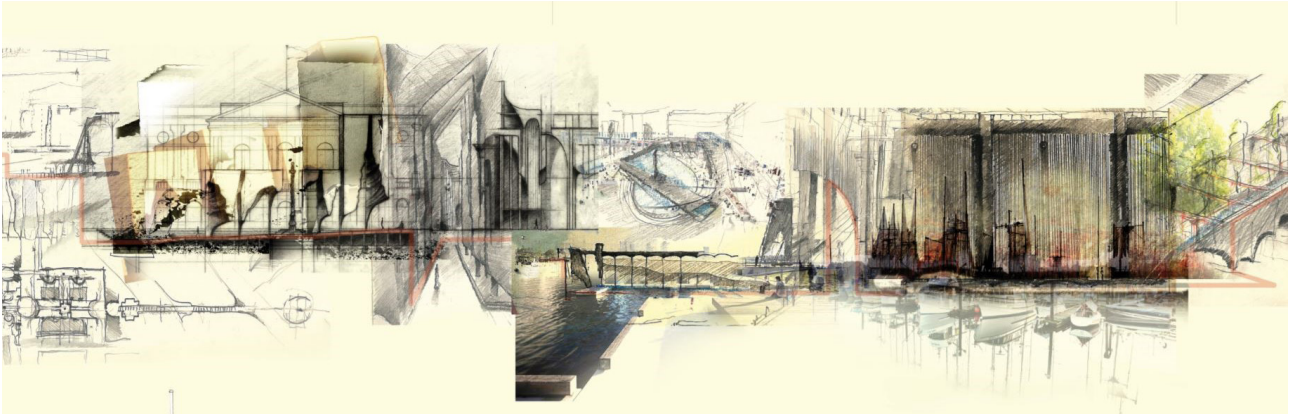


Fig. 14 Ed Meyers (2014). Lisbon Market Project [Render, *Super Architects*]

9.  The projects aim for poetic value and quality as one way of overcoming a melancholic finitude in things.

Finally, many projects strive for poetic beauty. The renders they exhibit are characteristically rich and complex. While depicting their intended proposition with much seriousness, the projects nevertheless maintain the pictorial dimension as itself a critical and necessary aspect of the architecture.

And yet, the projects also represent conditions, if viewed generously, in which the positive aspects of the work, politically speaking, can be focussed on. The emancipative opportunities of complex aesthetic experience—Theodor Adorno identifies this as "truth-content" (*Wahrheitsgehalt*)—can reveal both critical problems within social formations and possible moments of transformation of consciousness. The virtuality of this experience, its immanence as a counterfactual possibility, makes its political value clear. Aesthetic complexity is what makes the comparative and critical dimension of the projects possible by the very imaginative weight of their architecture.

## Conclusion

While the points above can only briefly characterise and question the tendencies evident in contemporary design practice within current architecture schools, they hopefully point to a gap that currently exists in the critical space within which they are evaluated. Though there are clearly locations that support these works through the development of clear critical practices, it is also the case that this is a fragmentary and individualised condition dependent on specific school cultures. What is certainly clear is that there is little literature that gathers these tendencies together and speaks across disciplines to the practice of exploratory design at this level, the level that the editors of Super Architects have recognised contains material of significant public interest.

Often the issue of what maturely constitutes the avant-garde is directed towards practitioners, or towards architect academics who have sufficient scholarship to situate their own work within the type of conversations framed by institutions such as the Graham Foundation, the Venice Biennale, or the Architectural Association, to name a few. But if we think of the process of origins as one of complexity promised but not yet realised, then the body of work that Super Architects captures is itself a form of origin myth, if carefully understood.

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SARAH TREADWELL

# Working with Cixous: The cleaner's grey drawings

Fig. 1 Author (2016). *Surface 1*: *Swab 1*

"We have to lend ears [...] to what is speaking, murmuring, signing around" Hélène Cixous said in a filmed conversation (2010) where she spoke of painters as recipients of messages from the past, and also from an arriving future running ahead. Elaborating on such insight, this essay deploys word pictures and drawn paintings to follow unconscious murmurs encountered in past acts of house cleaning, an undertaking that forestalls completion and engages with transformative material conditions. It is also an essay about an ending, although that is necessarily suppressed, for it is also an arriving future.

Contorted, the cleaner looked back and forwards to hear the conversations she had had with the houses in which she worked. Now elderly, she had been well trained in the space and formal conditions of rooms, operating outside notions of occupation, situated between life in the house and the life of the house; memories of that time would arrive without nostalgia. Originally the cleaner had been sent to work at a house in a dead-end street. Plain, blue and white, the house

blocked off the end of the road. No front garden, no display to the street and entry through a wall into a private world. The cleaner arrived in a glazed space, two stories high with a passageway through to a tree filled garden and another much larger house beyond. Two houses, one urban and one suburban, meant negotiating the unstable histories of their combined interiors.

A shadowy figure barely there, the cleaner came to treat the two houses as knowing and aware, and always in need of physical attention. It was a sort of loving and disowning relationship that mimicked maternal gestures of attention and affection but which was also momentary, temporary. The cleaner had no 'proper' relationship with the houses but rather a dreaming, physical engagement, a compound of labour, boredom and fantasy. Stray hairs, pieces of skin, crumbs of bread, wrinkled cloth, dirt from the outside world, germs from interior regions—the housekeeper pretended that these things matter. She was conscious of working with emotions of homeliness, aesthetics of class, and a parody of medical science; her work seemed to be situated in a zone of property and denial.

Within the wall-like space of the house elevated above the garden, glass let sunlight into a small gleaming timber interior where dust mites were illuminated with the fluctuating breath of occupation. A similarly thickened luminous space was made vivid in the writing of Emma Cheatle as she imagined the sweeping gestures of the *Maison de Verre* housekeeper, cleaning away physical remnants of the gynaecology clinic and its operations. Cheatle wrote of visiting the building, "a long time later when I enter this room again, the now abandoned surgery, layers of dust shift. I am moved, unable to think. The thin, brittle glass appears a contradiction, soft and pulpy, like jelly or thick seawater. You are neither inside nor out, swimming in a translucent, thick glass space yet exposed, open" (2012: 110). A long way from Paris, black dust and thickened seawater would become the substances of drawings the cleaner produced later in life, having moved on from the houses for which she cared.
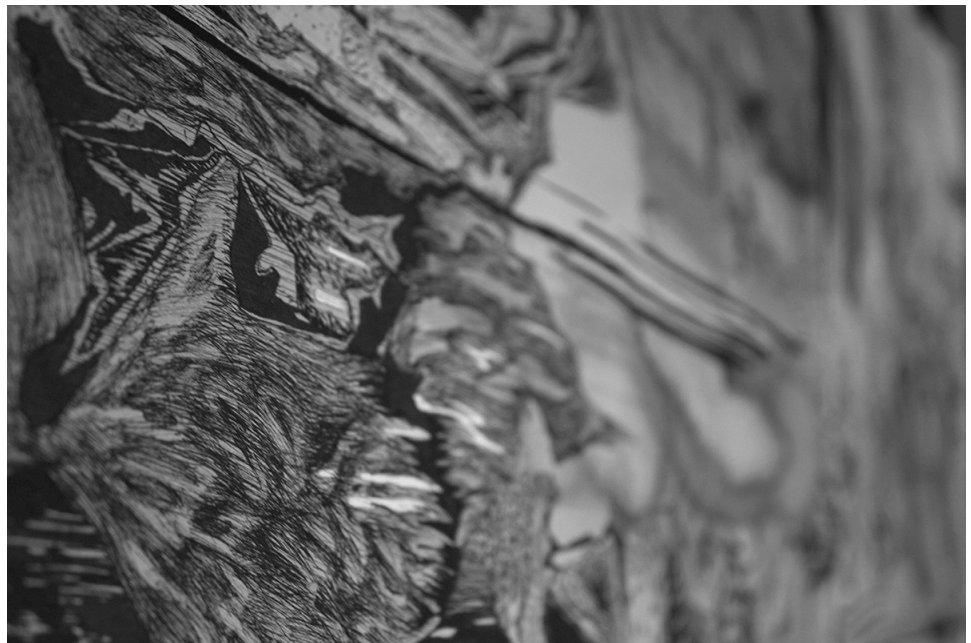


Fig. 2 Author (2016). *Surface 1: Swab 2*

Cixous evoked cleaners when she noted that:

> In order to live we busy ourselves casting off our sloughs. We pretend to be virgin and free from mortal remains and decomposition. We disown ourselves in bits and patches. Poor us, the denizens of heightened buildings, champions of denials, defenders of the Clean and Proper, we scaffold distances, walls, skyscrapers, classes, borders, in order to separate ourselves from our improper proper part. We furiously distinguish ourselves from our animality. We forget our natural mortality every day. (2012: 93)

Cleaners, chasing bits and pieces, might be seen to face up to the disowning we endlessly enact. The difficulty of removing mortal remains—hardened food scraps, traces of nail polish, and inadvertent splashes of Indian ink all beset the cleaner while a grey ring around the bath composed of soap fat and skin particles resisted her attentions. In her childhood she had been fascinated by the strange, purple-grey hue of an indelible pencil. The word 'indelible' itself seemed to be from elsewhere, suggesting access to another world. Marks from that pencil embellished surfaces intended to be blank and she recognised in them traces of illicit inscriptions persisting throughout her life. Indelible drawings grew in her imagination as she observed incised and burnished patterns in the houses she cleaned.

The film *Koolhaas Houselife* (2008) by Ila Bêka and Louise Lemoîne investigates the physical relationships between people, living or working, and the structures they occupy. Tracing the path of housekeeper Guadalupe Acedo as she cleaned the celebrated house in Floriac, Bordeaux, designed by Rem Koolhaas of OMA, the film collected her stories about the architecture and its occupants while the camera winds and swoops around the building following her work. The filmmakers talk of a building as a living body and wonder about the architect's primal fear of ageing. Perhaps the youthful perfection of a house occurs when it is detached from the architect and given to the client. Cleaners, however, following rituals prescribed as hygienic, register a gradual blurring of surfaces and the ageing sag of structure. Guadalupe Acedo knew the building intimately—in the film she is shown gathering and clutching curtains into human sized bundles while she talked of the sadness that followed the death of the man for whom thehouse had been built.



Fig. 3 Author (2016). *Surface 1: Swab 3*

The house at Bordeaux has attracted essays and films that seek to undo the primacy of the static image as the representation of architecture (Colomina and Lleó 1998, Bêka and Lemoîne 2008, Ventura 2009). Each piece of writing and sequence of filming steps away from traditional, disciplinary representations of space and building and lets in personal stories, families and cleaners. The actions of Guadalupe Acedo make a physical and emotional pattern of the house—her hands spiralled upwards repeating the circulation of the occupants, she also talked of the laughter that filled the house, and then of that laughter's absence. She worried about the leaks. Leaks were also a source of contention and anxiety in the childhood home of the cleaner in Aotearoa/New Zealand. It was a commonplace occurrence met with plastic buckets decorating the floor of an upstairs hall; small fountains sparkled as they dripped into red bucket, blue bucket. Leaks might signal a lack of organization, money, an endless dissolution of the proper and discrete container of family life; they also indicate experimental joints, radical materiality, and a breezy permeability.

She remembered other leaking roofs in her life. To be without shelter, without security, is commonplace and fearful—the cleaner sleeps badly after watching the news and her dreams slip out. Creatures of the night leak through the ceilings, crawl out of the floorboards, slide from under mattresses, from behind the fridge, beneath the table. They change scale, cease to be invisible, and proliferate. Stirring in her sleep, the cleaner emulates Cixous's night time practice of recording dreams and draws the creatures on scraps of paper. Black and scratchy drawings bubbled with gentle laughter from the occupants of the houses, tainted by the bitter taste of lack and patterned by the variable shape of labour. She carefully makes and remakes the contours of the drawings, paying particular attention to surface conditions. At times tears drip onto the paper blurring the precision of the aesthetic intention. As Cixous suggested in the filmed conversation about writing, cleaning and drawing might also be seen as strategies "of repairing the biting of death into life" (2010). In the morning, the drawn creatures are flat and slightly strange, confirming Cixous' sense of her own writing where "everything that happens on the surface... *is* a surprise" (2010).



Fig. 4 Author (2016). *Surface 1: Swab 4*

As she drew, the cleaner recognised in the night time visitants the concealed surface of her daytime labour. As Cixous explained "[t]he drawing wants to draw what is invisible" (1998: 24). Dark drawings emerged endlessly, hovering in a shallow space of displaced attention; the cleaner imagined a clear surface but could not believe in the eradication of doubts, sorrows or the displaced. Accepting the sharp teeth of death, she cultivated only the appearance of obliteration. As a practitioner of surface attention and material care, the cleaner gave scant recognition to errant details, cultivating instead the variable continuities of the house.

Suppressing sticky secrets, small hand movements touch the house, and the drawing, repetitively and obsessively, going over the surfaces. With lines of movement, threads and combings, an unstable surface of a house is rewoven, births and deaths are recorded, acknowledged, felt and never eliminated; treacheries and pleasures are threaded through the surface constructions with ornamental repetitions. Her work slows as she drifts off into memories which are also part of the fabric that she makes. The physical labour, in its repetition and rhythms, is a song, a refrain, a mobile bubble of sound that momentarily calms the world (Deleuze & Guattari 1987: 311). Singing to the house tunelessly, the pulsation of her throat binds her to the matter of the space; in tandem with the machines that growl across the floor, she is at once absorbed and detached.

Through her labours, the cleaner can induce only a pause in time and occupation. Her work creates an apparition of some original condition. Time falters as the mop moves back and forth, the pace and after-effects of physical action are regular, peristaltic. In an oblique alignment with the surfaces of the house, the cleaner constructs a space of hesitation in which to think, full of halting doubt and potential promise. Age is both denied and cultivated—polish builds up, patinas are preserved. In the cultivated surfaces lie shadowed aspects of occupation; echoes of disputes and words of love fail to register clearly and the rooms, in which so much was promised and given, have only an inkling of the future.

Blackness in the pot of ink, in the congealing surface that catches the light, is punctured by a nib that then drags across stained paper, trying to catch the fleeting visitants. Inklings are sharp, dark creatures partial in their definition; inklings of relationships and dreams that remain unfulfilled, or excesses expended and enjoyed, inklings born of idle observation. The drawings can only catch the barest black inkling of all the words, all the effort expended, the coming and the going of the interior. An arc of dirty water slashed across the stainless steel tub, drips flying, gritty. The cleaner gathered her belongings and left the house to others as the day ended.

Fig. 5 Author (2016). *Surface 1: Swab 5*

The odd culture of maintenance, reluctant to acknowledge change and uneasy with the release of time, seems to belong to the old world, to another world. As she walked home, the cleaner admitted to herself a minor tendency to celebrate the slow dissolution of the house; lightweight frames burn, decay flourishes in constant rain, carvings might be preserved but the house could blow away.



Fig. 6 Author (2016). *Surface 1: Swab 6*

Maintenance might be said to demonstrate compliance and obedience to societal strictures on hygiene and conformity. It might also be a sort of ritual blood-letting—her hands were scoured and her knees ached. The cleaner knew of television programmes on hoarding and obsessive cleaning and recognised the thin border between her work and anarchy. Out walking one day she had seen another elderly woman haunted by the unseen who endlessly washed the

gleaming weatherboards of her house. For Julia Kristeva knew it was "not lack of cleanliness or health that causes abjection but what disturbs identity, system, order" (1982: 4). Abjection marks, as she says, "the in-between, the ambiguous, the composite" (4). Hands scrabbling, lines of anxiety marked the face of the woman who tried to wash away the lines of gleaming weatherboards. At home now on a hill above the city, looking back down to the houses that she cared for, the cleaner washes creamy, thick paper with a mixture of mother's milk and Indian ink. She sweeps a broom across the skin, removing surplus tears. The stories of her day and the detritus that her work keeps at bay crawl across the surfaces of the houses that she draws but cannot inhabit. Joining together the drawings spread across the wall, there is no distinction between wallpaper and her work, which is never-ending.
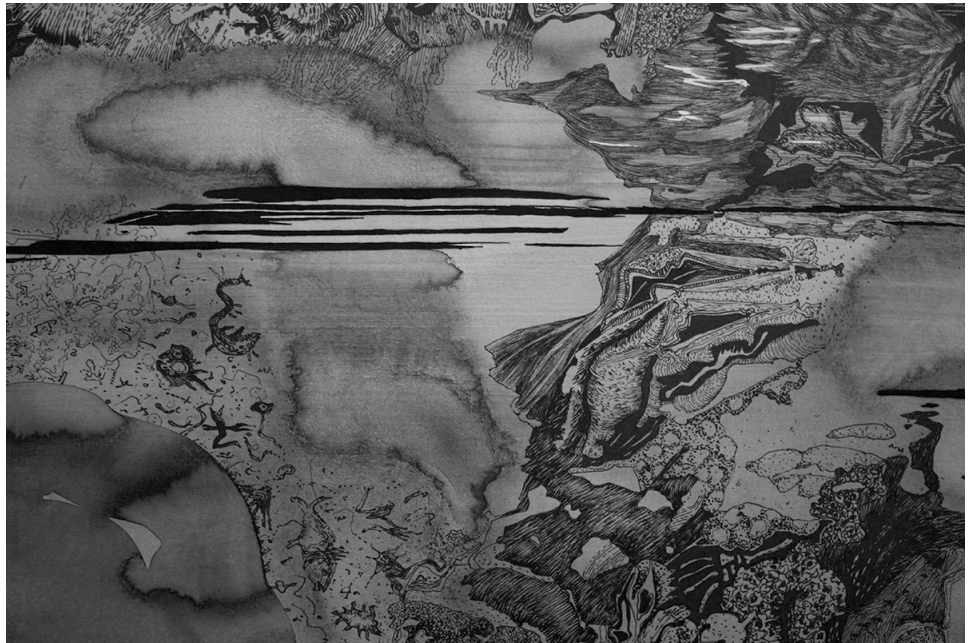


Fig. 7 Author (2016). *Surface 1: Swab 7*

### *Postscript*

This writing engages with a labour that, while mostly unrecognised, supports architecture and which itself is a form of drawing. Attentive to surface conditions, the material skin that engages with day-to-day life and death, cleaning is never about obliteration—in all its effort and repetitive labour, it allows a sensitivity to the emotional conditions of interiors and the residues of architectural occupancy. Are cleaners not painters who make works only to remake them again endlessly? For "what is a painter?", asks Cixous, but "[a] bird-catcher of instants" (1991: 104).

Writing here has been imagined as a net that envelopes and enfolds airborne moments passing by as sunlight catches dust particles. Caught in a brief curtailment of freedom, instants are drenched in the dampness of ink, making pictures which remain when the bird has vanished. Considered as swabs, as pathological and affectionate rubbings that seek to retain traces of substance, the drawings,

paralleling the writing, have a tendency to accumulate all the problems and curiosities of decaying matter.

To clean the houses doubled in a dead-end street was to work with an architecture that was doubled and split between the past and the modern, between the suburban life of animals, small children and the city, a doubled condition reflecting the ambivalence of the cleaner who cares for, but cannot occupy, that to which she attends. Neither possessive nor entrenched in the operations of cleaning, the houses are understood to foster brushwork skills, soft techniques that are forms of inscription, accumulative, dreamy and material. Cixous, considering the writer Clarice Lispector's book *Agua Viva*, suggests that it "aims to write-paint, to work on the gesture of writing as a gesture of painting" (1991: 104–5). Undertaken in this piece of writing is a transitional negotiation between drawing and cleaning, two modes of attention that operate with some care on architecture and that yet might now be a passing figment of the cleaner's imagination.

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JEREMY TREADWELL

# The rua whetu joint: Detail as origin

## Introduction

Architecture has often retreated from its obligations of contemporary relevance back to the comforts of origins. Architectural history has provided the mechanisms that bestowed authority on the notion of the origin and therefore on architecture itself.

But to return to origins comes with costs. The ever-reducing tendencies of the journey to origin lead inevitably to simplification and omission. This paper examines the architectural detail, not as a peripheral element of the more important and larger whole, but as a microcosm in which the geometrical, structural and cosmological dimensions of the building activate the architectural whole. However, the conceptualisation of this joint as a microcosm of the house will be argued to simultaneously enact a return to the geometrical, material and cosmological origins of the Maori world itself, as contained in the Te Ao Marama construct.[1]

This paper is concerned specifically with the development of one structural joint characteristic of whare Māori, and in particular the wharenui (large meeting house) of the 19th century. However, the joint is more specifically characteristic of those houses constructed from individually crafted components; "of whakano-ho, wrought timber, properly fitted together" (Best 1924: 562). It is within this fitted character of whare construction that this paper will examine the development and trajectories of the joint.

The junction with which this paper is concerned is that between the poupou (wall posts) and the heke (rafters). If the heke and the recess into which it slots is square or rectangular, the joint is known as the waha paepae. If the heke are semi-circular in cross section and the recess in the top of the poupou corresponds, then it is known as the whakarua whetu or rua whetu (Fig. 1). These drawings represent the two basic types of joint. There are, however, variants of these joints which developed within different iwi rohe (tribal territory).

The paper documents and examines the development of these joints as foundational artefacts in the evolving structural/cultural entity of the meeting house. The paper suggests that these joints have not received critical attention. Instead,
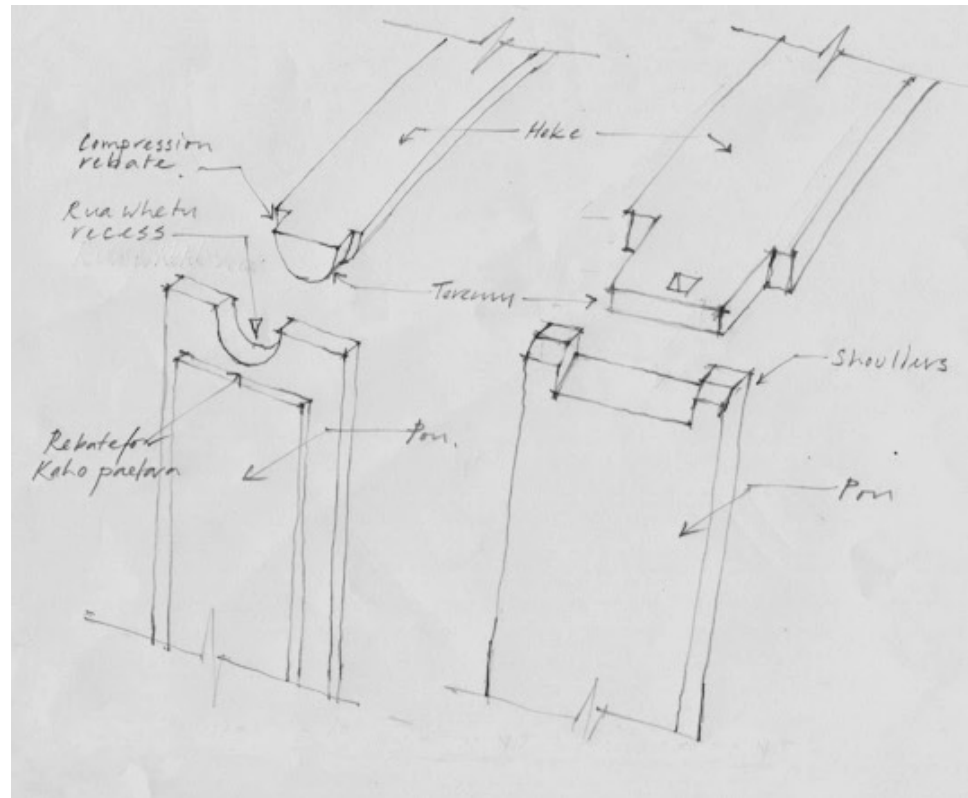
Fig. 1 Jeremy Treadwell (2015). Waha paepae and Rua whetu joints

it is proposed that these joints have been categorised and confined within existing Western constructional paradigms without reference to their role in the cosmological formation of the meeting house, or in their contribution to a distinctly Māori conception of building. The rua whetu joint, for example, is typically described and simplified as a 'mortice and tenon' joint. However, the rua whetu and waha paepape are both formally and functionally more complex than this Western joint. The Maori joint functions outside the conventional right-angled parameters of the mortice and tenon technique and is designed to operate not only as a junction of dissimilar components, resistant to both lateral and vertical loads, but also to lock against rotational forces.

The evolution of these joints into the 19th and early 20th century is traced chronologically through analysis of their representation in historic imagery, examination of artefacts in museums and examples of standing construction. It is clear that these examples do not represent a comprehensive record of the variations and distribution of the development of this joint, but do serve to indicate the scope and developmental direction.

The development of the waha paepae and the rua whetu joint is argued to reflect a formalisation of the building process which, by the 19th century, had become a refined technical practice which prescribed the geometry and the three-dimensional volume of the house. It is the angle of the slot cut into the top of the poupou to accommodate the heke that predicts the angle of the roof of the house and consequent shape of its interior volume. Similarly, it is the materialisation of this geometry as a locked joint which enables the formation of the whare as a sequence of structural arch forms.

The functional development of the waha paepae and the rua whetu joints as

compression joints will be examined in relation to their participation in the evolving structural system of the 19th century whare, particularly with respect to their increasing size and subsequent structural loads.

Equally invested in the structural and geometrical implications of this junction is a set of cosmological relationships essential to the wider stability of the house. This paper will therefore consider the joint through the complexity of its forms, meanings, functions and carpentry. It will propose that the late 19th century manifestation of the joint cannot be attributed to any single historical event, region, or structural requirement; rather that it emerged as a key element in the maintenance of the active cultural relationships embedded in the structural development of the house.

## Cosmology

The building of a wharenui is understood to recapitulate the cosmological opening-up and illumination of the inhabitable space of the world—te Ao Marama. In their whare wānanga, (house of esoteric lore) tohunga passed on their iwi's version of the creation narrative to selected pupils. Hone Sadler provided the Ngāpuhi account in 'Ko Tautoro Te Pito O Toku Ao: a Ngāpuhi narrative' (Sadler 2014: 1340–1441). Sadler had previously expanded the narrative to make clear its implications for the construction of the whare, describing the general metaphor in which the roof of the whare is seen as Ranginui (sky father), the floor as Papaptūānuku (earth mother) and, in more explicitly tectonic terms, how the toko (props) that Tāne used to keep his parents apart become metaphorically manifest in the house as the poutokomanwa and the poutāhu which support the ridge beam of the whare (Sadler 2013:).

Teone Taare Tikao narrated a largely Ngāi Tahu version of the creation story in which Tāne propped Ranginui from Papatūānuku with a great pole later laid horizontally across the sky, as in a ridge pole in a whare. Suspended from Tāne's great pole were the nine layers of heaven. In traditional whare construction, this account mirrors the suspension of the kaho (purlins) on either side of the tāhuhu (ridgepole) (Tikao 1939: 29).

However, it is in the formation of the roof and walls of the whare (in which the world of being is reconstructed) that the whakarua whetu contributes cosmologically as well as structurally. The etymology of the terms 'rua whetu' and 'whakarua whetu' suggest the nature of its intersection with the te Ao Marama paradigm. 'Rua' has several meanings including 'two', 'hole', 'storage pit', 'gap' and 'cave', whereas 'whetu' means star unequivocally (Williams 1892: 235).

The connection with the miniature radiance and seeming immateriality of stars does not appear to link readily with the incised hollow of the rua whetu. However other readings of te Ao Marama narrative confirm the role of ngā whetu. From these we learn that it is within the world's wider sources of luminescence, and the subsequent cycle of light and dark, that the 'rua whetu' (literally the hollow of stars) is connected to its metaphorical and structural origins.

Light did not immediately radiate into the space created by the separation of Ranginui from Papatuānuku. From the darkness that lay over Papatūānuku following Ranginui's elevation, Tāne nui a Rangi (departmental god and son of Ranginui and Papatūānuku) went forth to procure light for the world. He

Māori Language offers several meanings for 'waha', including 'entrance' and 'mouth'. There is a direct logic of 'entrance' to describe the slotted engagement of the heke within the top of the poupou (Williams 1892: 222). 'Paepae', in contrast, has a broader reach within the dictionary. The first definition of 'pae' is 'horizon'.

Polynesian marae have been identified as spatial markers of important navigational stars. Professor Paul Tapsell wrote,

> "Pacific anthropologists [and] historians ...noted that particular ancient marae appeared to provide earth bound (Papatūānuku) reference points by which accurate readings could take the place of celestial (Ranginui) pathways of sun, moon and stars as the navigators crossed the horizon" (Tapsell 2009:39).

In writing this, Tapsell connects the horizontality of the marae to navigational knowledge. (Horizon)tality, in this context becomes the reference point between the celestial and earthly opposition of te Ao Marama. At the horizontal junction of the waha paepae joint, between the celestial heke and the earthbound poupou, night becomes day, and beyond the interior of the whare and the paepae that stretches between the walls, light creeps over the land.

## Documenting the development of the poupou/heke joint in whakanoho construction

### Pre-contact evidence—waha paepae construction

Because timber structures tend to decay quickly in the ground, intact remnants of pre-contact Māori houses are relatively rare. The most significant finds are from kainga on and beside inland lakes such as Maungakaware in the Waikato, excavated by Peter Bellwood (1971), and at Kohika in the Bay of Plenty (Irwin and Wallace 1995). These sites have contributed much of what is currently known about the early whare whakanoho.

From the lakebed at Maungakaware Bellwood retrieved notched poupou and tenoned rafters. The drawings of these elements show somewhat irregularly tapering tenons and a majority of equally variable 'V'ed notches on the tops of the poupou (Figs. 2–3). The drawings of these components suggest that construction was not driven by a requirement for consistent controlled fabrication. The joints of the heke and poupou from Kohika have consistently constructed rectangular sockets and parallel bearing surfaces, which together demonstrate the intention to achieve secure component location and predictable load bearing. One explanation of this difference can be attributed to the clearly demonstrated use of cross-sectional post tensioning at Kohika with its additional requirements to control forces and loads (Irwin & Wallace 2004: 141–144).[2]

journeyed to Tangotango (the darkness of the celestial night) and Wai-nui (the ocean), whose whānau marama (children of the light) included the sun, the moon, the stars and phosphorescence.

> Tāne explained his need to Tangotango, *"To lighten us in our darkness; that Light may shine across the breast of our mother." (Best 1899:93) And so Tāne collected Nga Whetu—the Stars "whose dimmer rays only glimmered in the darkness" (Best 1924:563).*

Through this narrative ngā whetu entered into the body of the whare. But the next question is how the rua whetu joint was played out in structure. While most commonly known as 'rua whetu', the term 'whakarua whetu' was used by Elsdon Best (Best 1924:562), translating literally as 'towards the space of the stars'. By adding the article 'whaka', meaning towards and in the direction of, the implication of movement is added to the term (Williams 1971:485). 'Heke' (rafter), the member which connects to the rua whetu, also means 'to descend'. In the structure of the whare this is, by implication, the rafter's physical descent from the tāhuhu to the poupou. In genealogical terms it could be read as the ancestral descent depicted in the repeating patterns of kōwhaiwhai. As Neich summarised, "...the structure of the house constitutes a genealogical plan..." and more specifically, "the rafters (heke) were equated with branching lines of descent leading down to the ancestral representations of the poupou" (Neich 1993:130).

It becomes possible in this wider context to see the heke as a pathway for the stars from one side of the whare to the other, mirroring the nocturnal passage of stars from horizon to horizon across the dark vault of the sky, finally sinking below the horizon into the rua whetu. W.J. Phillipps wrote that the house Mataatua "when first erected conformed to the ancient rule that the tahu must run north and south" (Phillipps & Wadmore 1950:6). If this is the understanding of the traditional orientation of the whare, then the stars simultaneously traverse the night sky and the roof of the whare.

Interestingly, the Ngai Tahu narrative about the stars links metaphorically to both house structure and to the figure of the waka. Tikao wrote,

> After he Tane laid his pole across the topmost heaven Tāne returned to earth, leaving his big canoe Tutepawharangi—the canoe of Ruatapu, many centuries later, was named after it—to the family of Tamarereti, and it can still be seen, renamed as the Te Waka-a-Tamarereti, as a cluster of stars among the constellations adorning the sky. These Tamarereti people were lifted there by Tane when he lifted Rangi and they are there yet as they do not die like mortals (Tikao 1939:30).

The association of waka and their celestial navigation with Polynesian architecture is well known. Used as a representation of the night sky for navigational instruction, the Kiribati maneaba was traditionally built with the ridgepole (taubuki) aligned with the north/south axis. (Maude 1980:10) Similarly, the Samoan fale had stars and the moon in both ornamentation and structure (Craighill & Handy 1924:8, Treadwell & Austin 2009:42).

The term 'waha paepae' (the angled rectangular slot in the top of the poupou for a rectangular-sectioned heke) does not seem to offer a specific reading from within the narrative of te Ao Marama but its etymology suggests a connection with the discussion above. The 1892 edition of W.H. Williams' Dictionary of the
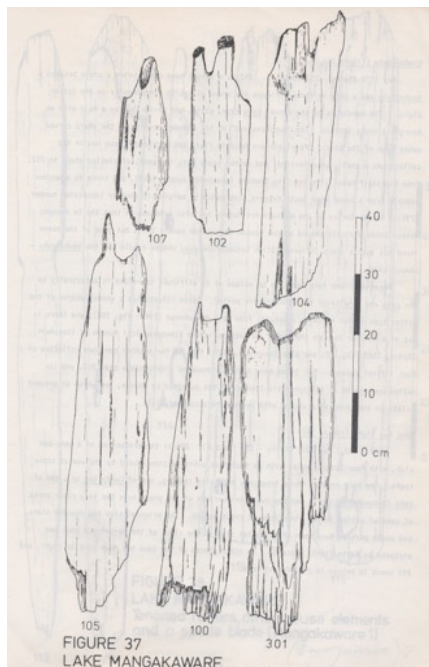
## Early contact evidence

### The Pourewa Island and the Hinematioro poupou

The most significant extant artifact of whakanoho construction from the period of initial Māori and Pākehā contact is the now well-known stone-carved poupou, collected by Joseph Banks from an unfinished house on Pourewa Island near Tolaga Bay during the Endeavour's 1769 visit (Salmond 1991:174) (Fig. 4).

With its squared format and refined figure carving, this poupou has been considered an exemplar of the Te Rāwheoro stone tool carving style (Ellis 2016:174). Appropriate to the fine definition of its carved surfaces and reflecting a concern with precise construction the top of the poupou and the waha paepae joint recess is accurately squared. Implicated by this carefully defined rectilinear slot is an absent heke of matching cross section.

There is another surviving stone-carved poupou from the same region and period which has been associated with the influential Ngāti Porou ariki Hinematioro. Much has been written about a possible relationship between these two potentially contemporaneous poupou and whether or not they were components of the same Pourewa Island house. This discussion has been based on historical accounts and comparison of carving styles. More importantly for this paper is the fact that there is significant tectonic difference between the two poupou. While the Pourewa Island poupou has a rectangular waha paepae joint (discussed above), the 'Hinematioro' poupou, by contrast, features a distinctly semi-circular rua whetu joint. This difference is of some complexity and importance.

Close examination of the back of the Hinematioro poupou shows evidence that the poupou, at different times, supported both rectangular sectioned and semicircular sectioned heke. The top of the poupou has been damaged on one side but shows, on the undamaged side, the recessed bevelled slot and locating shoulder characteristic of the waha paepae joint (Salmond 1991:174).

Fig. 4 (2015). *Pourewa Island* poupou showing the characteristic 'rectangular cavity' of whaka paepae construction https://upload.wikimedia.org/wikipedia/commons/e/ec/Klein_MUT-007.jpg

Fig. 5 (2014). *Hinematioro Poupou* showing the 'semi-circular' rua whetu joint at its top. Auckland War Memorial Museum Tāmaki Paenga PH-NEG-AM5017

One interpretation of this is that the poupou, originally part of a waha paepae house, was modified when it became part of a whare that had rua whetu construction. Significantly for this paper, the recovery of the poupou in 1885 after approximately 60 years in swamp makes this, the Hinematioro poupou, by far the earliest known example of rua whetu construction.

## Early Ngāi Tūhoe poupou

In the back room store at Te Papa Tongarewa are three Ngāi Tūhoe poupou from the Ruatahuna district in the Urewera ranges. Roger Neich concluded that while the poupou were carved between 1820 and 1860, it is probable that at least three of the poupou were carved before 1840 (Neich 1976:132). It is clear from the rectangular slot across their top edges that these poupou were part of a house, or houses, constructed with waha paepae joints.

## The houses drawn by George French Angas

In 1844, naturalist and artist George French Angas arrived in Wellington, where he began a meandering traverse of Aoteoroa. During the course of this journey, Angas carefully recorded a number of whare whakanoho.

Rangihaeata's house 'Kai Tangata'on Mana Island, the first of the whare to be painted, was represented in great detail, including the depiction of the poupou/heke joint as of waha paepae construction. The houses recorded by Angas can be understood as a dispersed sample of the constructional practices of various Tainui hapū from one discrete period of history. They all were recorded as utilising waha paepae construction.

### Te Hau Ki Tūranga (1840–1845)

About the same that Angas visited Aoteoroa a beautifully carved and technically refined house was completed near Manutuke on the East Coast of the North Island. Te Hau ki Tūranga was built by Ngāti Kaipoho between 1840 and 1845 (Brown 1996:12).

While famous for its carving, this whare survives in Te Papa Tongarewa as a unique and definitive example of an early meeting house of waha paepae and post-tension construction. Figures 7 and 8 illustrate the the poupou and heke of Te Hau ki Tūranga as the simultaneous embodiment of structural and genealogical relationships. These images depict carved representations of principal ancestors (poupou) supporting the carved representations from the next generation. This figural relationship is both metaphorical and structural, the more recent ancestor 'standing on' and tensioned against the head of the principal ancestor.[4]

### Whare karakia: Waikane (c.1843) and Rangiātea (1851)

In the 1840s, two important whare karakia were constructed along the coast north of Wellington.  These buildings indirectly inform development of the rua whetu joint and its structural context.  The first of these was a large chapel constructed by Te Āti Awa about 1843 at the Kenakena Pā at Waikenae (Treadwell, S. 1995: 147). This was a large whare structure of Gothic revival proportions. It was the subject of a sketch by engineer T. B. Collinson in 1846 (Treadwell, S. 1995:149). In 1852, Charles Barraud printed a lithograph of the interior of the second church, Rangiātea at Otaki. Despite certain limitations in technical detail, there remains enough information in these, and in later forensic drawings by architect Chris Cochran, to conclude that these buildings connected the heke to the poupou with waha paepae construction.

These two buildings are also crucial to a wider discussion fronted by art historian Richard Sundt. Sundt explores the Māori use of mid-span rafter props and under-purlins in these churches to remedy or prevent rafter deflection, citing their use as early examples of Māori adopting Western building technology (Sundt 2009:101). However, it appears that Māori, in their move away from the missions, extended their own technologies to construct large scale structures, and it is these technologies that influenced the development and proliferation of the rua whetu joint in the second half of the 19th century. Although beyond the scope of this paper, these technologies included semi-circular cross sectioned and pre-cambered heke, compression joints, and post tensioning.

### The development and proliferation of the rua whetu joint

In 1855, Reverend Richard Taylor published his major work 'Te Ika a Maui—New Zealand and its inhabitants.' In this text we find an early reference to the rua whetu joint as a general feature of whare whakanoho construction. "The sides (poupou) are seldom more than four feet high… having a small circular groove or opening cut into the top to receive the rafters (heke)" (Taylor 1974: 387). Despite this, there is little evidence in drawings or in securely identified museum artefacts from the 1850s and 60s to confirm Taylor's account of the widely spread rua whetu joint.

Fig. 7 (1976). National Publicity Studios. *Te Hau ki Tūranga: Representation of generational support*. Archives New Zealand. https://creativecommons.org/licenses/by/3.0/

Fig. 8 Jeremy Treadwell (2012). Te Hau ki Tūranga: Sectional detail—generational support conflated with structural support
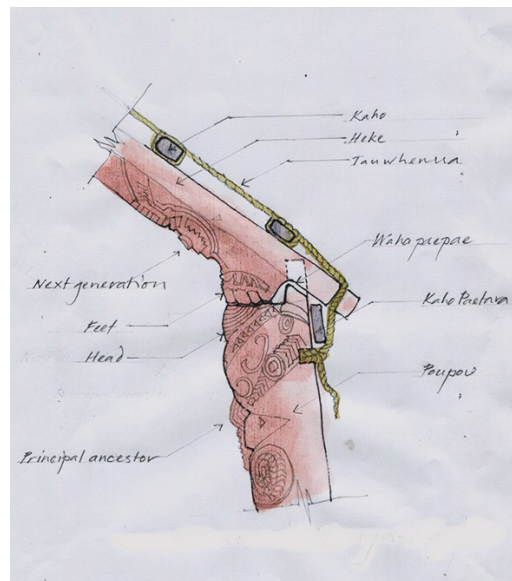
Following the New Zealand Wars of the 1860s, iwi built increasingly large whare to reaffirm tribal identity and provide places of worship. These buildings became characterised by semicircular and part-circular sectioned heke which were typically also pre-cambered. These heke required a new joint with the supporting poupou that would act in compression and 'lockup' (resist rotation) under load while accommodating existing artistic traditions. This was the rua whetu joint (see Fig. 1).

It is proposed that the rua whetu joint represented the continuation of the functional role of the waha paepae joint (also a compression joint) to accommodate the shift from rectangular section heke to semi-circular section heke, a shift motivated by the need to build larger whare with longer rafter spans.

In the second half of the century the rua whetu joint had several variants but virtually all were associated with semi or partly circular section heke. The bearing surfaces of these joints varied in accordance with the characteristics of the heke: a.) rua whetu with rebated teremu (tongue) and compression shoulder (Fig. 9) rua whetu without a compression shoulder and with vertical load bearing surface (Fig 10). These differences had constructional implications in terms of the achievement of lateral stability.

We will see that in the latter half of the 19th century the pre-cambering of heke was to develop further and become characteristic of much meeting house construction. This was to occur in the context of further significant changes to the heke and the expansion and development of the rua whetu joint. The use of the post-tensioning implicated in these changes will be the subject of another paper.

## Maui Tikitiki-a-Taranga (1865)

The earliest physical evidence of post-1850 rua whetu construction with secure provenance was the heke and poupou of Maui Tikitiki-a-Taranga (1865) located at the Tairāwhiti and Auckland Museums. The heke at Tairāwhiti Museum feature part-circular cross sections, a pre-camber of 100mm, rebated top joints and a teremu with compression shoulders to socket into rua whetu joints (Fig.9). The

poupou from this at the Auckland Museum have corresponding rua whetu joints.

An early 1865 photograph of the house Tumoanakōtore at Hicks Bay shows the house with same broad structural characteristics as discussed above, suggesting that rua whetu technology was well established on the East Coast at this time.[9]

### Tokanganui-a-Noho (1873) and Tāne Whirinaki (1874)

Te Tokanganui-a-Noho was built near Te Kuiti in 1873 by Te Kooti's followers in recognition of the shelter afforded Te Kooti by King Tāwhiao. Tāne Whirinaki was built at Waioeka in 1874 to bolster the mana whenua (power from the land) of Ngāti Ira following the land confiscations of 1865. Both houses were rebuilt and expanded in the 1880s 'by Te Kooti' and carvers from several iwi (Phillipps 1955:139).

These houses shared both artistic and tectonic features.  From the junction with the poupou and for a short distance up their shafts the full semi-circular section of the heke of both houses were further thickened. This had the effect of increasing the depth of their vertical intersection within the top of the poupou. This configuration effectively constructed a form of pre-cambering.  Both sets of heke also featured compression rebates at their intersection with the poupou as did the heke of Maui Tikitiki-a-Taranga.

### Mataatua (1875) and Hotunui (1878)

In an adjacent rohe (tribal area) of the same period, Ngāti Awa used the tectonics of the rua whetu joint in a significantly different way. As Te Tokanganui-a-Noho was being built at Te Kuiti, and Tāne Whirinaki at Waioeka, Ngāti Awa were building the great house Mataatua at Whakatāne. Three years after its opening in 1875, Ngāti Awa carvers also completed Hotunui at Parawai in Thames.

The heke of both of these houses have a wide and partly-circular cross section. Hotunui's heke are about 530mm wide and 140mm deep and are slightly curved

Fig. 9 Jeremy Treadwell (2016). Maui Tikitiki-a-Taranga c.1865. Detail: rua whetu junction with teremu and compression shoulder
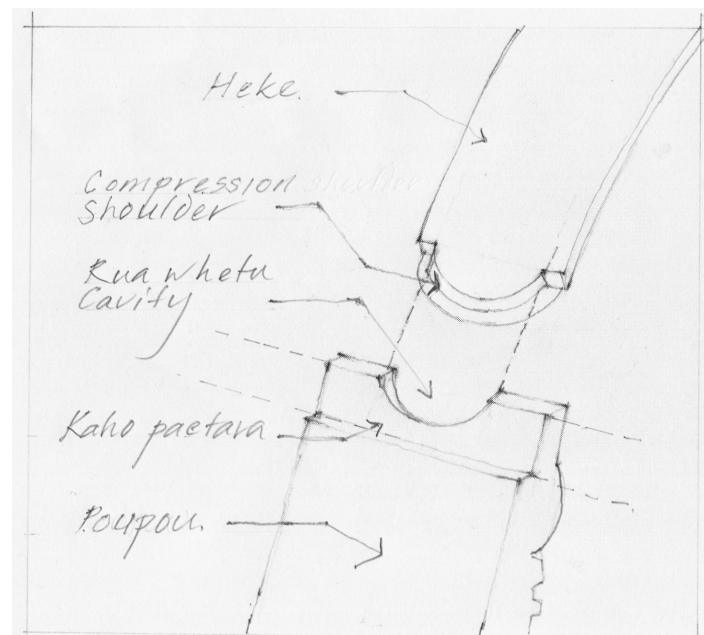
along their length (Fig. 10). In striking contrast to Te Tokanganui-a-Noho and Tāne Whirinaki, the heke lack compression rebates at the rua whetu recess and their upper end is tapered to be parallel with the inclined top face of the tāhu-hu. Instead of butting against the near vertical face of the poupou, the heke from these houses are simply slotted into and onto the poupou. Without a rebate on the heke, resistance to the horizontal load component was necessarily passed to the kaho paetara, a continuous horizontal batten fixed to the top of the back of the poupou. The implications of this are still being investigated.
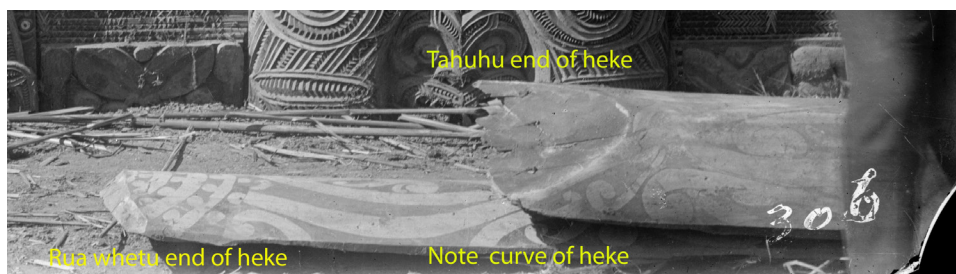


Fig. 10 Thomas W. G. Hammond, (c1925). Dismantling of Hotunui. Details of heke. Note absence of compression shoulder at the rua whetu end. Auckland War Memorial Museum Tāmaki Paenga PH-NEG-PH-NEG-A907

These examples of rua whetu construction represent the broad scope of rua whetu construction as it can be accessed in museum collections, identified in contemporaneous images and through description in literature. The distribution and variation of the joint is currently the subject of ongoing research. However, early evidence is clear that the rua whetu construction was in use predominantly across the middle of the North Island from the 1860s until the turn of the century.

## Conclusion

This paper has investigated the cultural and tectonic development of the rua whetu joint and its precursor the waha paepae joint in the context of the 19th century meeting house. In doing so, it provides the first written exposition to specifically address the joint as an individually fabricated component of pre-20th century Māori building practice. In its broad explanation of the joint's development, the paper seeks to provide a reference for the examination of tectonic relationships implicit in whakanoho construction. In doing so, the paper identifies these tension and compression joints as complex, crafted, and high performance technology.

The paper has argued that these joints have played complex structural/cultural roles and should be seen as foundational components in the evolution of the 19th century meeting house. Argument has been presented that these joints have not received critical attention either in terms of the sophistication of their fabrication or their function. The rua whetu joint has been distinguished from the simple 'precision joining' function of the familiar mortice and tenon technique as a much more complex junction, which integrates locating and locking functions while also controlling environmental and applied forces at a structural scale.

While there is a predictable emphasis in the discussion of the functional roles of the joints, the integration of the technology within the cosmological and environmental dimensions of Māori building is explored. It is proposed that both joints were invested within Māori origin constructs and likely reference Māori voyaging origins and technologies.

Evidence from artifacts, images, and literature showed that the waha paepae joint and rectangular-section rafters were characteristic of late 18th and early 19th century whare construction. During this latter period, political and religious movements required larger buildings for assembly. The expansion of building width generated increased rafter spans, and with them the problem of deflection. While some whare karakia of the period were modified by Pākehā agency with struts and under-purlins, it appears that at the same time Māori builders had already been combating the deflections of large structural spans by pre-cambering and other processes.

Endnotes

[1] Sadler, Hone, (2014) wrote," On entering the house Ranginui stands above and Papatūānuku lies below. The world of enlightenment is inside". Location 1410.

[2] Post-tensioning in relation to Māori construction refers to the cross-sectional tensioning of each pair of poupou and heke over the tāhuhu creating a sequence of structural arches.

[3] Anne Salmond wrote, "Chiefs houses were commonly decorated with carved side posts or poupou and indeed these were quite commonly shifted from old decaying houses to newer structures." (Salmond 1991: 173)

[4] The top figure is carved integrally with heke thereby implicitly involved in the transfer of vertical and horizontal loads to the poupou. Te Hau ki Turanga is the earliest whare surviving from the 19th century to feature the lashing holes charactersistic of post tensioning as first first described on the whare at Kohika.

[5] The T.B Collinson drawing (Alexander Turnbull Library TePuna Matauranga o Aoteoroa Wellington, M-SP1038-01) does not show an underpurlin spreading the load of the roof onto the props and neither the Collinson drawing or the Barraud drawing shows the kaho paetara linking the top of the poupou.

[6] This was the period before photography in New Zealand and immediately prior to the New Zealand wars. During the wars there was widespread destruction of Māori houses in the Waikato, Taranaki and the Bay of Plenty. For example there were no carved houses left in Whakatohea following the land confiscation and the invasion of the militia.

[7] Pre-cambered rafters were common from the 1860s onwards: Insitu heke measured in Hotunui in the Auckland museum still showed a pre-camber of approximately 50mm. Rafters from the Tolaga Bay house, possibly Te Kani a Takirau at Firenze Museum of Anthropology and Ethnology have obvious camber. Heke prepared (c1960) for Tāne Whirinaki have cambers averaging about 150mm. Irapuaia,

built at Waioweka marae 1902, was also built with cambered rafters.

[8] In this context pre-cambered rafters, while not providing extra stiffness, provided Māori with a means to visually manage deflection. However pre-cambering plus, a semicircular cross section, compression joints, top and bottom, in conjunction with post tensioning provided Māori with improved spanning performance. This will be discussed in detail in a future paper.

[9] Photo of Tumoanakōtore Museum of New Zealand Te Papa Tongarewa MA _B.01337

[10] Both these houses had both carving and figurative painting. Not much is known about the interior of Tāne Whirinaki but figurative portraits can be seen on the bottom of the heke in the porch much as they appear in nearby whare Tutamure built at Omaramutu c1902.

[11] Measured in place at the Auckland Museum. Rafter curvature was variable but up to approximately 50mm at mid span.

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ASHLEY MASON

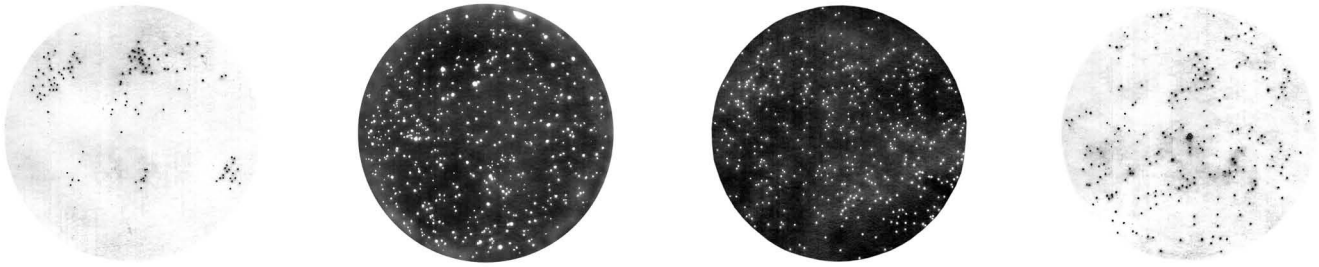# Craters: Between cleared and constructed, between absent and present

Fig. 1 Author (2016). Craters [Drawing]

The following piece is a bricolage of both absence and presence, borne of the observation of such synchronous phenomena within a 1953 exhibition, held at the Institute of Contemporary Arts, London, called *Parallel of Life and Art*. This exhibition, edited by the Independent Group, presented a constellation of photographic figures; reproductions of scientific and artistic origins, lifted from an array of publications, were scattered at different scales around the surfaces (walls, ceiling and floor) of the gallery (Henderson, Paolozzi, Smithson and Smithson: 1953). There were no captions. Only an accompanying catalogue detailing the titles and sources of each image, though not all references were able to be cross-referenced with the (mis/un)numbered images, if indeed they were present. The exhibition's organisers called themselves 'The Editors'. One of the Editors, the photographer Nigel Henderson, documented the final installation through a series of photographs. It is in the space between two of these photographs that one may notice a subtle difference: one[*] of the suspended images is in one photograph absent, and in the other present.

What seems significant is that this absent-present image was an aerial view of a *crater*. Captured by J. R. Eyerman and distributed through *Life Magazine* (Lichtenstein and Schregenberger, 2001: 44), it was found by the *Parallel of Life and Art* exhibition's Editors, who selected it as part of their spatialisation of the scrapbooks of images which they used to pass between one another (Henderson, ,=1953: unpag.). The following piece does not focus on the exhibition itself (there is undoubtedly much more to explore), nor on the specific photograph of the crater and its photographer; it does not question why the image (dis)appeared, nor

what it may have represented to the exhibition's Editors. Rather, it deconstructs and re-textualises the spatial phenomena associated with the word *crater,* tracing the understandings and associations of these at once both forcibly evident and evasive marks, joining the dots and translating between spatial and textual fields much as the tales of the stars in the sky try to comprehend our origins through narrative.

This piece is an opening; an opening outward toward the peripheral, the marginal, and from the crater image to the craterous landscape of post-World War II London, in which the *Parallel of Life and Art* exhibition took place. It is a series of productive readings about the site of the exhibition and the sites from which it borrows. Yet, it is also a tracing through etymological origins and mythological tales whose beginnings, like the exhibition itself, are only allusive references, tales passed down through the generations, deflecting *ad infinitum.*

There are two voices differentiated in what follows, and each rests respectively in sites of absence (cleared) and of presence (constructed). This has been reflected in formatting, as well as in referencing styles. In the first voice, the formatting and style reflect that of the exhibition: scattered, with spaces between, and with an accompanying catalogue of references, not inserted in the midst of the writing but, rather, separate. The second, meanwhile, allows for a more conventional reading, a grounded counterbalance to the more allusive character of the other half of its pairing.

In the first pairing, I focus on origins, the background of the initial image from the exhibition and the sources of the notions of the 'clear' and 'constructed' site which have so profoundly affected my considerations of what 'site' is and can be. In the second, I move from the ground to the sky, and from what is tangible to what remains beyond reach. I transition from the constellations, a crater beyond our orbit, to other, interconnected points of reference beyond the knowable parameters of a site conventionally delineated by its boundaries, its outlines on a map. In the third, in light of the division between clear and constructed, the absent-present is accommodated with a discussion of the crater as 'trace', as writing, before following with a fourth pair that offers a manifestation of these ideas, opening the sieve-like post-war cityscape to a tracing of its inheritance and context. Finally, the last pairing returns the crater to the textual realm and to the beginning; to the nature of the crater as between cleared and constructed, and between absent and present.

These dialogues are a frame to the figures; they are the contexts and conversations which constellate around these particular definitions and associations of craters, though they are by no means exclusive. The three-dimensional figures allude to the crater image of the exhibition in their placement. All were traced by hand, on trace, before being reproduced, layered, then photographed once more, as were all of the figures within *Parallel of Life and Art*. Each is at once both a clearing, and a construction: a plot of simultaneous craters, all at different scales from the ground to the universe to the city. The black and white markings play with perceptions of what is absent and what is present, while the layering of traces enables a glimpse into the space between.

Fig. 2 Author (2016). *Meteor Crater, with trace overlay of all  known craters on Earth* [Drawing]
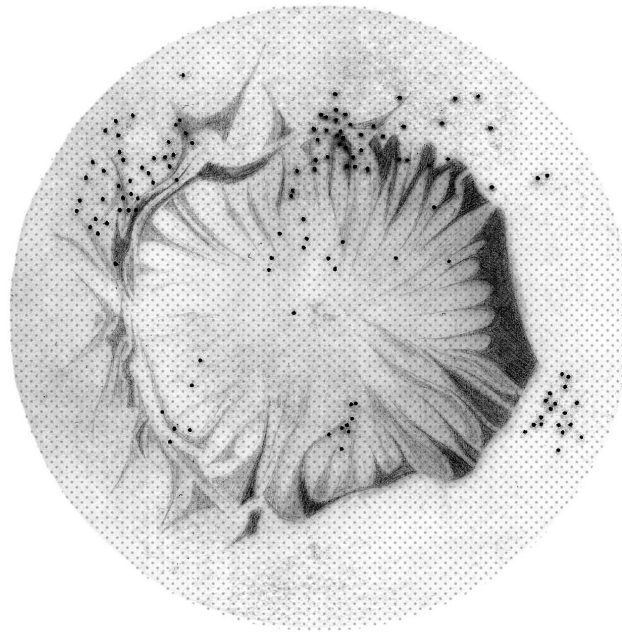
**[to explore the interstices]**

_____ *I.*

*The figure is an image of a CRATER.*

*A reproduction.*

*This CRATER may be found somewhere within the desolate landscape of Arizona, as well as captured and enclosed within scrapbooks of images, scattered across sites often unknown and uncharted:*

*imaginary museums.*

*It has been known by many names, including 'Meteor Crater', and an aerial photograph of this hollowed field was included in Life Magazine in the late 1940s and 1950s, at a time when its meteoritic origins were still uncertain.*

*Though, in the early 1900s, tunnels were drilled, and compasses held, nothing was discovered beneath the surface of the hole; no hidden iron deposit shifted the direction of the needle. Fragments of meteoritic iron were only to be found scattered across and within the surface surrounding the crater's rim. Yet, further into the century, studies appeared to indicate (fittingly for NASA, whose Apollo training programme was later undertaken there) that this CRATER was caused by the impact of a meteorite, a foreign object*

*from outside*

(Malraux 1965. *Life Magazine* 1948: 96; 1950: 34–35; 1954: 33; 1958: 91. Barringer, 1905: 875–878. Shoemaker, 1987: 403.)

*the atmospheric margins*

*of          the          Earth's          spinning          sphere.*

## [the gaps and fractures]

_____ *II.*

The text 'On Site: Architectural Preoccupations' (Burns 1991), opens with a drawing for James Turrell's volcanic art project of Roden Crater, Arizona. The place of the human race within the context of the universe has for centuries been derived from the sky, gazing upward toward the unknown. Yet, it is a crater that the artist first saw from the air, looking down on the clearing below (Adcock and Turrell, 1990: 154; 158, 196). Turrell has spoken of his captivation of spaces devoid of function, and buildings 'emptied of their use'. Alongside the drawing for the crater project within Burns' text appeared the following quote:

In mythic origins, the first human place was the sky, made by Jove's thunder and lightning. To see it more clearly, the primeval forest was cleared; the clearings or 'eyes', loci, became groves as centres for ritual. … The place-making rituals and geometry of the clearing were later transformed to foundation rites. … The first mythic clearings established the site both as the embodiment of the sacred and as the source of human culture. (Burns, 1991: 146)

The crater marks a clearing—be it volcanic, meteoritic or man-made. Although they are each different causes of cavities within the spatial environment, all simultaneously destroy and create. All value the silence of the space between. A small piece of sky; a column of unbreathed air (Colomina, 2004). Perhaps we arrived here from elsewhere, perhaps our source—our origin—lies both within the clearings of the Earth and the abyss within which it floats. Findings are perpetual: the footnotes will never stop. Yet, it is still wonderful to wonder if we are all made of stars.

Fig. 3 Author (2016). Crater constellation, *with trace overlay of the unknown abyss between stars* [Drawing]
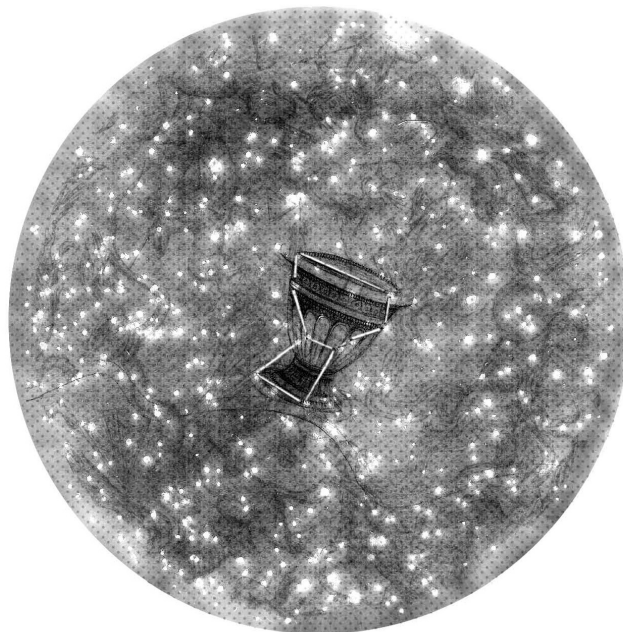
**[the spaces between]**

_____ *I.*

*The word*

      *CRATER*

            *is also a name for one of the constellations.*

*Greek for 'cup', it is identified with Apollo, and associated with the Greek mytho-logical tale in which Apollo sends a crow to fetch water, who, after resting, finally returned with a snake as an excuse. But Apollo was wise to the crow's idleness, and saw through the deception, casting all three—cup, crow, and snake—into the heavens.*

*Finding figures in the skies, joining the brightest dots, may be seen as a form of pareidolia: where visual significance is perceived in what would otherwise be ran-dom stimuli, a predilection which predates writing. The constellations, including Crater, all form a path through the darkness; the shimmering dots are ellipses*

            *suspended within the blank page,*

                  *the emptiness,*

*hoping to be drawn together by the human imagination.*

*The astronomical and astrological signs are actually out of sync with one other, a phenomenon known as precession. The sun occupies Ophiuchus for part of its cycle, yet, there is no astrological sign for Ophiuchus.*

*To the Greeks he was known as Asclepius. Amongst many other myths, he was the Son of Apollo and Coronis, an unfaithful wife. A crow brought Apollo the grim news but instead of being honoured was cursed, and is thus found immortalised against the firmament as the constellation Corvus. The child became so gifted in medicine it is said that he returned the departed; the serpent encircling a staff is a symbol associated with medicine.*

*Thus these two tales interconnect, in their attempt to plot the obscured origins of ourselves and our skies,*

        *outlining a presence in the void,*

     *and showing how narrative may unfold from the deepest*

                *lacuna.*

(Condos 1997: 119. Barentine, 2015: 8.
OED—Zodiac. Edelstein and Edelstein,
1998: 23. Condos, 1997: 120–121.
Eratosthenes et al., 2015: 59, 62.)

# [ uncertain boundaries ]

_____ *II.*

The 'cleared site': a site that is empty of content, absent of prior constructions, and devoid of meaning. Land which lies undeveloped is perceived to be lacking any architectural context despite being littered with other, often natural, constructions. The 'constructed site': the consideration of the visible and coextensive layers of a site that have accumulated over time. The remains of agricultural production, the industrial revolution, and present operations (highways and suburban developments included). Burns argues that, as a consequence of their intertwined accumulation, these indiscrete phenomena stimulate the coincidental wonders of "interruption, simultaneity, discontinuity, synchronism, fragmentation, coincidence, and disruption": they "cohere only in abrupt juxtapositions" (Burns, 1991: 154). Yet, she acknowledges that this approach to site also misses some opportunities. As a consequence of valuing *visible* material only: what is *absent* is not considered. By using this visible material as a literal foundation upon which to construct, the resulting architecture of the site is merely an extension of the existing conditions of the location, which is itself already constructed. Therefore, the site may be seen as one appropriated rather than created by an architect: "The site is a work, a human or social trace. It is comparable to a myth, temple, or city in that it is open to archaeological deciphering. The site is a significative system with no single author" (Burns, 1991: 164). A site is never cleared, is always-already constructed, and has no unique origin.

Fig. 4 Author (2016). Craters (*Asclepius meeting Earth, with trace overlay of all known non-impacts from other asteroids within the blank expanse of the universe*) [Drawing]
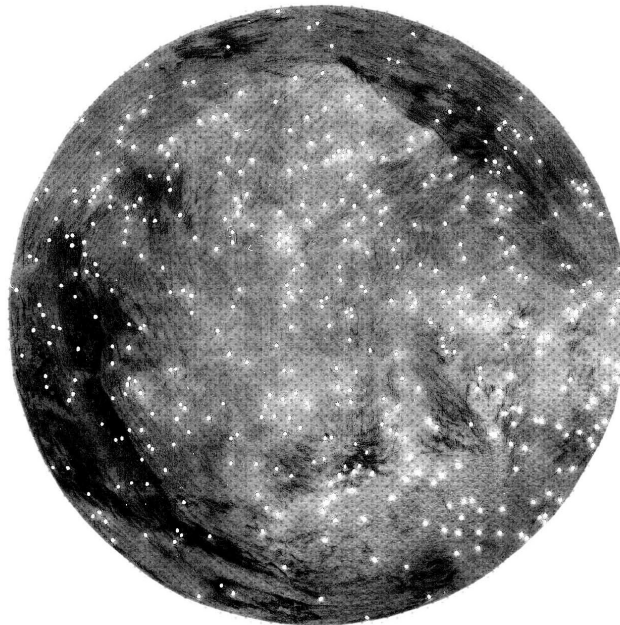
## [a sounding of the cavities]

*_____ I.*

*The asteroid passed by Earth on 23 March 1989 at a distance of 0.00457AU.*

*It was named Asclepius.*

*A small asteroid of the Apollo group, it was discovered by Henry Holt from Flagstaff, Arizona (40 miles from Meteor Crater) while working on a NASA project. It is ironically named after the Greek demi-god of Healing, despite its capacity for devastation.*

*Although the*

*space between*

*this missile and Earth surpassed the orbital radius of the moon, the pass attracted attention, since, a few hours previous, the asteroid passed through the precise position of our planet.*

*The physical structure of Asclepius has never been conclusively documented;*

*all writings are*
*assumptions,*
*deductions,*
*speculations.*

*The impact may create another CRATER, devastating the encompassing environment: it may be enough to destroy a city. With oceanic impact, coastal regions may be destroyed through tsunamis. The third potential outcome of such a scenario would be non-impact, where the asteroid explodes in the Earth's atmosphere, shatters above the surface. Only through the discovery of an anomalous amount of the element Iridium on or within the ground (usually scarce within the Earth's crust) would it be*

*traceable,*

*since other meteoritic events have shown that no other fragmentary indications are left. Indeed, some impacts to this day remain contentious as a consequence of the lack of physical,*

*visible*

*—present—*

*evidence.*

(Shoemaker et al., 1993; Carusi et al., 1994: 134. Carusi et al., 1994: 134; Verschuur 1997: 116. Verschuur 1997: 9.)

## [the absence of centre and origin]

_____ *II.*

The 'cleared' and the 'constructed': neither offers a reading of site that admits the marginal, the elusive, the obscured. What is found is only the physical and evident, not the ephemeral and absent-yet-present. Traces: thin veils left behind by the absent yet present (Derrida, 2016: 68–71). In French, the word '*trace*' is found to have a multitude of meanings comparable to those of its English equivalent, yet, it additionally implies definitions more closely aligned to those of the words 'track', 'path', or 'mark'. Early writing methods often involved pressing a sharp instrument into a receptive substance: the creation of a cavity within a surface (Lowe, 1993: 42–43). The impressed mark resultant from this process was a negative space, an absence, yet simultaneously, as writing, it was also a web of significations, a meaningful presence. A crater is a mark in the landscape. Its impression is resultant of the universe's quill, a text formed of the calligraphy of nature, scorched into the yielding surface of the Earth. What once existed in its place no longer does so. Often evaporating on impact, no trace is left behind of the meteorite itself. Absence. Yet, the replacement—the crater, the void—is a presence, is a trace of the event which preceded its insertion within the landscape. All marks of presence bear the traces of the absent: the crater is a mark which exists only in relation to the ground it annihilated. It dislocates, displaces, and refers beyond itself. Burns quotes Ernst Cassirer: "It is, as it were, the fundamental principle of cognition that the universal can be perceived only in the particular, while the particular can be thought of in reference to the universal" (Burns, 1991: 164). The 'craterous' site relies not on knowable parameters, but on transcendent thresholds, conscious of their ever-reaching roots and evasive inheritance.

Fig. 5 Author (2016). Craters (*London, sketched figure-ground plan, with trace overlay of all known post-WWII crater locations*)  [Drawing]
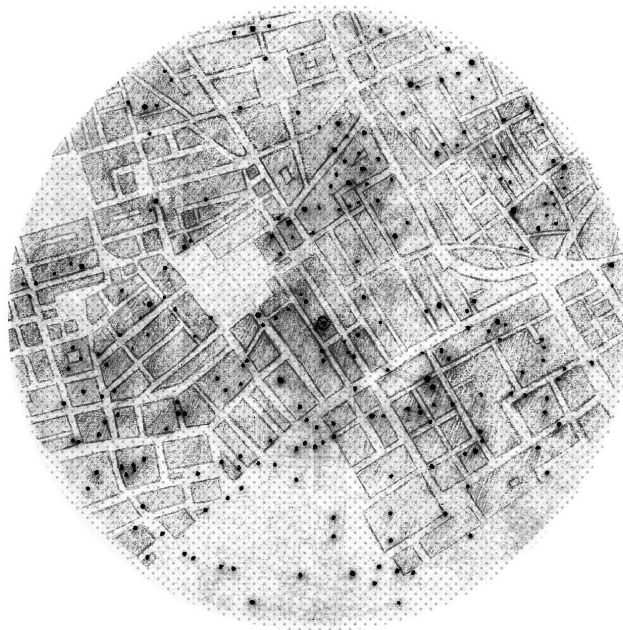
## [correspondence]

_____ *I.*

*Asclepius may yet create a CRATER in our landscape.*

*A hole, like Meteor Crater, may open up in one of our cities.*

> *Anonymous.*

*On the basis of its present orbital progression, this asteroid is unlikely to impact the Earth in the next century, or even further into the future. However, the threat of such impact has been brought to attention in the years subsequent to its discovery, with the implementation of extensive mapping of all 'near earth objects' with potential to devastate the Earth.*

*Yet, many remain unknown,*

> *their trajectories not yet plotted.*

*A CRATER is defined as a cavity within the surface of the Earth or other heavenly body, as a bowl-shaped depression with a raised rim formed by the impact of a meteoroid. We have seen it is also a term associated with the heavens from which these potential meteorites, such as Asclepius, encircle and hurtle towards our planet.*

> *Neverending.*

*Yet, it is also a descriptor for the hole or pit in the ground where a man-made device has exploded.*

*From Greek* krater: *a mixing bowl. From the root kere, to mix, confuse.*

> *Etymological origins.*

*The blitzed cityscape is one confounded.*

*It is riddled with dead ends and plot holes that threaten memory with the blanks of forgetfulness. All that remains once the walls have fallen, are the references to them that existed beyond their physical manifestation.*

*The CRATER is a mixing bowl for the traces of inheritance and context:*

> *for citations and footnotes to*

*other sites,*

> *other CRATERS.*

(Shoemaker et al., 1993: unpaginated.
OED—crater.)

## [there are gaps through the walls]

_____ *II.*

A crater is not only the calligraphy of nature. It is also the full stop of human endeavour. It is every demolition site, every cavity within the structures of our built environment. Yet, these ellipses are also pauses on the threshold between past and future construction. These holes, unlike meteor craters, are not anonymous; whether by resolution (agreement in redevelopment) or regrettable dispute (war) these holes are resultant of intention. Still, though provisional authors may be accounted for, inheritance and context may become veiled and hidden, once the cracks are papered over and the surface glossed over, to return focus from the unbearable debris and bricolage of the *banlieue* back to the present, visible centre of a 'space to be filled in'. Pasts are placed under erasure (Spivak, 2016: xxxvi–xxxix), nevertheless traces are always detectable, beneath the surface, in the footnotes. In post-WWII London, the problem of holes was ever-present. *Mind the gap*. The tabula rasa of Modernism emptied and removed, perhaps too much, but the brutality of war, equally, offered the opportunity to sweep aside the inadequate and unjust (as slum clearance programmes showed) (Bullock, 2002: 8). Throughout the war city centres were a target, and so, in anticipatory fear of future loss, industry was protected through decentralisation, moved to the outskirts of the map (Vidler, 2010: 35). Despite these clearings, the longing for the familiar, and of constructions translating the invisible (the atomic) into the quotidian, was equally profound. Thus, as Burns and Andrea Kahn have noted: "site is best viewed from points in between" (Burns and Kahn, 2005: xxiii). A space between the 'cleared' and the 'constructed', between the unknown and the familiar. An urban crater, no matter how seemingly vacant, never evades its past: it is always a space between the 'absent' and the 'present', haunted.
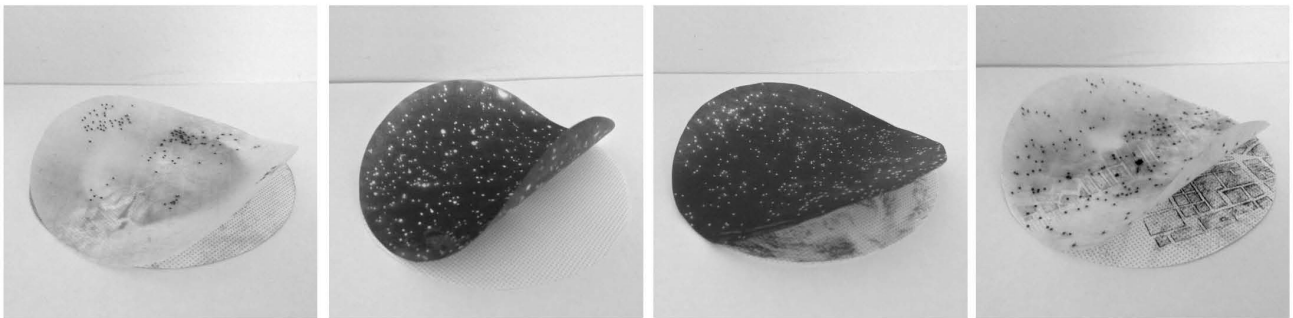


Fig. 6 Author (2016). Craters
(*trace layers, with spaces between*)
[Photograph]

**[sliding through the intervals]**

_____ *I.*

*[this space is left intentionally blank...]*

## [speaking into the void]

_____ *II.*

As Burns observes, contemporary architectural culture is preeminently con-cerned with the visible, with the site as presented. There is often little regard for the over-sighted, the margins, the craters. Viewed as a synchronic phenomenon, a site becomes temporally isolated, with the historical considered and acknowl-edged only in relation to its influence upon the site's present, visible state. The potential to plot the temporal rather than the spatial is not pursued further (Burns, 1991: 149). The crater is not the original landscape, yet, though nothing perceptible exists, it remains a container for prior constructions, as well as for future potential. Still, it is the origin of loss and destruction for that particular location. This paper aims to highlight the invisible, the absent-yet-present: the traces disregarded, the craters circumvented. A crater is both an absence and a presence. What was there no longer is, yet, this removal forces the spatial practitioner, the decipherer of the site, to other contexts and sources of infor-mation in order to recreate the lost, the missing. It sparks a quest for recovery and reproduction, at least in understanding and figural representation (if not literal re-construction). The original is no longer the origin but may be found fragmented and dispersed: perhaps it is the destiny of all sites and situations to be shattered, scattered, and erased from view, to be found only underground, in the traces left behind within these spaces between, within these craters.

\* For the purposes of this piece I have chosen to focus on one of these images, though there were in fact others.

\*\* All text suspended in the spaces between the parallel texts have been taken from 'The Spaces Between', the original editorial of *Interstices* (Jenner 1990).

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ROSS JENNER & PATRICK CLIFFORD

# In Memoriam
# Rewi Michael Robert Thompson
## (19 January 1954–2016)

Of Ngāti Porou and Ngāti Raukawa descent, born and raised in Wellington, architect and also academic at the University of Auckland, School of Architecture & Planning from 2002, Rewi Thompson passed away in mid-October 2016.

Rewi completed a New Zealand Certificate of Engineering through the Wellington Polytechnic, having previously worked as a structural and then architectural draftsman for Structon Group before attending the University of Auckland. After graduation, he joined Structon's Auckland office where he became a registered architect and then, in 1983, established his own practice. Throughout his career, he received over 25 design awards. By 1986, his work had achieved sufficient renown to gain him an invitation—along with a group of well-known New Zealand architects, Ian Athfield, John Blair, Roger Walker—to participate in a lecture programme in the United States, facilitated by architect Stanley Tigerman, who had recently visited New Zealand at the invitation of the NZIA.

From marae to public housing, from town centres to healthcare facilities, from exhibitions to event architecture—Rewi produced, for instance, the temporary outdoor pulpit in the Auckland Domain for the visit of Pope John Paul II (1986)—his work favouring the inclusive and the diverse was always slightly beyond what was imaginable and achievable in the built public realm.

Apart from his own practice, he was an important collaborator engaging with a broad range of colleagues across a variety of projects—for instance, the plan of the Wellington Civic Square (Te Aho a Maui, 1988) with Athfield; the City-to-Sea Bridge (1990) with John Grey, master planner for Wellington waterfront, and Paratene Matchitt; and the Te Papa project (1990) with Frank Gehry and Athfield, which was blindly and stupidly thrown out in the first round of selection. A decade later came the Olympic Park War Memorial in Newmarket, Auckland, completed with Isthmus Group (2001) and the City Mission proposal undertaken with Stevens Lawson for Hobson Street, Auckland (2006). He created works that, beyond exploring biculturalism, built relationships that enabled others to do so also. As such, he was a bridge connecting and bringing into close proximity multiple worlds. His Te Wero Bridge proposal for Quay Street, Auckland, for instance, with Warren & Mahoney and Holmes Consulting, was conceived of as an overarching hīnaki (eel trap) and offered a figure for connecting and spanning a diversely configured and populated city.

Among Rewi's unique traits was a very personal understanding of materials, often in models, where, for example, he employed paua (abalone) and oyster shell, pounamu (jade) and other stone, and various states of wood, as in his models for the Wellington waterfront. In this work, piers break out, and ramps, tilted planes and other fractures narrate the emergence of land from sea. Timber-work resembling drift wood suggests the arrival of canoes and sailing ships. Rewi delighted in the sheer exhilaration of improvisation. He caught things in the act of making; they often appear inchoate and temporary, but they retain the immediacy of that act. His projects do not begin in form or geometry but in an impromptu play of provisional elements, where materials have important lifecycles.

His understanding of place, moreover, involved negotiation—rites of foundation and of construction. Place is not not something simply found but *made*. Places, like buildings, are events. Place is a matter of placing and marking, where the beginning often lies in nominating something, in naming

> it, in putting down a thing (like a stone or a stick) that marks or allows us to think about putting something on that site. But the thing you put there for the purpose of just starting, might also have abstract architectural qualities that you keep because it is the thing that in the process, has taken on some meaning for those involved. (Thompson, 1995: 26)

While his projects make visible traditional sanctities of places and their relationships to an over-arching cultural matrix, his understanding of place was not one of nostalgia, archaeological recovery, or the disclosure of what already exists as some sort of permanent background. Even though Māori understanding of landscape may have been pre-urban, it is, as Rewi demonstrated, still perfectly capable of animating the most banal and sterile Anglo-Saxon urban planning and building forms. To live and make architecture between cultures is to recognize that any fixed 'original' tradition cannot be realised by any process that translates it. On the question of negotiation, he wrote of his own house:

> The house or the project, then, is the object of negotiation. The object is a part of this reconciliation that is central to the process of culture: they have to get used to it or burn it down. (1995: 25)

Rewi's work always had an element of the iconic, a term which implies something sacred, ritualistic, or worshipped, a suggestion of mystery, 'presence' or
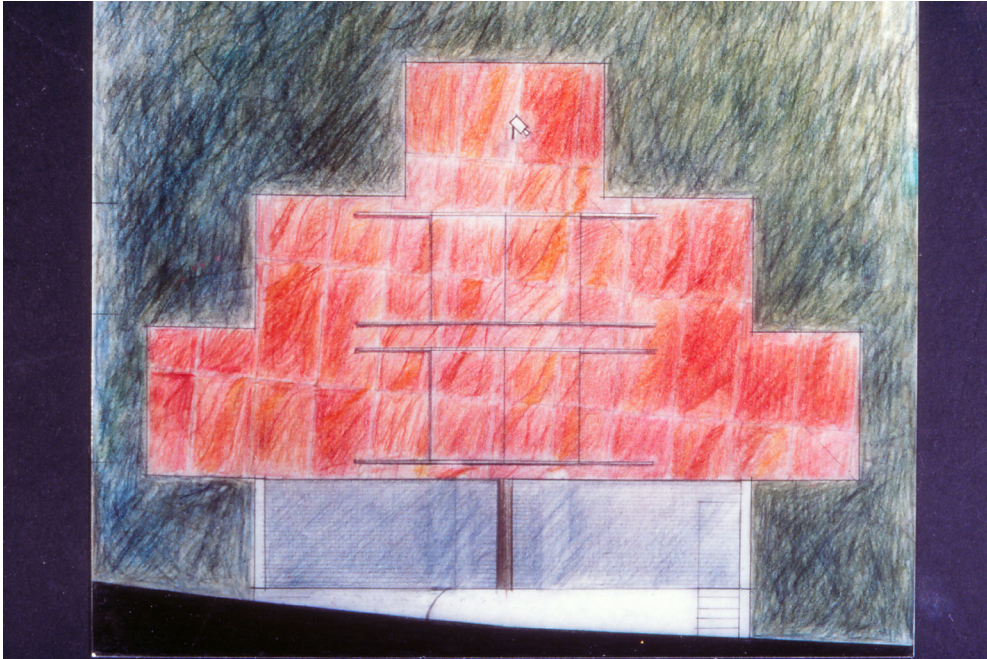
Fig. 1 Rewi Thompson. Elevation of Thompson House.

'aura'. Indeed, at its best, his works embody these qualities. Traditionally, the iconic also implies an image on a flat surface or background. In order to achieve a hieratic force, a certain flattening and diagrammatic condensation is needed. Among very many examples, this is demonstrated by the image of the waka in the Ngāti Poneke marae project (a wonderful reversal of Stanley Tigerman's Titanic, where the iconic postmodernist image of Mies' Crown Hall (1978) sinking into lake Michigan became instead the arrival of Māori into Wellington Harbour), the severed fish at Otara town centre (1987), the mountain in Wellington's Civic Square, the kotouku (white heron) as papal pulpit, the suspended letter of the Wishart House (1987–99), the baskets of knowledge at Pukenga, Māori Education Department (1991), or the hīnaki project (2007).

In Māori culture, voice, language and land are connected. A matrix forms over the features of the landscape (mountain, river, swamp, etc.) and their sites are defined by their relationship to them. Similarly, within the tradition of oratory and oral literature, kōrero are required, specific stories whereby things are animated, made into cultural objects by a process of clothing with words. Over time, a thing becomes invested with talk, transformed "by building words (korero) into it and by contact with people, into a thing Maoris class as a taonga" (Mead 1984: 20–21). Buildings, too, are animated, and this means that they have agency. Since the demise of modernism, we have come to understand that agency in architecture means more than the simple functional workings of a building. The paradigm of the building as machine is well passed; Rewi lived through that era and overcame it. An idea of animation arose that was typified in various tendencies: 'animate form', parametrics and 'vital beauty'. Yet, for Rewi, this return to the animate took a different slant. For example, as well as toying with it as a person without eyes, he presented his own house (1985) as site of warfare: the stepping terraces of the volcanic pā (hill forts), whose remnants are scattered throughout Auckland, are effective in the stepped terraces of the house. A sectional model, with the facade removed to show the design of the interior screens, reveals violence, the

violence of the region, its geology, its volcanoes and their myths, and the blood spilt over successive occupations of Auckland: "Maori vs Maori and later Maori vs the colonists. But now it is violent, where people fight over land, they fight a war for a view of the water. I didn't want any windows" (1995: 26). The vivid red paint in the drawing, on the model and on the screens, animates the house by the evocation of blood. Perhaps this is a form of security, a living-on from the primeval cosmogony when Papatūānuku (Earth) and Ranginui (Sky) were cut apart. Rewi put it thus: "Blood brings the violence into the soul of the house." (pers. comm.)

Rewi's works may appear stark and diagrammatic, but at an intersection of cultures—as questions posed—they remain a rich call to attend to the limits of one's own thinking—and above all, to the encounter with what lies outside it.

Ross Jenner

Fig. 2 Rewi Thompson. Model of Thompson House screens.
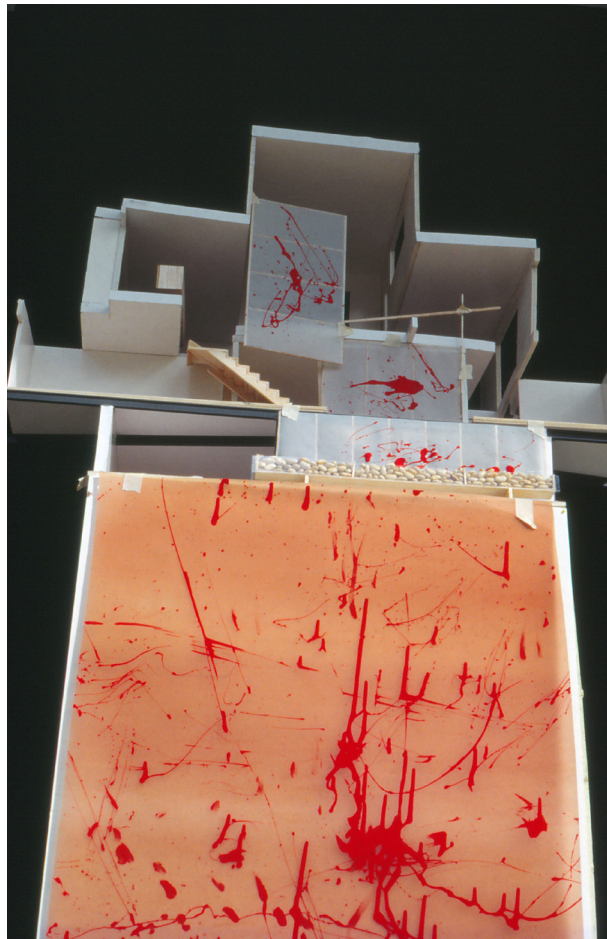
**Eulogy delivered by Patrick Clifford at Tātai Hono Marae/Church of the Holy Sepulchre on Friday 21 October**

Tena Koutou.

To Lucy, Des and the whanau,

On behalf of the architectural community, particularly of course, those who could not be here personally, and on behalf of the New Zealand Institute of Architects, the collective guardian of our craft, I offer you our thoughts, our support, our love.

Too young and too soon Rewi leaves this physical world. His presence, however, will remain palpable—in constructed works, projects and writings, in the many students he inspired and mentored, in the colleagues he influenced and guided, and in the memories we all hold.

Rewi is a hugely significant figure in the culture and architecture of Aotearoa—New Zealand. His exploration and defining of a way to express bi-culturalism lies at the core of this legacy. Of it, he said,

> Our practice is interested in what this might mean architecturally. How you would discuss the sort of relationships this might produce in a spatial way. Does it mean that instead of having only one door you have two? Where would people go when you have two different doors? They would have to make a decision as to which door they belong to (1995: 25).

Rewi had an ability to reduce and represent issues and ideas in incredibly simple and powerful ways. In some ways I think, of these as being like parables appropriate to today. His work is raw and elemental—literally expressed as earth, water, wind and fire, conceptual and abstract, heroic and challenging. Formally inventive and technically daring.

Neither his work nor his words were ever delivered in a strident or assertive way but were offered with respect and dignity. Lots of gently posed questions challenged any assumptions or too quickly reached conclusions. Rewi was not about answers but about the process.

He was great collaborator, there are many here like me and my colleagues who worked with him. He created not only works that explored biculturalism but relationships that enabled others to do so—he was a bridge to connect our worlds. Rewi was a great colleague, too. Des, I can't imagine how many of those models you two made together …

He was also a great friend. He first entered my life wearing pink jandels, having arrived late for the start of architecture school in March 1978 (38 years ago), fresh from the national surf lifesaving championships representing Worser Bay as I recall. He came directly into second year and produced a stream of striking projects—the first a bach at Piha illustrated with a highlighter that matched his jandels.

We got to know each other that year and shared a studio in 3rd year. The studio structure at that time involved the students' picking a project from those offered at the beginning of each term. Rewi would do them all and still fit in a reasonable number of visits to the Kiwi! He redefined studio.

Rewi was not only a member of the architectural profession ( the NZIA ) but also of the "380 Group". We fell under the spell of John Williams at the end of 1979— if friendship is about shared experience, then we had enough to last a lifetime after that summer! Malcom Bowes, Michael Thomson, Tim Nees, Ti Lian Seng, Rewi and I were chatting in the studio about holiday job prospects when John popped up and off we went to our first demolition job which paid $3.80 per hour. When the summer ended, we had demolished quite a few things, sold and partly put together a modular house in Patumahoe and bought a substantial but rather run-down boarding house in Parnell. Rewi had the only car, a Mini, we needed to get to Patumahoe each day—with five of us in it, it wasn't speedy—Rewi was always known as 'Fangio' from then on. I also stayed with Rewi and Leona that summer—they were so generous and welcoming—and so committed to each other and their families.

Over the last 30 years and more, we enjoyed happy times—from the Tolaga Bay motor camp to a lot of Mondays in the Corner Bar of the Globe Tavern or a catch up in the office—and there have been sad times...

Aside from having a few laughs about the 380 days, every conversation we shared from then until the last time I saw him—a few weeks ago—no meeting went past without his saying "how's the family?—that's what is important".

He was right about that.

Vale Rewi

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RACHEL SARI-DEWI MURRAY

with Sam Kebbell

# *Wetland Square, Market Pier*: Designing for heritage in the New Zealand regional landscape

## A peripheral problem

From swampland through farmland to urban sprawl, the regional landscapes which once lay quietly at the peripheries of our cities are now experiencing radical urban growth and drastic environmental degradation. In the last 150 years, it is estimated that 90% of New Zealand's indigenous wetlands and swamp forests have been destroyed in the face of development (Robertson, 2015: 1). With wetlands drained, streams channeled and riverbanks stripped of their protective riparian forest, New Zealand's lowland ecosystems have suffered extensive and irreparable damage. The speed of this landscape transformation is so drastic that the changes which took place across just one century in New Zealand occurred over four in North America, and twenty in Europe (King, 2010: 26).

The Kāpiti Coast District, lying at the north-western reaches of the Greater Wellington Region, is identified as an appropriate case study to investigate the environmental and urban transformation typical of New Zealand's regional landscapes. Historically known as the 'Great Swamp', Kāpiti was once inhabited by Māori iwi, who settled near estuary mouths and on suitable mounds and spurs in the swamplands. Unearthed remains of eel weirs and sunken canoes unlock a not-so-distant past in which a navigable inland coastal water canoe passage was said to have stretched 30 kilometres between Paekakariki and Waikanae (Baldwin, 1993: 39). Following the arrival of European settlers to the region in the 1880s, Kāpiti has since evolved into a new type of regional landscape—one dominated increasingly by big-box retail centres, low-density residential development, and extensive farming pasture. Currently home to 51,400 residents, it is anticipated that Kāpiti's population will grow to almost 60,000 by 2040, increasing by 20% (Statistics New Zealand). To accommodate this growth, the local council has stipulated 2400 new households in the form of greenfield development[1]—a strategy that will only exacerbate urban sprawl-induced problems such as car reliance and wetland eradication.

## A compelling alternative

Prompted by these challenges, and in search of community and ecological resilience, this research sets out to investigate alternative strategies for urban settlement in the Kāpiti regional landscape. How can architecture reconcile a threatened, dynamic wetland system, a volatile urban condition, and an overlooked cultural history of indigenous settlement to ensure community and ecological resilience[2] in the low-lying regional landscape? Among the suburban patchwork of lawns and single houses on Waikanae Beach lies an opportunity for architecture to respond critically and innovatively. At Waimeha Lagoon, an uncanny square 'conservation' wetland sits grid-locked by streets and unkempt residential fences, alluding to New Zealand's suppressed history of lowland European colonisation and subsequent environmental marginalisation. Inspired by this narrative, *Wetland Square, Market Pier* is a speculative site-specific design project for Waimeha Lagoon. The scheme proposes a new public platform to act as the catalyst for the wetland's transformation into a new town square—a new, but historically significant civic heart for the region. Through increasing population density and urban vitality, Wetland Square, Market Pier aims to reactivate and celebrate the natural and cultural history of a remnant wetland and its associated ecosystem.



Fig. 1 Google Earth (2010). Waimeha Lagoon, Kāpiti, New Zealand [Satellite Image]

Fig. 2 Author (2015). An early conceptual image illustrates the dichotomy between New Zealand's imported colonial history and its own unique natural history; A European Town Square is juxtaposed against New Zealand indigenous wetland plants [Digital Collage]

## A market pier

Extending from a proposed new street edge, *Market Pier* is a porous 100 metre long, 12 metre wide platform connecting the lagoon edge and the town centre, acting as an ecotone between urban and natural systems. At the urban end of the pavilion is a permanent food market. Market stalls are rented to small gourmet restaurant outlets or produce shops. Dining rooms are located above, sheltered by a long ramped platform enabling views out to the offshore Kāpiti Island. The food market connects the new town centre with the wider agricultural activity of the region, referencing the historic function of the wetland as an important food and plant source. At the lagoon end, rentable and private kayaks are stored

in lockable open-air shelves. Finally, the three separate walkways meet before the pier dives into the water, forming a launch pad for kayaks and referencing a local history of waka travel in the wetlands. The building's distinctive inclination from urban edge down to water's edge emphasises that this is not simply a landscape 'lookout' but a working pier, reactivating the landscape and functioning as an integral component of urban life.



Fig. 3 Author (2015). Market Pier: Roof Plan, elevation and ground floor plan [Composite Digital]

Fig. 4 Author (2015). Market Pier Perspective: Approaching from the proposed new street [Composite Digital]
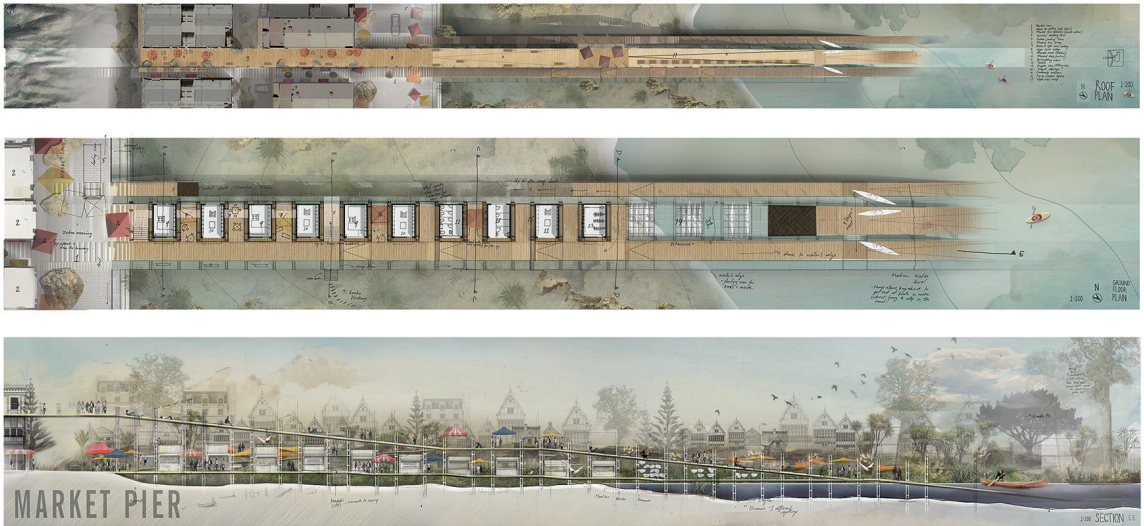
## A wetland square

The scheme exploits the unusual square frame of the existing urban landscape, transforming the wetland into a new town square, and centre for the scheme's proposed medium-density intensification. The concept pays homage to New Zealand's colonial history, taking precedent from a quintessentially European town square but with a clear difference: new 3–5 storey mixed-use buildings overlook a dynamic landscape, rather than a static square of pavement. Where many cities retain their heritage through protecting the built environment, this scheme emphasises that New Zealand's heritage is more strongly linked to its landscapes, its native flora and fauna, and the significance established by the first indigenous Maori settlers.

To transform the square, the perimeter of private fences is replaced with a ring of public boardwalks and shared streets, acting as a threshold between urban life and wild life. The design addresses the conflict between urbanism's desire for hard edges and the wetland's natural tendency for curved edges through proposing hardscaped shared streets and tightly clustered buildings on only two sides of the square. On the alternate sides, elevated timber boardwalks support a more porous urban grain while allowing for the wetland lagoon's movement. Key urban design principles are proposed for the buildings, including wetland-fronting orientation, narrow plot size and facade symmetry. To strike a balance between building variation and cohesiveness, different architects would be selected to design each building, while one master planner would govern the overall design quality and character of the *Wetland Square*.

Fig. 5 Author (2015). Masterplan of Waimeha Wetland Square [Composite Digital]



### An Archetype for the Regional Landscape

Together, the *Wetland Square* and *Market Pier* act as a system which could be applied to other squared-off urban wetlands in the regional landscape. In particular, two similar sites identified in the neighbouring suburbs of Otaihanga and Paraparaumu Town present suitable opportunities to promote urban intensification, restore wetland quality and strengthen place identity. At a macro scale, the project proposes to link these urban wetland squares by restoring the region's former wetland network. In the way that interconnected wetlands once enabled inland canoe travel for Maori settlers, revitalised wetlands could act as spines for

associated recreation walking and biking trails, connecting the proposed town squares with each other, and the region's existing trail network. While *Wetland Square* and *Market Pier* are developed as the primary focus of this research, in reality they are envisaged as just one micro-component of a much greater urban and landscape heritage regeneration project.

Fig. 6 Author (2015). A regional wetland network [Composite Image]

Endnotes

[1] Kapiti Coast District Council has proposed approximately 1,500 households at Ngarara and 400 in Waikanae North. (Kapiti Coast District Plan—Operative 2016)

[2] The United Nations defines 'resilience' as the ability of a system or community to accommodate and recover efficiently from the impacts of a hazard ('Terminology—UNISDR').

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PENELOPE FORLANO

with Dr. Dianne Smith

# *R*esurfacing Memories: Mnemonic and tactile representations of family history in the making of new heirlooms

Fig. 1 Author (2013). The Unforgotten hall cabinet [Front view, Photograph, Eva Fernandez courtesy of FORM]

*The Unforgotten* is a functional furniture piece that challenges current conventional industry design practices which seek to achieve object longevity and heirloom quality through realising the status of a 'design classic'. By taking a design anthropology approach to understand the person-object custodial relations, the creative work aims to embed a long-term attachment for the possessor by encouraging emotional attachment and custodian behaviour. As such, research was conducted in the areas of consumer psychology and behaviour, object attachment, inalienable objects and custodianship.

Anti-obsolescence approaches such as quality craftsmanship and materials no doubt contribute to longevity in terms of durability (Pye & Nevelson, 1973). However there exists a significant omission in design discourse regarding the potential for object lifespan extension through recommodification (Gregson & Crewe, 2003) and the inalienability of manufactured objects. Even when durable and still functioning, objects that are no longer *desired* by the possessor are typically assigned to the waste stream, often being replaced with equally short-term products (Botton 2004; Mugge, Schiffersteinn, Schoormans, 2010; Naish, 2008). However when objects have a "singularised" and "storied life" (Epp & Price, 2010),

and are recommodified or rendered inalienable, their lifespan can be significantly extended (Belk 2006; Karanika & Hogg 2012; Mugge et. al., 2010).

Design discourse often characterises 'new heirloom' furniture—that is, furniture that will be intergenerational and evade premature disposal—as 'classic' (Hebrok, 2014: 213), modernist, and typically non-decorative (Schiermer, 2016; Simmel, 1997). However this belief is challenged when examined through an anthropological perspective of person-object relationships. Anthropological findings indicate that a significant characteristic of inalienable heirloom objects is that they are emotionally laden and mnemonic of significant life experience, rather than being generated from the object's physical characteristics (Csikszentmihalyi & Rochberg, Halton 1981; Mugge, et. al., 2006). Objects that are conducive to intergenerational ownership, namely those re-commodified, are not dependent on modernist, visual forms per se (Curasi, Price, Arnold, 2004; Epp et.al., 2010; Gregson & Crewe, 2003). Therefore addressing durability and longevity materially, without addressing the individual or social attachment, or conversely how disconnection to objects occurs, potentially results in a mismatch between the material and emotional or social longevity, and thereby premature disposal of functioning furniture.

Consumer behaviour studies in custodianship and collector behaviour further reveal the importance of memory and experience with objects post-acquisition. In fact, custodian and collector behaviour demonstrate the potential for individuals to invest significant time, energy and care into ensuring object longevity, often with the aim of bequeathing or passing the object on to others (Belk, 2006). The findings from these studies of person-object relationships tell a great deal about the potential role designers can play in facilitating object longevity by encouraging custodianship through embedding memory or experiential opportunities.
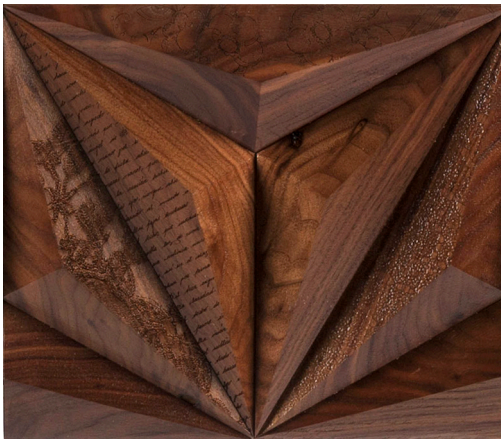


Fig. 2 Author (2013). *The Unforgotten* [detail, Photograph, Eva Fernandez courtesy of FORM]

Fig. 3 Author (2013). *The Unforgotten* [detail, Photograph, Eva Fernandez courtesy of FORM]

The phenomenon of object attachment has typically been understood in anthropomorphist terms—that is according to correlates with human features or modes of animation (Chandler & Schwartz, 2010) or, in the case of electronic artefacts, through user experience (UX). However, *The Unforgotten* project developed here exemplifies the opportunities for emotional inalienability present in tactile experience and the mnemonic qualities of objects.

## A Hallway Cabinet

To firstly address the measurable, durable qualities, the object is made of stainless-steel rod and solid American Walnut timber to ensure material longevity and potential surface renewal as it ages. The timber is finished in natural, non-toxic furniture oil and wax. As the entry of the home is a powerful signifier of personal space and identity, *The Unforgotten* hallway cabinet was thus designed as an entry marker reflecting the essential concerns of the resident, one that intertwines emotional gravitas with product durability.

The geometric and facetted timber front and sides of the cabinetwork facilitate the expression of past memory as a collage of distinct life episodes *stitched* together in a traditional quilt style narrative similar to previous creative works of the author (Forlano, 2015). The cabinet's form creates a series of variegated surfaces into which the narrative of the client can be read as distinct, yet connected stories, in order to reify social relations and memory.

Evocative of the incompleteness and disjointedness of memory, some facets are left unmarked whilst others are engraved. Custom laser engraving to facets draw the viewer into a detailed attendance, inviting intimacy through a close encounter with textural surface and potential touch. This invitation to be drawn into the work is further reinforced through the intricacy of the surface detailing representing meaningful family possessions, stories, events and places.

Through an informal interview it was revealed that the client possessed some disparate and highly personal objects kept hidden for over sixty years in a small box. This served as the driving force to reflect personal history and intergenerational narrative in the hallway cabinet—a long-recognised furniture type for holding and retaining. These objects—the only physical possessions remaining of the client's mother after her passing during childbirth—had been stored away so as not to be damaged through handling, light, or other intrusive environmental factors generated across time. Amongst the possessions were her mother's own handmade silk lace embroidery, hand-written poetry, newspaper cuttings, and hand-drawn diagrams of embroidery never completed.

Fig. 4 Author (2013). Photograph of original hand-embroidered silk lace handkerchief

Fig. 5 Author (2013). Scan from notebook of handwritten transcribed poetry
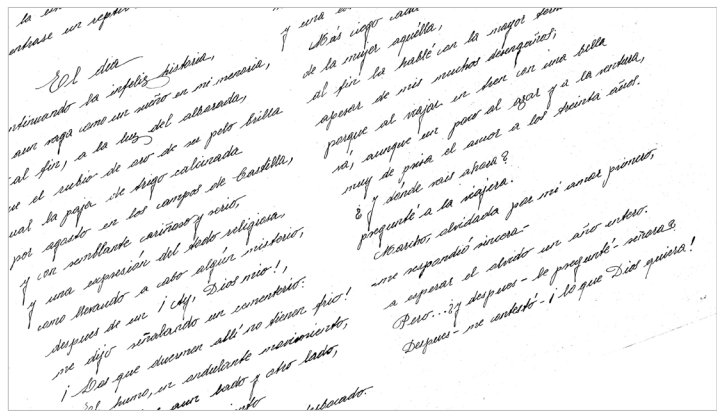


The texture of the silk, now partly decomposed, is captured in the cabinet's surface treatment. It reflects a moment in time, and the time in between spanning its first completion in 1950 and sometime in the future when it will have completely decomposed. Surfaced in the cabinet is both the 'thing' (the silk) as a

tangible object, and the 'time' constituting an intergenerational/heirloom object. As a further example, the hand-written words and diagrams on pieces of decomposing paper are now inscribed in a more robust material, whilst also providing a new character not evident in the original possession—that is, the texture of the text as engraved material.

Through digital processes including 3D laser engraving, the characteristics of the 'things' become both visual and textural, eliciting an invitation to touch and become more familiar with the previously 'untouchable' precious object. As Stewart states:

> The transitivity and motility of touch are key to legends and myths of animation…There is a carrying-over from experience to experience of the experience a kind of doubling which finds its illustration in the image of a living thing, bringing a dead thing to life through the transitivity of touch. Sleeping Beauty….and other stories emphasize the vivifying power of gestures of love and attention (through making and reciprocal touch). (1999: 33)

Combining the various representations as a narrative of personal memory with the intricate and tactile surface qualities, the furniture object ensures an intimate engagement with the work of this other ancestor. Furthermore, what was once hidden away has now been recovered, and presents significant life memories, bringing the intimate family stories and the past back into the living present, and therefore into the everyday.

The work does not gain its meaning through physically presenting or being a container for personal things, rather inalienable and precious things are presented and embedded within the materiality of the artefact itself. As a result, this contemporary object takes on both the inalienable character of the original decomposing or fragile artefact, and it provides the opportunity for new, richer meaning within its fresh context, meaning that extends the life of the original decomposing artefacts.

Through simulation and representation of the inalienable, what is precious and potentially erasable is made viewable and touchable every day. In this way, the work demonstrates the potential for new, everyday home possessions to become inalienable and to rethink what the design of the 'heirloom' can mean.

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GRACE MILLS

with Sam Kebbell

# A new agora: A project(ion) on the sub-centre

Perhaps no space or time in recent New Zealand history has presented such an opportunity to speculate on architecture's urban operativity as did the immediate aftermath of the Christchurch earthquakes. Out of the devastation and destruction came both enthusiasm and experimentation, fed as they were by the uncertainty surrounding the city's future. Undertaken from late 2011, this design research project was propelled less by the tens of thousands of damaged and destroyed buildings (upon which so much work was already being undertaken), than it was by the resulting structural transformation of Christchurch's urban realm. With its centre rendered largely uninhabitable and made inaccessible for immediate safety reasons, the city's monocentric structure was ostensibly supplanted by a *polycentrism* that had always been latent, but never hitherto realised. The eventual city-centre rebuild blueprint notwithstanding, Christchurch's peripheral suburbs were asked, overnight, to perform a direct 'urban' role, catering for increased density, diversity, and vitality in the sudden absence of a functioning CBD.[1] Collectively, these emergent *sub-centres* presented a condition worth deliberating architecturally.

While the spatio-social implications of *polycentrism* have gained currency within global urban discourse in recent years, they remain markedly underexplored within a New Zealand context, despite the fact that several of the country's cities appear to increasingly defy a monocentric narrative.[2] In addition, the paradigmatic shift toward multiple, interconnected urban centres is further complicated by a deep-seated and unabashed 'cultural' aversion to density—or, a profound affectation for spacious, detached housing and daily commutes to a within-relative-reach CBD.[3] To this end, the challenge for architecture in post-quake Christchurch (not least for design-research partially suspended from the immediate rebuild efforts) was seemingly two-pronged: to probe the demand for new programmatic arrangements and proximities (live-work being one example) alongside the socio-cultural shift implicit in the city's urban restructuring. How might the repercussions of this larger urban transformation be synthesised into tectonic and programmatic opportunities, opportunities which dared contemplate alternative urban futures to those eventually being proposed?

Tasked with the challenge of forging a denser, more vital urban condition in one of the city's emergent *sub-centres,* this design-research project sought a

productive, site-specific dialogue—one that married an acute sensitivity to the local with unique forms of catalytic intervention. While aspiring to invoke this more vital urban *milieu* in a selected site, the design endeavour also set out to 'test' architecture's capacity to both *affect* and *embody* the larger urban trans-mutation taking place.[4] At the root of these musings was the very agency of architecture itself: as urban environments transform in unprecedented fashion, and as Architecture (with a capital A) appears ever on the brink of irrelevance, the grounds to explore the discipline's productive, self-conscious relationship to *the city* are both fertile and ever-pressing.[5] By bringing this thinking into focus within Christchurch's unique setting, the question was formulated: how might Architecture speak to, and become a medium for, Christchurch's emergent polycentric condition?

## Re-appropriating a latent (sub)urban centre

The chosen site—an under-utilised sports field in the seaside suburb (or *sub-centre*) of Sumner—had originally been laid out in the late 19th century as a central village green. However, this plan was soon thwarted by developers' conflicting goals for the town's subdivision—today manifested in the curious schism in the town's otherwise regular grid. Perhaps still more suggestive than the site's un-tapped 'central' purpose was Sumner's uncanny resemblance to New Zealand's capital city in both scale and topography. If nothing else, it aided the imagined potential of this township within the wider Christchurch context (Fig. 1).



Fig. 1 Author (2013). Sumner (left) and Wellington at the same scale and orientation [Composite multimedia drawing]

In a myriad of ways, St Leonard's Square represented a natural centre for Sumner in its emergent *sub-centre* state—only further reinforced by the fact that many of the suburb's cliff-straddling public spaces and buildings lay in disrepair.

The site's existing recreational use became the basis for initial typological test-ing. Drawing from the ubiquitous grandstands and pavilions dotted throughout New Zealand's provincial landscape, and driven by the intuition that in order to

Fig. 2 Author (2013). Early concept
sketch [Multimedia drawing]

assume a more central, *gravitational* role, the perimeter of this large open space must transition between 'park' and 'street' (proxy respectively here, for civic and commercial, rarefied and dense; unbounded and bounded) (Fig. 2).
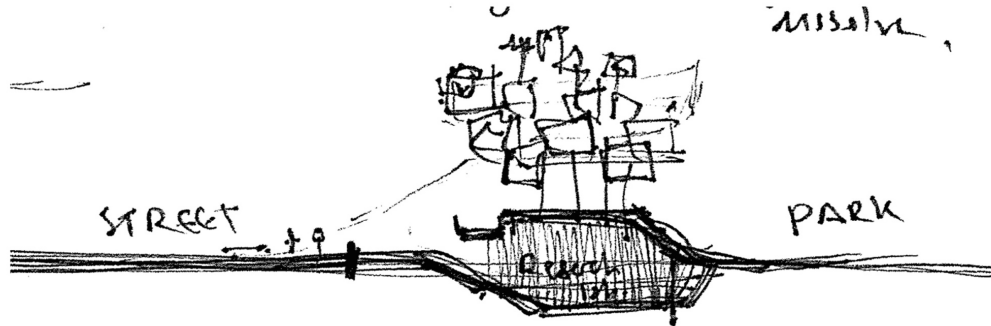


Disregarding specific programmatic requirements in the first instance, iterative studies toyed with the tectonic possibilities of a more dense and intense mixture of public and private uses in a way that, through the deployment of typology, could begin to resonate with the site's former use. (Fig. 3).

Fig. 3 Author (2013). Typological
Studies [Multimedia drawing,
author's own]
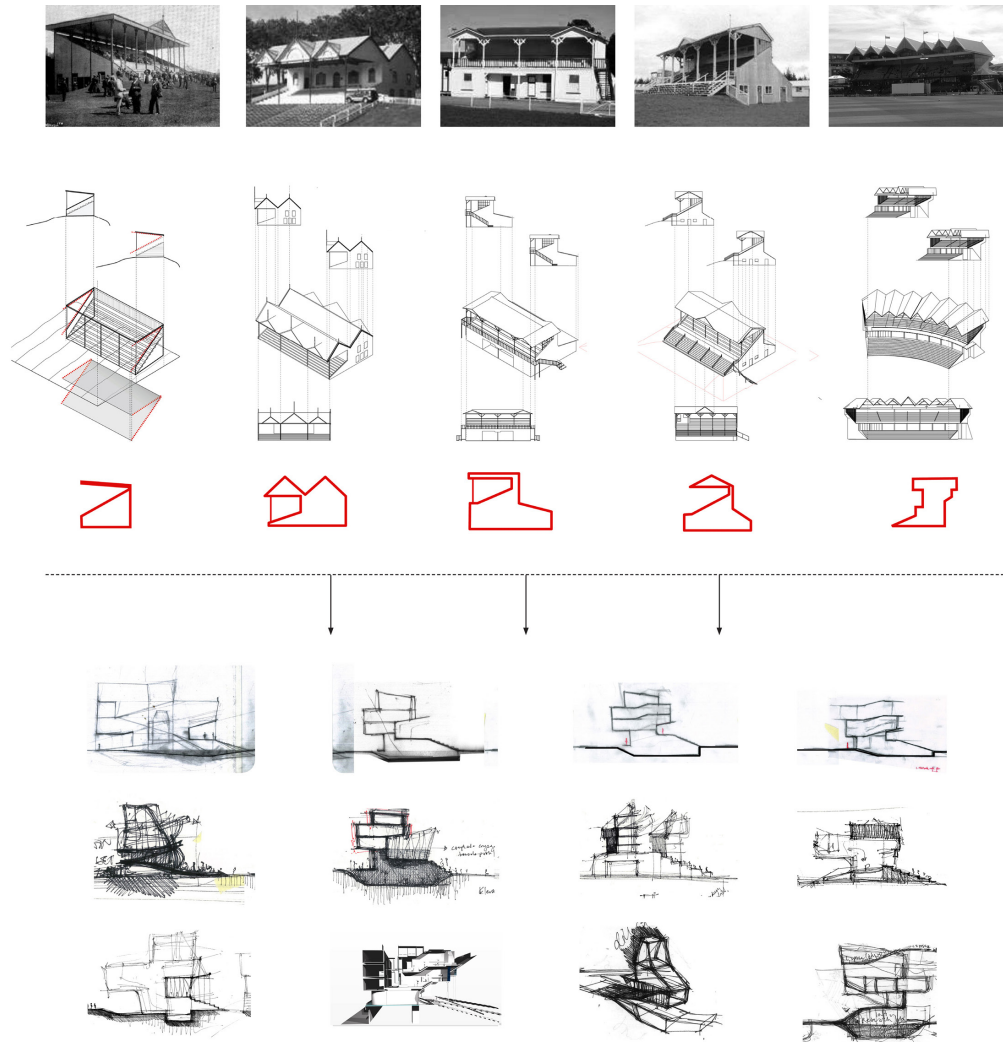
## A deliberately 'flickering' design process

As the design process evolved, programmes reflecting a more mixed, dense 'urban' environment were gradually introduced. To achieve 'medium density' by national standards (deemed a bare-minimum if an 'urban' sensibility was to be invoked) the entire site would need, for example, between 33 and 66 dwellings. The injection of such programmes prompted further manipulation of form and sectional configurations, so as to advance (and distort) the grandstand/pavilion types. This process was experimental and fluid, being neither a case of *form-following-function*, nor an uncompromising tectonic-led endeavour. Intentionally, it entailed a reflective, playful flickering between typology, existing context, and desired qualities of 'urban-ness'.

In turn, this 'flickering' process enabled self-imposed and often highly-specific programmatic constraints to produce and reassert the larger conceptual '*parti*' for the project—an urban (sub-centre) microcosm. A veritable mix of interconnected urban functions—from dwelling, to working, to recreation, to commerce—began to emerge, manifesting themselves both organizationally and formally. Reflecting the desire for a significant proportion of dwellings to be configured as live-work, for example, a central 'chasm' drew these often separated programmes into active dialogue, while imparting a dramatic spatial experience. Similarly, the impetus to create a connective, two-sided public-commercial space at ground level dictated a unique horizontal configuration, with levels folding into one another and exterior spaces seamlessly becoming interior. Such formal decisions embedded in the otherwise quotidian nature of the architecture an urban sensibility (Fig. 4).
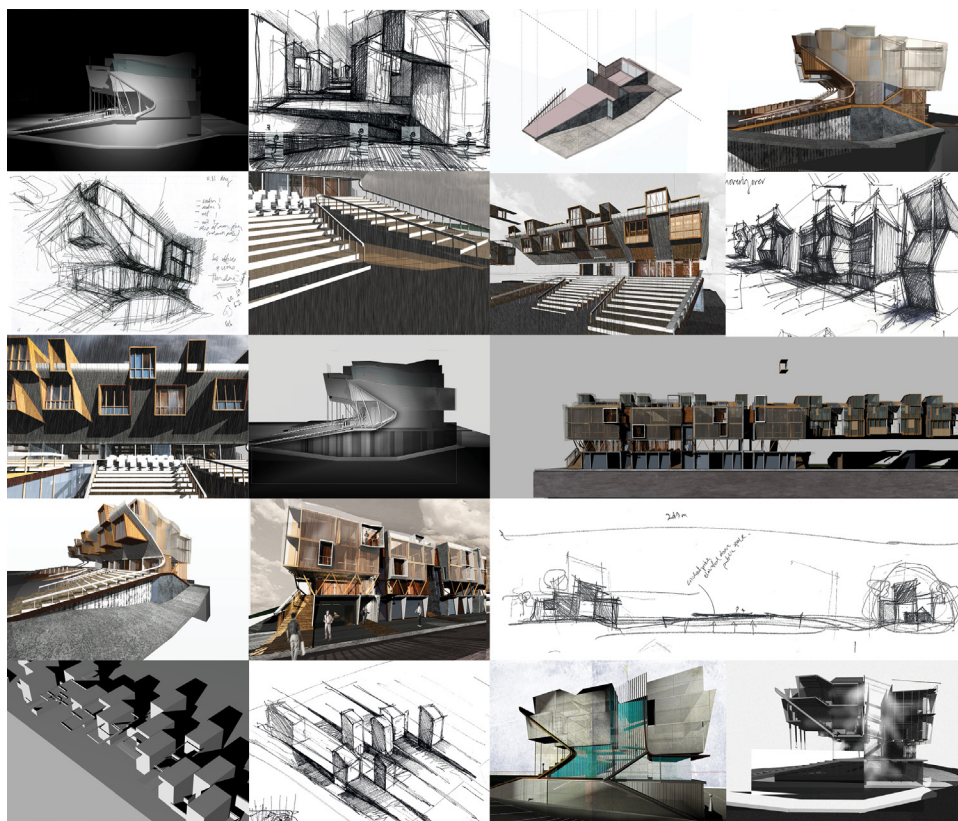


Fig. 4 Author (2013). Iterative Design Process [Collage of multimedia drawings]

## A new agora as an intervention on an emergent sub-centre

In the final design outcome, two elongated pavilions straddle the site, re-casting the central open space as an identifiable public realm (Fig. 5–7).

Fig. 5 Author (2013). Site Section [Multimedia drawing]

Fig. 6 Author (2013). Site Plan, "A Forged Familiarity" [Multimedia drawing]
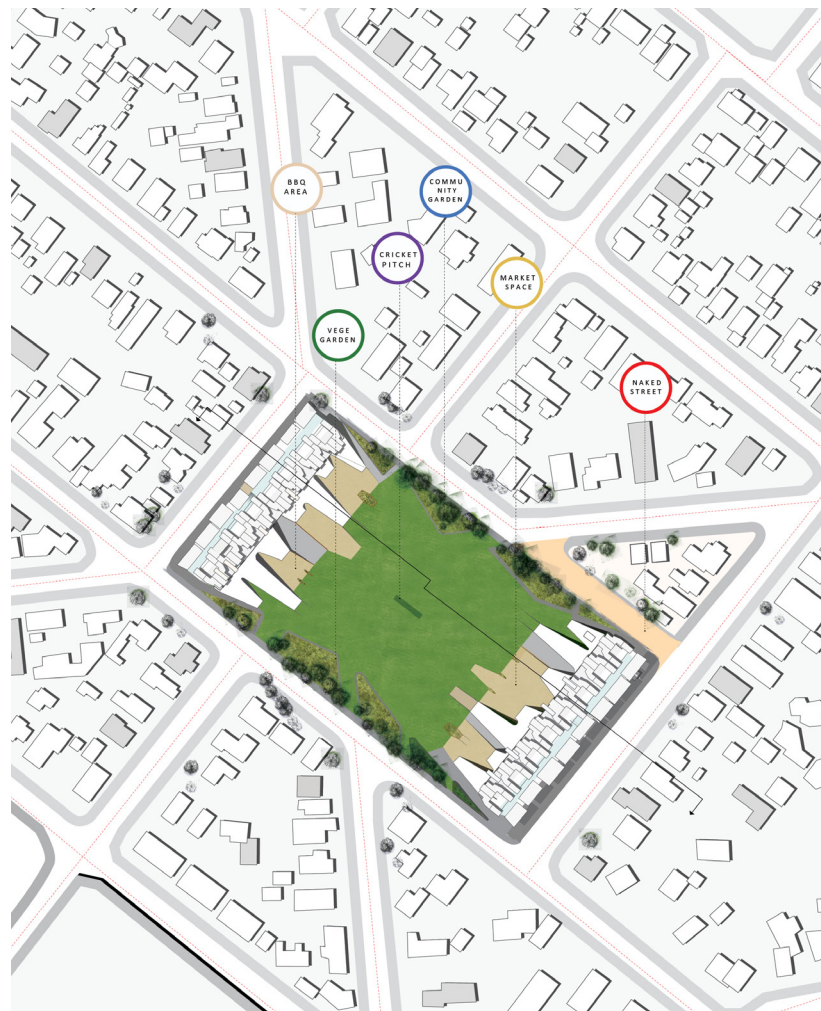
Fig. 7 Author (2013). Sections through Pavilion. [Multimedia drawing]

Exploiting the vastness of the site, the grandstand-pavilion types are given greater built density and more social intensity, while registering the vacant quality of Sumner's original village green. As such, each pavilion boasts an expansive *public porch* overlooking the street on one side while tapering into the centre green by way of staggered terraces on the other. Lurching out, the upper portions of the pavilions hold individual dwellings that playfully project into the open space below. Reacting to the double-edged condition presented by this large, open and fully surrounded site, the pavilions address the 'street' and 'park' in distinct fashions: each side foregrounding the activities of *working* and *living* respectively. This dichotomy is softened on the interior, where the primary functions interface—horizontally and vertically—in novel and intriguing ways (Fig. 8–12).

The design plays out tensions between rarefication and density, contextualism and newness, individual and collective forms, and between monumentality and the vernacular. Further, the 'internal' open space—serving as a domain of everchanging activity and programmability—is afforded new intensity and multifaceted meaning by the two mixed-use pavilions that bookend it.

Fig. 8 Author (2013). Park-side Perspective [Multimedia drawing]

Fig. 9 Author (2013). Street-side Perspective [Multimedia drawing]

Fig. 10 Author (2013). Section through housing, public porch and communal spaces [Multimedia drawing]

**THE GROUND FLOOR**

(a veritable mixture of public
and commercial activities)

1. Retail space
2. Gallery
3. Public entrance to first floor
4. Entry to housing
5. Boulangerie
6. Dance studio
7. Hairdresser
8. Store for delightful goods
9. Delectable cafe
10. New-age pet shop
11. Strip club
12. Changing /club room
13. Hobby shop
14. Public bathroom
15. Resident bike storage-room

**THE FIRST FLOOR**

(a pavilion-esque public space
spanning between park and street)

17. Public lounge area
18. Temporary kiosks
19. Casual meeting spaces
20. Possible convention areas
21. Internal 'deck' strip
22. Main entrance to workspaces

**THE SECOND FLOOR**

(studio apartments and work-spaces reaching
over the live-work chasm)

23. Apartments
24. Work spaces
25. Live/work bridges
26. Void

**THE THIRD FLOOR**

(larger apartments with and work-spaces reaching
over the live-work chasm)

27. Apartments
28. Work spaces
29. Live/work bridges
30. Void
31. Stairs to roof garden

Fig. 11 Author (2013). Floor plans 1–4
[Multimedia drawing]

Fig. 12 Author (2013). Exterior
perspective from lower terrace
[Multimedia drawing]
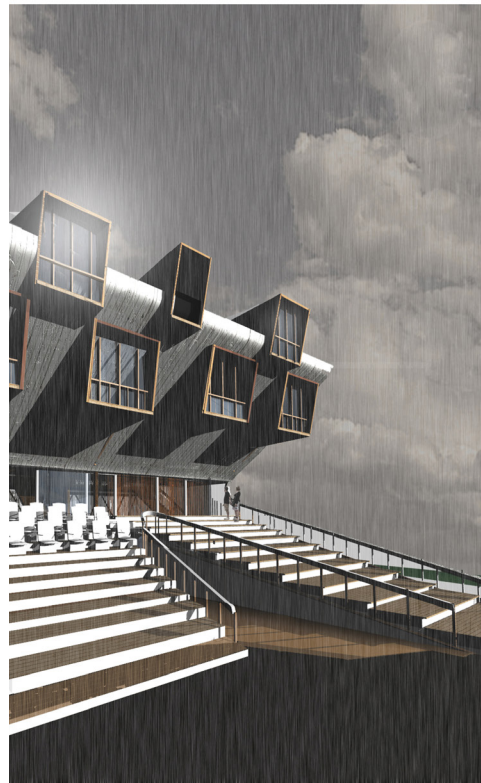
## A retrospective conclusion—architecture keep up!

In ancient Greece, the *Agora* was the centre of religious, political, social and athletic activity; it was a complex place of public, community assembly. In an effort both to provoke and to provide an alternative way forward, this design-research project rethought this spatio-social possibility for a contemporary, polycentric setting.

Through both process and outcome, *A new agora* thus began to speculate on what Christchurch's emerging polycentric condition—and its *sub-centre* components—might mean for architecture, and vice versa. By taking this urban context as its provocation and attempting to distil it architecturally, the project became a catalyst for the *sub-centre*'s emergence (forging a radically more 'urban' setting, eighteen times the existing density of the Sumner), while simultaneously reflecting the conditions and culture of the site and township in its previous incarnation as a suburb of a monocentric city.

Of course, this project (and the *Agora* itself) is but one architectural project(ion) of an emergent polycentric condition. Despite little acknowledgment officially, this condition has generated wide and impassioned explorations since 2011. These efforts have viewed Christchurch's polycentric *sub-centres* as an inevitability, or indeed, already a reality, one into which design-research must be channelled.[6] The importance of these efforts is self-evident. In 2016, Christchurch's CBD hardly looks like being halfway through the predicted decade-long rebuild period, while in the meantime, several outlying *sub-centres* are flourishing. It is clear that the city's *sub-centres* have a momentum that bypasses the official blueprint.

There is a second, and equally salient assumption, at stake in this design-research: architecture's ability to relate to, ask questions of, and interrogate urbanism. If architecture is to maintain its agency within urban contexts that are becoming more complex, interconnected, and fragmented than ever before, novel approaches must be sought which insist that architecture can—*does*—have a role in its urban context beyond its immediate site or 'inhabitants'. Whether this role is spatio-formal, rhetorical, referential, symbolic, programmatic or ecological (to name but a few possible mechanisms), design and design-research are charged with interrogating this question of agency. To that end, the question is not only whether Christchurch is becoming polycentric, but whether architecture can have anything to do with it. What's certain—if not ironic—is that by passively accepting and limiting itself to 'the' centre, architecture risks becoming marginal.

Endnotes

[1] A '100-day blueprint' was released in 2012. Known as the *Christchurch Central Recovery Plan: Te Mahere 'Maraka Ōtautahi'*, it outlined a proposal to rebuild Christchurch's CBD through the concentration of development in a reduced geographic area. Aiming to restore the city as a single-centred model, the blueprint implicitly resisted the reality—and the opportunity—of Christchurch's post-quake polycentrism.

[2] Extensive international literature in the last decade has sought to translate lessons from one polycentric city to the next (for instance, Lehmann 2010, Vasanen 2012, Hall & Pain 2006). In 2011, there was a clear opportunity for Christchurch's post-quake situation to learn from and contribute to this global discourse on polycentricity.

[3] This *anti-urban* sentiment continues to rear its head: as a precient example, Auckland's recently-proposed Unitary Plan recommended densifying a significant portion of the city's existing residential areas. The backlash has been exemplary of a presumed cultural 'right' to large sections and detached housing, even when residing in relatively central areas and in the face of a substantial housing crisis.

[4] Discourse around architecture's microcosmic relationship to the city was given considerable momentum by *Delirious New York* (Koolhaas 1997), which explored architecture's capacity to subconsciously embody the essence of the city. The thinking is continued today by authors such as Pier Vittorio Aureli (2008 & 2011), who argues for an 'Absolute Architecture' that distills the political nature of the city within resolute architectural forms. Albeit less explored in an Antipodean context, this discourse formed a basis for understanding how the site-specific project may be framed in relation to Christchurch's larger urban structure.

[5] A host of contemporary thinkers have contemplated how architecture might re-assert its agency within ever-complex urban settings. Of particular influence on this project was Cuff and Dana (2011) and Lee and Jacoby (2011).

[6] See for example the work of *Studio Christchurch* (2014). For an overview of this multi-institutional Studio, see Bogunovich, D., and Budgett, J. (2014).

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YASSER MEGAHED

with Adam Sharr & Graham Farmer

# Practiceopolis: Journeys through the contemporary architectural profession

The status quo of the contemporary architectural profession displays an ongoing struggle for economic and cultural capital between heterogeneous cultures of practice, which nevertheless together comprise what can be described as a state of dynamic equilibrium.[1] The term describes a system where different parts of a composition can change freely within a fixed and steady whole. This state of dynamic equilibrium, it can be argued, is what allows the architectural profession to change internally while maintaining its coherence as a field. The various cultures comprising architecture's dynamic equilibrium were each originally associated with particular understandings of the role of the architect and frames of reference where this knowledge is drawn.

Currently, the profession is dominated by what might be called technical-rational practice. The term refers to commercially-driven practices that are often associated with the production of buildings by, or for, multinational corporations, and which tend to echo their values. Technical-rational practice shares an ideological platform with systems thinking and management theory, and with other actors in the building industry, all of whom are invested in discourses of efficiency, coordination and quality control, alongside timely and profitable delivery. This research project seeks to interrogate the values and origins of technical-rational practice with the aim of rethinking the future trajectory of the architectural profession.

The research builds upon two strategies: firstly, mapping the alternative cultures of the present architectural profession, and secondly, identifying the dangers of the increasing closeness in values between the profession and other actors in the building industry. The research argues that these increasingly shared values threaten the unique worth of the architectural profession and the dynamic equilibrium which characterises it. By inventing *Practiceopolis,* an imaginary city of architectural practice, the research aims to investigate the nature of the profession and the particular values it contributes to the built environment. Practiceopolis is a city built on diagrammatic relations between different cultures of practice covering a wide spectrum of the contemporary profession. The city became envisaged through a sequence of five iterative narratives whose specific narrations set the foundation for the next. An initial diagram becomes a map, which subsequently becomes the plan for a speculative city. The narrations

are: the map of practice; the city of practice, Practiceopolis; the Map Library; Practiceopolis as a City-state; and stories from Practiceopolis. They emerged from the iterative process of research-by-design, and speculate on the possibilities for design research as a means for articulating the values of the architectural profession. These narratives comprise two parts: part one is accountable for mapping the contemporary profession by building the complex metaphor of Practiceopolis; while part two explores the inhabitation of Practiceopolis by narrating stories about the competition between prominent cultures of practice in the city's imaginary political scene. The two parts of the research draw on Donald Schön's notions of "reflection-in/on-action" (Schön, 1991).

## Part one: Mapping the Architectural Profession

Narrative 1
**The diagram: A map of practice**
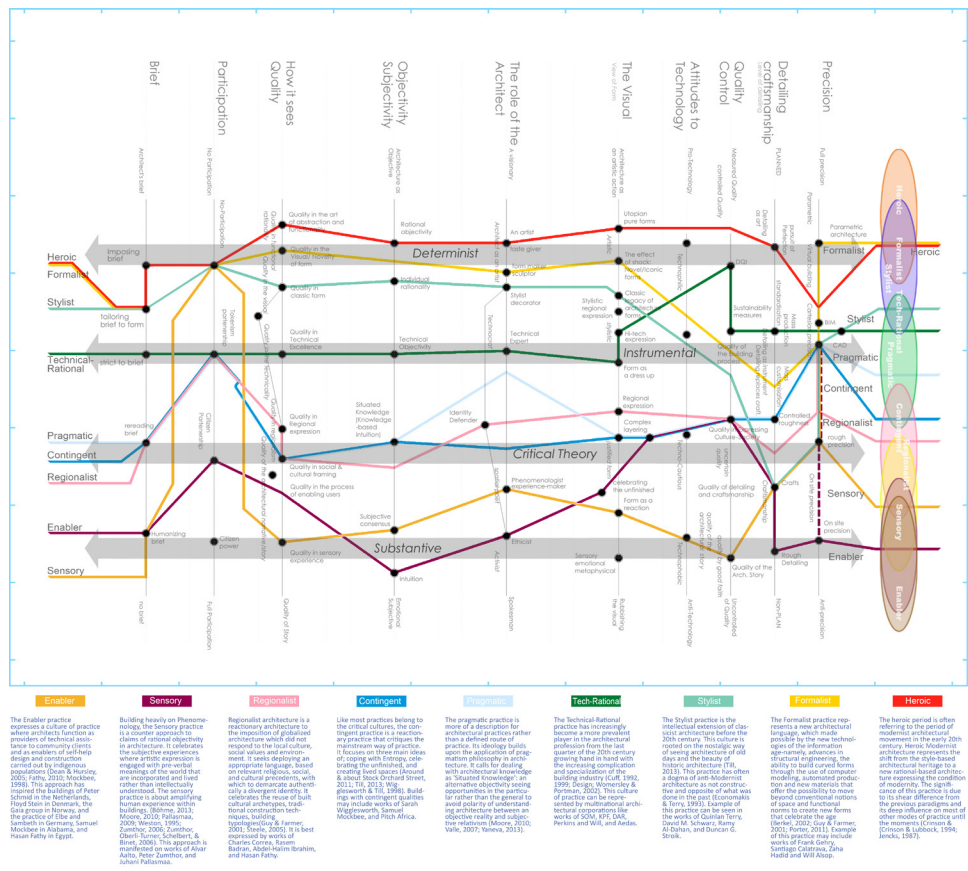


Fig. 1 Author (2012). The map of practice.

In this diagram, the horizontal lines stand for alternative stances towards architectural technology and technical knowledge, and the vertical lines stand for architectural typologies. The paths of the theoretical routes of practice record the set of values shaping their cultures of practice. Each path connects different stops on the vertical grid of the architectural typology. These stops stand for the position of each route of practice, relative to aspects of the architectural typologies.

The map of practice was an analytical exercise which produced the first iteration of Practiceopolis. The map is a diagram that analyses and outlines prominent modes of contemporary architectural practice. Its morphology derives from correlations between three layers: firstly, a set of typologies covering key aspects of the architectural field; secondly, a classification of architectural stances towards technology and technical knowledge based on an interpretation of Andrew Feenberg's (1999) philosophy of technology; and thirdly, an identification of a series of theoretical considerations of architectural practice. Various intersections

found between these layers helped establish the values defining the main cultures of practice in architecture. Narrative 1 concludes by acknowledging the co-existence of these cultures as a dynamic equilibrium, and identifies the two prominent cultures: the technical-rational and the critical.

Narrative 2:
**Creating Practiceopolis: the methodological device**
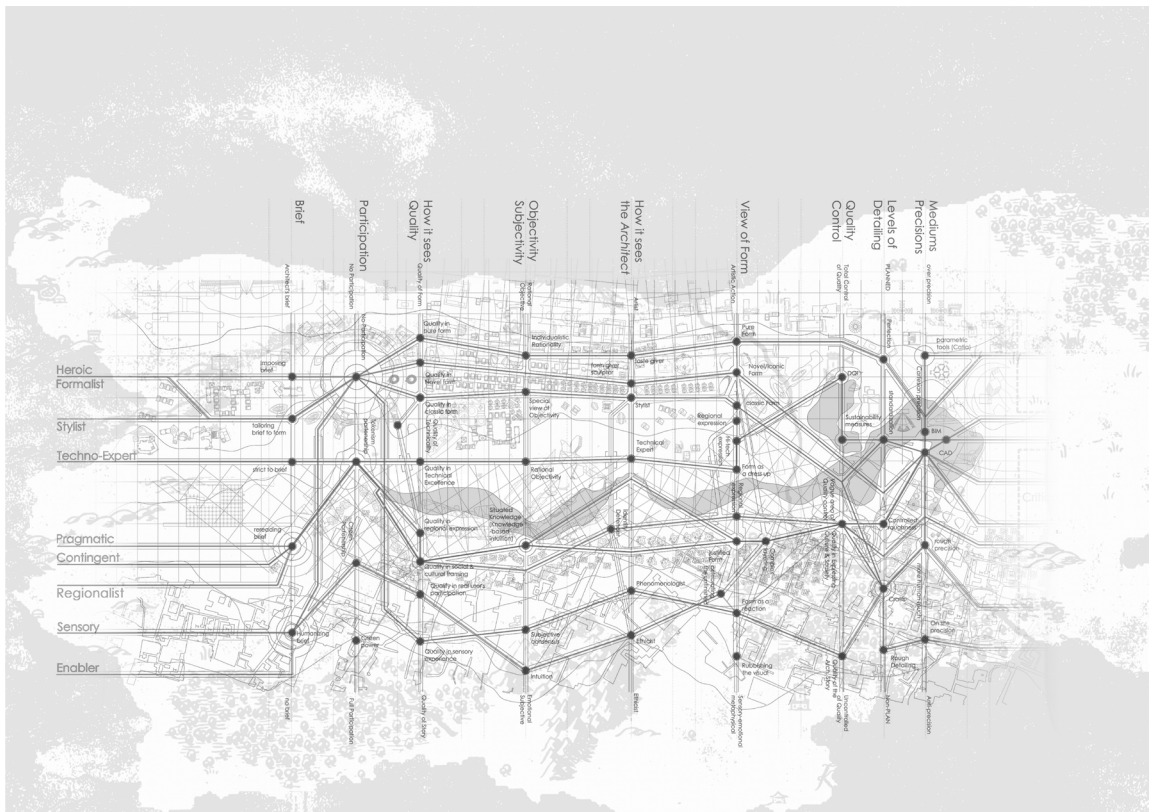


Fig. 2 Author (2013). The map of Practiceopolis.

Each stance towards technology is translated into topography, into a contour line. These become the boulevards of the theoretical routes of practice, the roads of architectural typologies, and the squares or key stops in these typologies. Bridges and tunnels make direct and indirect juxtapositions between routes of practice at different levels. Practiceopolis is populated with buildings from the architectural canon, set out afresh in an alternative, speculative urban context."]

In the short story, "On Exactitude in Science" (1975), Jorge Luis Borges imagined an empire where the cartographers struck a map of the empire whose size was equal to that of the empire. Inspired by this story, narrative 2 sets out a spatialised metaphor for Practiceopolis—a tangible world re-articulating the profession. It translates the diagrammatic relations forming the map of practice into a 1:1 scaled map. Accordingly, Practiceopolis acts as a medium, allowing these relations to be architecturalised in order to explore further the dialogues between varied architectural ideologies. Practiceopolis concentrates these dialogues and expresses them by contrasting tectonic and urban idioms given built form. Narrative 2 concludes by acknowledging the domination of the technical-rational culture of practice.

Narrative 3:
**The Map Library building**



Fig. 3 Author (2012). A sectional and aerial view of Practiceopolis showing the concentration of buildings from the architectural canon. The city has a distinctive capacity to illustrate the dialogue between cultures of practice in high concentration. It shows the coexistence of competing cultures of practice manifested in the shape of buildings.

The Map Library building is situated at Practiceopolis, in the district between the instrumental and critical-theory zones, and is centred by the Situated-Knowledge Square. The design of the building traces the four stances towards architecture and technology as the main generator of the form in a shape of four unequal masses expressing these stances. The building is designed around a journey between exhibitions of the theoretical routes of practice which end with the hall exhibiting the original Map of Practiceopolis, whose location in the building is an actualization of the idea of the "Map within the Map"."]

The "Map Library" building registers the ideological positioning of the map of practice itself by giving it a specific location within the analytical frame of Practiceopolis. This exercise explores how Practiceopolis is not a neutral tool but is determined by the researcher's position as an architect who brings his own insights, values, and personal baggage to his/her study of the profession. This is expressed through the allocation of a building that houses the imaginary original map of Practiceopolis: the Map Library Building. The building design expresses in microcosm the values underpinning Practiceopolis. In the narrative of Practiceopolis, the relations between cultures of practice are neatly ordered. However, in the Map Library these cultures become inseparable and interwoven, enabling a critical exploration of the intersection of their values. Narrative 3 concludes by acknowledging the significance of critical culture's discourse within the contemporary profession. The narrative reveals that this culture—though slippery to define and to describe tectonically—is a prominent and influential agent in maintaining the balance of the dynamic equilibrium of the profession.

Narrative 4:
**Practiceopolis the city-state**
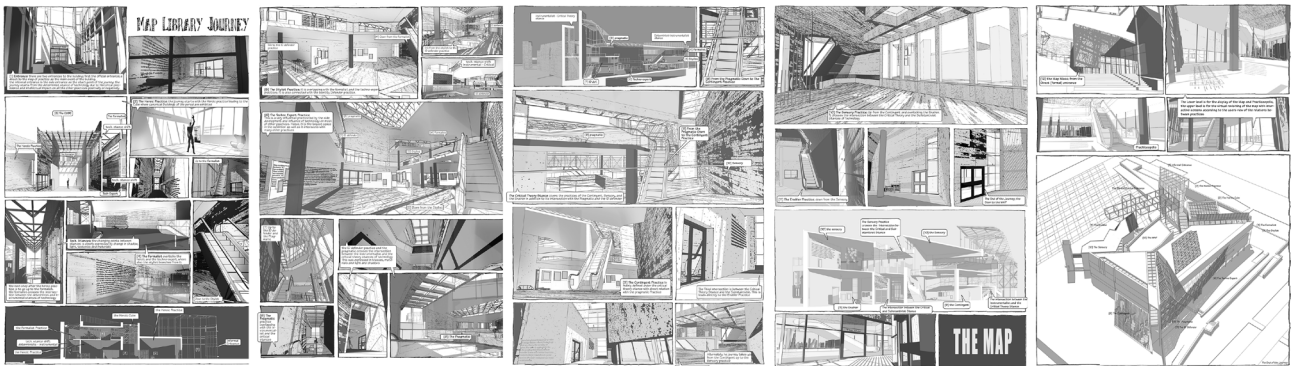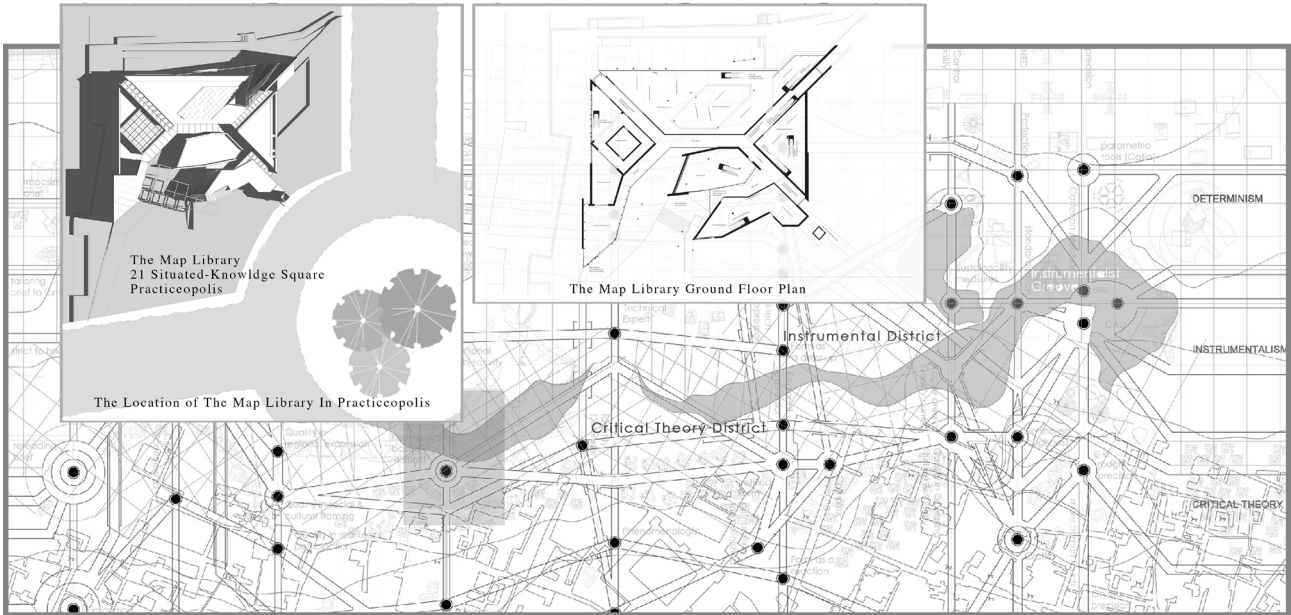
Fig. 4 Author (2013). The Map Library location and design.

Narrative 4 depicts Practiceopolis as a city-state within a union of states representing different actors in the construction domain that together form "*Constructopolis*"—the confederation of the building industry. This narrative adds missing dimensions of history, social connections, and political competition to Practiceopolis. It portrays how the architectural profession is not autonomous but implicated in the values and agendas of other actors in the industry with whom it cooperates. Narrative 4 concludes by acknowledging the conflicting values between the prominent cultures of practice, i.e. between the technical-rational and the critical. In addition, this narrative introduces the possible inhabitation of Practiceopolis by preparing it as a backdrop for stories that will further investigate these value conflicts in the second part of the research.

## Part Two: The Inhabitation of Practiceopolis

Narrative 5:
**Stories from Practiceopolis & exploring the conflict**
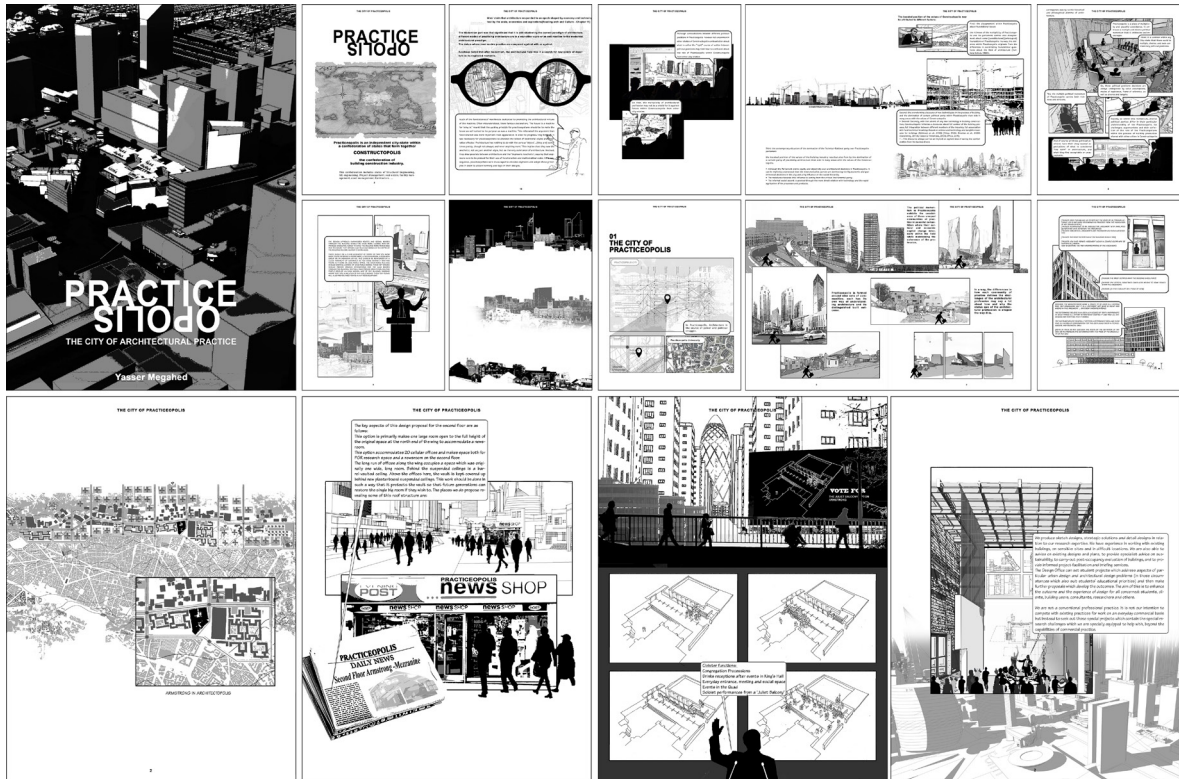


Fig. 6 Author (2015). Excerpts from the graphic novel "Stories from Practiceopolis".

Since Practiceopolis occupies a middle ground between fantasy and actuality, cartoon techniques are deployed as a way to narrate stories about the inhabitation of Practiceopolis. Inspired by Jimenez Lai's "Citizen of No Place" (2012), these stories narrate the architectural everyday. This tactic makes readable the value conflicts between different cultures of practice."]

Part two of the research situates a set of quasi-realistic stories within Practiceopolis via the conventions of the graphic novel. These stories narrate situations experienced by the researcher: a self-confessed technical-rational practitioner as experienced through his work with Design Office, a research-led practice which seeks to pursue a critical approach. The stories revolve around the researcher's role in the renovation of a Grade II listed building in the UK. The stories reflect upon the value conflicts that occurred during the project's Progress Meetings and Value Engineering meetings. These meetings highlight the two cultures converging around the practices of the Design Office—one culture represented by a critically-oriented concept designer; the other by the estate managers, a rational/technically-orientated client liaison.[2] In these meetings, different values played-out around attitudes to efficient, profitable and timely delivery, themselves composing a technical-rational template shaping the performance of participants. The discussions made the researcher a kind of participant-observer, acutely conscious not just of the values of Design Office but of certain priorities in architectural discourse, and the legacies of architectural

training. The stories relocate these meetings within the city of Practiceopolis and dramatise them as conflicts between the two cultures, both of whom articulate competing visions for the future of Practiceopolis.

The research ends with speculations about the role of the architect, and the values of the architectural profession. The research calls for celebrating the richness of its multiple cultures and refutes the claims to dominance of a single culture as a totalising mode of practice. It shows that multiplicity and diversity in the contemporary profession provide one of the particular values that protect its dynamic equilibrium. Subsequently, the research points out that an increasing proximity of the values of a techno-rational approach to those held by other actors in the building industry threatens to unbalance this equilibrium.

The research highlights the necessity of defining, communicating, and marketing the values that architects add to the process of building production. To do so, it introduces an idea of the *critical instrumental approach* as an intellectual framework to deploy specific architectural knowledge in an actively critical way. It calls for foregrounding the incompatibilities and collisions between technical-rational culture and critical culture to produce new accounts of the particular values of the profession. Critical-instrumental understanding could potentially replace the search for a single technological epistemology in architecture with the pursuit of architecture 'in good faith'—a quest for the best result possible outcome rather than a standardised perfection as default. It encourages architects to guard against claims of truth by recognising divisive political values and practices, resisting the potential reduction of practice toward a singular approach, however complex or comprehensive.

Fig. 5 Author (2014). The Map of Practiceopolis—the City-state.

Practiceopolis reflects an embodiment of Pierre Bourdieu's notion of cultural capital in the architectural field (Stevens, 2002). Extending the concept beyond Bourdieu's use of the term, Practiceopolis becomes a city-state in which architectural practices are in ongoing political competition. The nine theoretical routes of practice are represented by nine political parties competing for power and influence in the Practiceopolis parliament, whose chambers are imagined to be housed in the Map Library building.
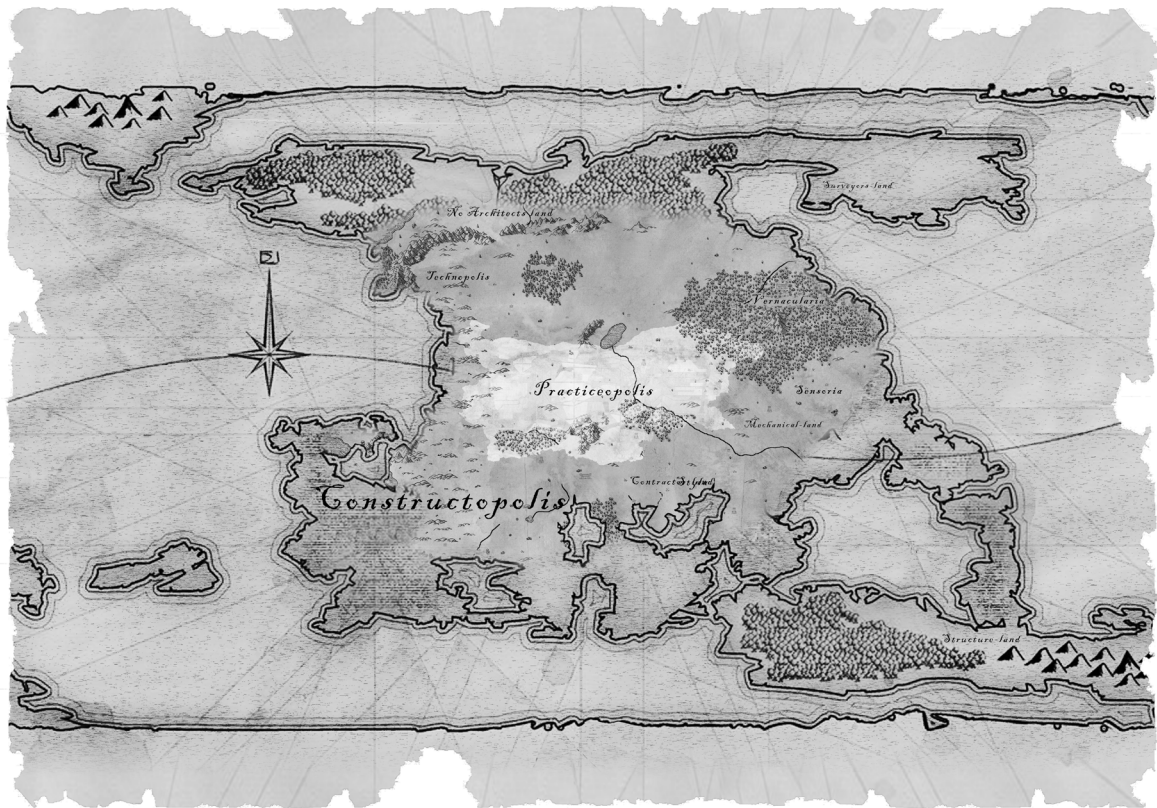
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Endnotes

[1] A dynamic equilibrium is a term used in physics, chemistry and biology to describe a state of balance between continuing processes. According to the Oxford Dictionary of Sports Science & Medicine (2006), dynamic equilibrium is a form of equilibrium in which short-term changes are superimposed on a background state which is itself changing. This allows open systems to remain stable over long periods of time. As such, it describes that a composition or mixture does not change with time (Cartwright, 1983). In this research, the term not only describes an architectural field where different practices coexist in peaceful competition, but one where change does not compromise the coherence of the field.

[2] Commonly in the UK context, university institutions are run by a facility management entity called Estate Support Services responsible for the acquisition, development and maintenance of the land and buildings of particular universities.

review / MARK SOUTHCOMBE

# Julia Gatley & Paul Walker
## *Vertical Living: The Architectural Centre and the Remaking of Wellington*
### Auckland University Press, 2014

*Vertical Living* draws together, consolidates and rethinks the histories of the Wellington Architectural Centre interwoven with a wider modern architectural history of Wellington City. The broader intention, as authors Julia Gatley and Paul Walker state, is to begin writing "the city back into the history of architecture in New Zealand" (2014: xi).  This is the book's strength but also its inherent limitation—a strength because it broadens the book's scope and scholastic intent significantly, yet a weakness because, as the authors acknowledge, the writing of the city into New Zealand history is an undertaking beyond the scope of a single volume.

The first chapters outline the period preceding the Architectural Centre's establishment. Political and architectural contexts are documented comprehensively alongside major milestone buildings of the city.

Material on the formation of the Architectural Centre follows documenting early meetings and social events in private homes, the support of major governmental design ministries, and the active involvement of public servants, students, artists, designers and architects. It is a vivid picture of a nascent revolutionary institution.

The Architectural Centre had visionary and social underpinnings that sought to counter the institutional culture of the 1940s workplace. Its forward-looking focus recognised the need to educate students, architects and a wider audience about the potentials of modern architecture.  The Centre walked the talk from the beginning, establishing a series of summer schools focused on both the training of architects and improving the quality of the Wellington built environment. It served as a counterpoint to the perceived deficiencies of the Auckland University College course and the alternative professional training course for architecture. Its focus on architectural education had a wide influence, proving an important impetus for the eventual establishment of a second school of architecture in New Zealand at Victoria University of Wellington.

The book is divided into decade-long chronological sections, themselves organized by themes addressing particular foci pursued by the Architectural Centre. The 1950s and 60s decade section is augmented by a chapter focusing on publication activities of the Centre, particularly the *Design Review* and *The Book* projects.

This chapter, "Bursting into Print" by Paul Walker and Justine Clark, is followed by Damian Skinner's "The Gallery" where the history of the Centre's gallery is examined, including its experimental focus, exhibitions, influences and roles. The two decades are further evaluated through consideration of the Centre's advocacy for designed urban environments, or 'town planning' as it was known. This urban focus was taken up through publication and well-known visionary theoretical projects such as *Te Aro Replanned* and *Homes Without Sprawl*, with the latter exhibited in Wellington and toured across other New Zealand cities.

The 1970s and 80s introductory chapter "The Commercial City" is more general. It contains fewer milestone projects and the details surrounding them. The absence of some key projects creates gaps in the architectural history of Wellington City the authors are consciously documenting. Some of New Zealand's most and least memorable postmodern buildings were built in Wellington at this time, and these remain, defining how Wellington is experienced today. These include big buildings by Warren and Mahoney such as Mercer Tower, 49 Boulcott Street, and the pivotal Bowen House, also Structon's Sun Alliance Building on the Terrace, the Saatchi and Saatchi building on the corner of Taranaki Street and Courtney Place, the ANZ Centre and the Park Royal, as well as Craig Craig Moller's integration of Plimmer House cottage into a larger built composition around the same time.

Smaller buildings that would help round out the Wellington City story of that time would likely include projects such as the Willis Street Village by Roger Walker and Moore Wilsons, the latter with its split façade, balancing cube and painted Gravesian murals—perhaps the high point of Ian Athfield's post-modern period and the beginning of a second phase of the redevelopment of the Te Aro part of the city. The associated chapters "The Centre as a Protest and Lobby Group" and "The Recognition of Heritage Values" partly account for the omission of many key projects of the period. The Architectural Centre's focus on the buildings lost in Wellington at the time was paralleled by a lack of attention to the new city emerging with the generation of replacement buildings.

*Vertical Living*'s discussion of the fight for the harbour's edge in "The Centre as a Protest and Lobby Group" chapter records an important historical period for Wellington that is all the more remarkable in the light of the extent of change that occurred, and the resulting new public access to the waterfront which now exists. An account of how the Architecture Centre effectively lobbied for access to the harbour shows a particular and political shift in the Centre's activities—a commitment with significant personal cost for the individuals involved. The account of this period would have been deepened by discussion of the design and realisation of the quirky Frank Kitts Park, the first of the major changes to the harbour's edge.

The final section, "The Nineties and Beyond", and its three sub-chapters are appropriately focused on major projects around the waterfront, particularly Te Papa Tongarewa, the Civic Square, Taranaki Wharf Precinct, and Waitangi Park, however they miss one of the early big projects—Craig Craig Moller's huge Queens Wharf Event Centre. While referenced briefly with Frank Kitts Park as part of the Waitangi Park discussion, there is no discussion of the history or design of the Queens Wharf Event Centre itself. The twinned building of the Centre, originally designed as a retail shopping mall, and the sail-shaded public space between

them introduced major public venues to the waterfront. They also formed a gateway from the city to the waterfront and were a catalyst for further public access to the waterfront.

The chapter in the "The Nineties and Beyond" final section, titled "Exhibiting Architecture", showcases the depth of Wellington's growing architectural awareness and design culture in a period when the Victoria University of Wellington School of Architecture had become well established and increasingly engaged with the city from its new Vivian Street location. The last chapter of this section, titled "Turning Sixty", reflects on the period and possible future of the Architecture Centre. Although depiction of the Centre's more recent projects lacks the elaboration and illustration afforded to the work of earlier years, it shows how the Architectural Centre continues to influence the shape of Wellington City today.

*Vertical Living*'s intention to begin articulating an urban New Zealand architectural history is an ambitious and valuable undertaking. The pairing of the Architectural Centre and its history with the wider, evolving city has resulted in a rich and rewarding narrative. Inevitably the dance between the histories of the Centre and the city results in some divergence, for the former remains a critical and aspirational mirror of the latter. As such their correspondence must remain an ongoing project.

Through Gatley and Walker's scholarship, the Wellington of today can be seen as a city with a self-aware design history. This arose substantially through the ideas and actions of a group of politically astute architectural advocates. City change has clearly been influenced by a series of public activities, events and publications the Architectural Centre orchestrated across a 70 year period. *Vertical City*, in its documentation of the operation of the Architectural Centre and the parallel growth of Wellington City, is also a valuable contribution to wider discourse on city growth and change over time.

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review / MICHAEL MILOJEVIĆ

# Mirjana Lozanovska (Ed.) *Ethno-Architecture and the Politics of Migration*
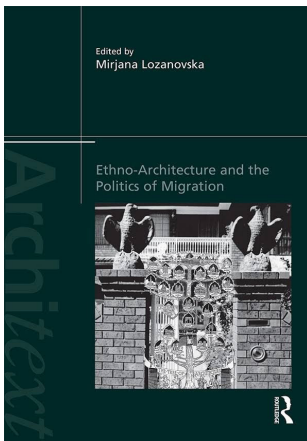
Since we've had migration longer than architecture, the latter's history is a palimpest inscribed by the histories of migrations. The canonical Western history of architecture in the Old World is a succession of migrations—the dynastic Egyptian migrations up into Nubia, Greek migrations west into ancient Sicily, Umayyad and Almohad migrations north into Iberia, and of course reversals and re-reversals. In *Ethno-Architecture and the Politics of Migration*, Mirjana Lozanovska reminds us that an important facet of cultural hegenomies is the reading and control of urban space and architecture. In this volume, she gathers the research of fourteen scholars, each of them carrying out micro studies into the ethno-architectures of transnational migrations across the past few decades.

While all her contributors engage with the city, not all can be said to have engaged explicitly with architecture, and none engages in a sustained reading of form, space or materiality. Lozanovska articulates this loose assemblage of materials over three sections—the first and third concerned with expansive ethno-landscapes in metropolitan centres, with four case studies focussed on smaller scale domestic topics across the middle section.

Though Lozanovska's publication does not include studies which focus on the architecture of prominent or longstanding transnational migrant communities, two chapters focus on 'Third World-looking' facets of Melbourne. Ian Woodcock's piece on the particularity of Sydney Road as an urban armature of ethno-architecture analyses its exceptional density and diversity, noting that the original two-story narrow frontage mainstreet building stock, the retention of which is now supported by heritage controls, endorses the need for adaptivity and reads as a palimpsest of simultaneous readings, quite literally.

In another chapter, David Beynon's case study on the rebuilding of Emir Sultan Mosque in the suburb of Dandenong highlights issues around the visibility of minorities. Unpicking the cultural disinclination to appreciate neo-Ottoman architectural forms, he highlights the council's biased planning application process. He points out that the new project was deemed "not in keeping with the character of the neighbourhood" even if the law said that there was no distinction to be made between Christian and Muslim places of worship. In his account of the 'Indianisation' across a part of Queens, New York, John Frazier highlights

the irrational racist response to the transformation and renewal of commerical and domestic properties by Indian immigrants.

The scenario involving waves of immigrants moving gradually through the city neighbours, before dispersing in subsequent generations, is common internationally where the closing of ethnic 'institutions', be they Jewish delis, Italian bars, or Austro-Hungarian patisseries, are replaced by 'strange' new businesses catering to an entirely different migrant clientelle. Mark Gillem and Lyndsey Pruitt report on this phenomenon—the highly concentrated and visibly coherent migrant settlement areas such as San Francisco's Chinatown, where shopping, political, cultural and spiritual pursuits had been concentrated within a few blocks—to the dispersed communities of the biggest Ethiopian-Americans zone in Atlanta, and the even more extensive migrant landscape found in America's largest Lebanese-American community of Detroit.

Arjit Sen reports on the incremental expansion of the extended Patel family businesses in the medium density fine grain urban fabric of Devon Street, North Chicago, as an example of "spatial temporality". Now, two generations on, the Patels are an extended family each fronting a facet of the national Patel brands, supplying to a much broader ethnic spectrum nationally, disengaged from their original clientelle to the point where devotional songs and vegetarian stricture is long gone. In contrast with the Patels' immersive experience retail formula, Karen Franck and Philp Speranza's survey into the latest iteration of mobile food vending in New York and Portland notes how, in a bid to enter hospitality, the food trucks and carts of the cash-strapped migrant support the semblance of an informal city and its unpredictably pleasureable urban experiences. But where the truck or cart format cannot support an ethno-architectural atmosphere or sustained client contact, these businesses often branch into immobile restaurants. The co-authors recommend that more cities actively support these endeavours as they tend to serve a significant sector of the low wage earners, who claim otherwise be priced out of the market by high restaurant prices.

The four "materialities of home" chapters sit together more comfortably. Using Vista Hermosa in the Mexican state of Jalisco as a case study to better understand the aspirational aspects of migrants' remittance projects, Sarah Lopez points out that the landscape of migration is double-ended in that some properous Mexican migrants, not only Mexicanize their American neighbourhood, but through sustained philanthropic involvement in seed-funding via a Mexican government urban development program, also engage in the Americanization of their hometowns by the construction of luxurious vacation homes, the renovation of a plaza, and the construction of a sports and entertainment faciliity.

Critical responses and ambivalent results suggest that economic infrastructure might be a wiser investment. Christien Klaufus's contribution concerns remittance architecture in the peri-urban zones of three mid-size Latin American cities—Cuenca in Equador, Quetzaltenango in Guatemala and Huancayo in Peru. Applying "demonstration effect" analysis, it is noted that whilst the owners of these unconventionally large and non-traditional residential forms are re-investing in their hometowns, they are simultaneously jumping up the social ladder. Architectural form and ornament re-emerge in Iris Levin's readings of two domestic interiors in Tel Aviv. Deriving socio-political meaning from the ornamentation of the "Moroccan rooms" synonymous with Sephardi

Moroccan-Israeli immigrants, she points out that these private havens of nostalgia do not challenge the long-dominant European Ashkenazy culture like the outwardly Morrocan cultural sites of Bab-Sali shrine at Netivot. Marcel Vellinga's study of two unrealised pseudo-Indisch style neighbourhood developments in the Dutch city of Almere set out the projects' intention to satisfy the late life nostalgic inclinations of first and second generation Indisch immigrants to live out their days with each other within a visibly distinct environment. While rejecting the objections of the Dutch press to *ersatz*-Indonesian design, the author evokes notions of domestic comfort, of being 'at home', without an analysis of the projects' urban or architectural design.

The contributions of the first and last chapters of Lozanovska's volume highlight the opportunities that the study of the representation, images and their interpretation provides the researcher in this field. Ayona Datta's piece on photo-narratives of London by Polish migrant construction workers, and Yannik Porsché's account of mounting a temporary exhibition on the history of immigration in Paris, and later Berlin, points out the gulf between a migrant's view of the everyday city and official narratives projected by institutions.

As one might expect, Lozanovska's own final chapter is both the most broadly framed and most closely argued piece in this volume. In it, many important questions of her topic and material are asked. In her repositioning of ethno-architecture alongside the prevailing understanding of vernacular architecture, I found myself wondering how she might see this in the broader context of the pseudo-ethnic and pseudo-historic architectures, and other reinterpreted and debased forms by long established and fully integrated communities, each punctuating the urban panorama of our cities.

As an ex-Toronto and Vancouver Serbian-Canadian architect, I carry personal experience of two examples Lozanovska calls upon, these being the tendency among Balkan migrants to increase the success of their relocation in Western industrial cities by leaving and arriving in clusters, and the ironic indignation of Shaughnessy residents in their reactions to wealthy immigrant Chinese "monster houses". Such phenomena from distinctly different socio-political urban contexts suggest that the coherence of ethno-architecture as a study is critically important, and that research of this kind be strongly contextualised in time and space.

review / SARAH TREADWELL

# Mark Dorrian (Ed.)
## *Writing on the Image: Architecture, the City and the Politics of Representation*
### London and New York: I. B. Tauris, 2015
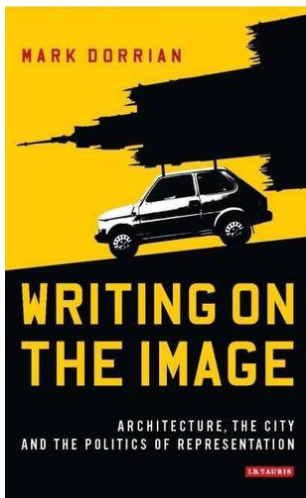
In *Writing on the Image: Architecture, the City and the Politics of Representation*, Mark Dorrian brings a specific shaping of language to bear on some memorable and strange urban events and objects (Dorrian, 2015). Each essay in the brightly yellow volume observes and articulates objects framed as spectacles through language. According to theorist Paul Carter, "all the objects in Dorrian's book are spectacles in a double sense: they draw attention to themselves in order to bring into focus a new ideological reality." (Dorrian, 2015: xviii). The essays delivered as seminars, articles, and those newly written for the volume, have a wonderfully wide reach—from clouds to Ferris wheels via vertigo, transparency, miniaturisation and utopia on ice—the essays look from above, from within, and obliquely. Written over a twelve year period, they are mostly attentive to Northern and Western conditions and the urban.

Paul Carter observes the anti-totalising structure of the book that allows the essay to reclaim "a public space that is no longer the projection of powerful interests but that retains a dissident topology of its own" (Dorrian 2015: xix). Each essay, he suggests, is conceived of as a "new viewing platform" looking at objects which are often themselves concerned with the act of looking. (Dorrian, 2015: x). The small, grey and somewhat dingy photographs in the book seem to stand as indeterminate markers of the objects, and it is rather the corporeal and sharply astute qualities of the writing that bring physical material to the reader. *Writing on the Image* is a sort of anti-picture book where the language is at once complex, poetic and explanatory, catching at the history and reception of images, while the grey photographs deny any correspondence to the world evoked through the writing.

It would be easy to see a perhaps thwarted material maker at work in the writing, itself formally adroit and structured by the object under consideration. While producing many of the essays, Dorrian was working in the architecture department at the University of Edinburgh and his research atelier Metis. *Mêtis*, as Ann Bergren has pointed out, is a transformative intelligence associated with architecture and weaving (Bergren: 1993). Poets are said to be weavers of words and Dorrian's essays practice writing as a form of weaving, a compelling web of architecture and urban politics. The afterword by Ella Chmielewska confirms the architect at work when she writes, "in their oscillations between detail and

overview, scales and perspectives, Dorrian's essays construct and perform complex architectural drawings" (2015: 198).

In some ways, the book is a companion to an earlier and memorable collection of essays on the visual, *Looking from Above: The Aerial View in Visual Culture*, which Dorrian edited with Frédéric Pousin (Dorrian and Pousin: 2013). Both volumes trace connections between the observer, technology and socio-political conditions. In its attention to viewing, the book also has a lineage in earlier work such as Jonathon Crary's *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (1990)—which considers the historical construction of the observer—and Martin Jay's *Downcast Eyes: The Denigration of Vision in Twentieth-century French Thought* (1993)—which also considers how images are produced, seen and understood. Both were written at the end of the twentieth century at a time of robust engagement with theory, and Dorrian's books offer contemporary accounts in a similarly complex field.

As well as addressing the form of writing he employs in the "open, provisional, speculative and non-totalising" essay, Dorrian also comments on his writing as having other trajectories than those initially intended (2015: 2). He acknowledges a sensitivity to the effects of his subjects, and this is an absorbing aspect of the book. The collection of essays is shaped in a sequence, constructing the collection as a developing argument with the first four chapters historically oriented, commencing with "Falling Upon Warsaw: The Shadow of Stalin's Palace of Culture", a paper delivered by Dorrian at Auckland University of Technology in 2015.

The objects of history and the contemporary world are interpreted critically and with wonderfully wilful play in the swinging analysis of each essay as connections are made and elaborated upon, as in his piece analysing transparency and vertigo. The arguments progress in unexpected ways across a discussion on the "Blur Building" by Diller and Scofidio, described as pioneering a "new kind of environmental commodification" (2015: 8). He extends this idea in the essay *Utopia on Ice: The Sunny Mountain Ski-dome as an Allegory of the Future* in studying a glass-domed ski resort intended for the deserts of Dubai. Each chapter has a specific quality with "Voice, Monstrosity and Flaying: Anish Kapoor's Marsyas as a Silent Sound Work" being particularly harrowing.

The essay "Adventures on the Vertical: From the New Vision to Powers of Ten" exemplifies techniques employed in the volume. Dorrian starts by paying close attention to the familiar scene on the picnic rug, noting the proliferating clock faces and titles of the books abandoned by the sleepers. He then suggests links between the scene of the sleepers and Goya's sleep of reason, "a monstrous sleep of reason" or perhaps a "4-dimensional nightmare—it pictures a kind of vertiginous, abyssal collapse of everyday reality" (2015: 74). In the "Power of Ten in Cold War, Corporate and National Contexts", Dorrian points out how it can be understood "in terms of the domination and control of the domains that it pictures" (2015: 74).

In an era of surveillance, questions of the politics and poetics of the visual field and its observers have grown compelling, making this a valuable and entertaining book. Visual theorist Martin Jay suggests that "perhaps the real task these days is […] to probe the ways in which the sense of 'looking after' someone is just as much a possibility as 'looking at' them in *le regard*, and 'watching

out for someone' is an ethical alternative to controlling surveillance" (2002: 89). Dorrian's writing is richly engaging throughout, with unexpected revelations and insights across its negotiations between spectacle and detail, providing opportune evidence of a quietly political and benign criticality.

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review / MICHAEL DAVIS

# Peggy Deamer (Ed.)
## *The Architect as Worker: Immaterial Labor, the Creative Class and the Politics of Design*
London: New Delhi: Bloomsbury.
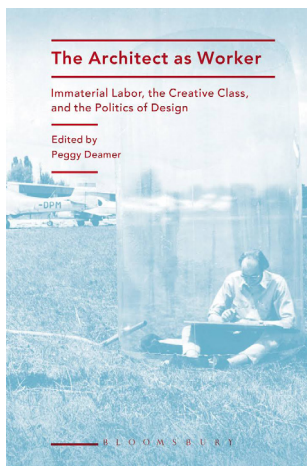
The latest published offering by Peggy Deamer, architect, Yale University professor, and occasional resident and teacher here in New Zealand is *The Architect as Worker: Immaterial Labor, the Creative Class and the Politics of Design*. As editor, Deamer has gathered a range of authors, including architects, non-architects, professionals, and academics to reconsider the manner in which architecture is practiced from the position of the actual work involved.

In her introduction, Deamer argues that there are few authors who have addressed the issue of architectural labor. She sets the book directly in relation to those who she considers have previously, including Manfredo Tafuri and Kenneth Frampton, and to contemporary thinkers like K. Michael Hays, Reinhold Martin, and Richard Sennett. Missing, as she argues, is a necessary examination of "architecture's peculiar status of material embodiment produced by its immaterial work, work that is at once very personal and yet entirely social" (2015: xxxi).

*The Architect as Worker* consolidates Deamer's research at Yale University in the wake of the slow-to-fade effects of the 2008 Global Financial Crisis. It also extends thinking explored in her earlier *Architecture and Capitalism: 1845 to the Present* (New York: Routledge, 2013), and it provides an expanded context for her and Phillip Bernstein's *Building (in) the Future: Recasting Labor in Architecture* (New York: Princeton Architectural Press, 2010).

The book transcends geographical boundaries and will find relevance anywhere global capital and architecture coincide. While directed toward architects, it presents ideas that have implications for the creative disciplines more generally.

The essays are arranged in five parts that progress from discussions of the work of design (that might strike a chord with a range of designers) through to examinations of some of the peculiarities of architectural practice (that may be more pertinent to architects). Part I, "The Commodification of Design Labor", discusses immaterial labour and its treatments. Part II, "The Concept of Architectural Labor", presents ideas on the varying nature of architectural work. Part III, "Design(ers)/Build(ers)", further examines aspects of architecture's particularity and its current disciplinary condition. Part IV, "The Construction of the Commons", sets out connections between neo-liberalism, capitalism, and ideas of architectural impoverishment. Part V, "The Profession", is more optimistic.

It offers strategies in response to the difficult malaise brought into focus in the preceding parts.

While the fifteen essays differ in their point of entry into the discussion of architectural labour, they are connected by a Marxist thread concerned with the possibility of change across the discipline. Highlights in the book are many, but for me, Franco Beradi, Neil Leach, and Deamer herself make the deepest impression.

Franco Beradi's "Dynamic of the General Intellect" paints a picture in which the Intellectual, the Merchant, and the Artist are "the dominant characters of the fable we call Modernity" (8). Reframing them as the Artist, the Engineer, and the Economist, Beradi aims in this demarcation to disentangle their relations with one another to the effect of empowering the artist to better claim their proper role in the triumvirate: that of breaching the status quo and extending knowledge. Beradi further takes aim at the academy and the way in which it has succumb to neo-liberalism through a lack of resistance to the encroachment of meritocracy. He writes, "meritocracy is the Trojan Horse of neoliberal ideology" precisely because it fosters competition over solidarity and a pursuit of research and discovery "dissociated from pleasure and solidarity" (7).

Neil Leach addresses the issue of professional accreditation of academic architecture programmes in his chapter "The (Ac)Credit(ation) Card". With architecture school accreditation an ongoing, normative measure of professional education, here as elsewhere, Leach's position is challenging. His point is that professional accreditation, by holding the schools firm to existing local knowledge, contributes to the under-delivery of architectural education in a rapidly changing global market. He argues for a more flexible model for architectural education and its quality assurance.

Deamer's own chapter, "Work", directly challenges the architectural profession to account for the role and place of labour in design production. The failure to do so, she claims, has resulted in the increasing marginalisation of the profession within the building industry. A necessary first step is to understand the work that designers and architects do as itself *work*. From this position it is then possible to think work and value in more utopian terms—that is, to rethink the way we do it. This leads, as the final part of her text identifies, to alternative models for architectural practice.

No doubt *The Architect as Worker* is confronting, precisely because it asks us to question foundational aspects of architectural education and production. Moreover, it looks towards ways in which that education and production might depart from prevailing socio-economic and aesthetic norms. Yet despite this challenge *The Architect as Worker* offers views that are inclusive and engaging. Presenting stark "left-right" political distinctions as inadequate measures of current architectural patterns, the juxtaposition of perspectives and analyses open up rather than shut down possibilities for future practice.

Reviewing *The Architect as Worker*, invoked two memories specifically for me. Firstly, as a newly employed graduate, I recall walking into the office to begin my twentieth consecutive 12-hour day to find a colleague cleaning up the remains of a coffee cup he had flung at the office wall in a state of fury and exhaustion. Together we calculated that we were earning less than $9 per hour having

spent five years at university and having racked up significant debt in doing so. Secondly, in a conversation I had with my father just after achieving my NZRAB registration I found myself exclaiming to him "I love what I do, but I hate the way I do it". What *The Architect as Worker* articulates for me is precisely *why* this isn't the architectural profession I want to send my students out into. Its greater achievement may be to answer just *how* that profession might be otherwise.

# The Architect as Worker

Immaterial Labor, the Creative Class, and the Politics of Design

Edited by
Peggy Deamer

B L O O M S B U R Y

# *bios*

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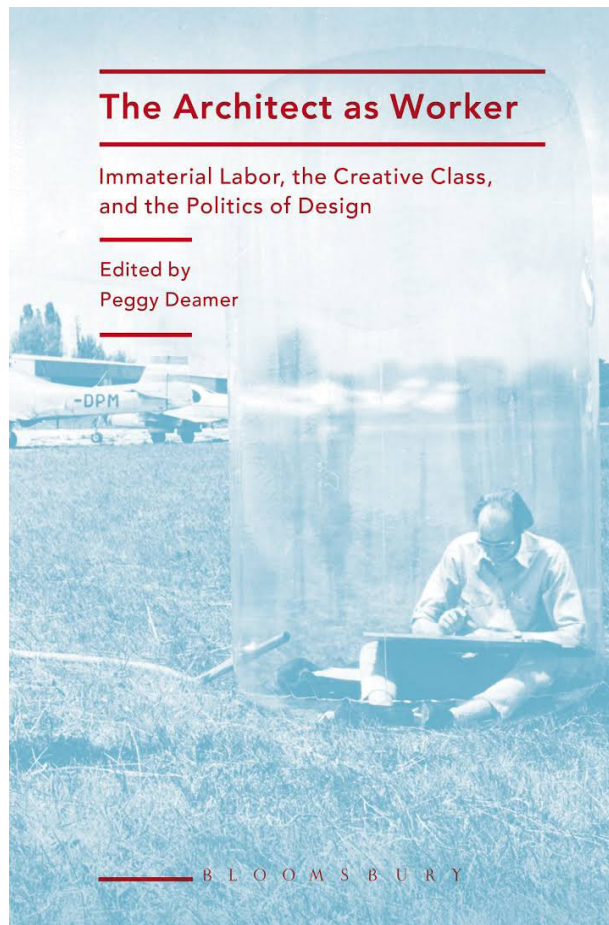
**MARTIN BRYANT**
Martin Bryant is the Professor and Programme Director of Landscape Architecture at Victoria University of Wellington. He is a multi-award winning practitioner with numerous built landscape architectural projects in Australia and New Zealand over 30 years. His academic work includes publications concerning the role of landscape architecture on resilience, including the UN Habitat III Policy Paper on Urban Ecology and Resilience.

**PATRICK CLIFFORD**
Patrick Clifford was a fellow student of Rewi Thompson at the University of Auckland School of Architecture in the late 1970's. Together with Malcom Bowes, Michael Thomson and Tim Nees they have collaborated on numerous projects over the many years since. Patrick is a founding principal and design director of Australasian architectural practice Architectus.

**MICHAEL DAVIS**
Michael Davis is Director of Architecture programmes at the University of Auckland's School of Architecture and Planning. He teaches and researches in the areas of architectural design and architectural media. Mike holds a PhD from RMIT in Melbourne and a Master of Architecture in Architecture and Urbanism from London's famed Architectural Association. Davis co-founded architecture and design practice 'Ark' with Vanessa Ceelen in 2004 and has practiced his trade in New Zealand, Canada and the Netherlands, while being involved in projects from Ethiopia to New Caledonia.

**ANDREW DOUGLAS**
Dr Andrew Douglas is a Senior Lecturer in Spatial Design at the School of Art+Design at Auckland University of Technology. He is coordinator of the Urban Practices undergraduate minor, a member of the TurnSpace Collective, and contributor to the Making Public research cluster. He is also an Executive Editor of Interstices: Journal of Architecture and Related Arts, and a trustee of the enigma: he aupiki Trust, and the Greg Bowron Trust, along with being a director of the Interior Design Educators Association and an editorial advisor to the IDEA Journal. He has practiced architecture in both Auckland and London and maintains specialty skills in critical urban thinking and design particularly. He has pursued postgraduate studies at The University of Auckland and Goldsmiths, University of London. His research ranges across fields associated with urban and Greek philosophy and history, aspects of poststructuralist thinking—particularly the work of Gilles Deleuze and Felix Guattari—critical perspectives on socio-spatial practice, and gender and sexuality as these pertain to literature, cinema and the urban imaginary. His doctoral research investigated observation and reflectivity in modernity and its linkages with human motility in European urbanism since the seventeenth century. His current research includes the role of affect in emerging forms of publicness and governance, colonial-urban formations in New Zealand, and various aspects of an urban-interior synthesis

**GRAHAM FARMER**
Graham is Professor of Architecture and Director of the Architecture Programmes. Graham's diverse research and teaching interests encompass sustainable design, materials, tectonics and architectural pedagogy. A key theme in his work is the social production of the built environment, with an emphasis on understanding how the built environment is socially sustained. Graham is interested in the ethics of sustainability, and in particular how environmental values relate to the specifics of place and the pragmatics of design practice.

**PENELOPE FORLANO**
Penelope Forlano is a PhD student at Curtin University with a special interest in inalienable public and private artefacts, design anthropology and object agency. She has over 20 years practice as an award-winning artist, furniture designer and interior designer. Her work has been exhibited widely, including a coveted spot at London's 100% Design, CraftACT, The John Curtin Gallery, FORM, and a solo show in 2004 at the esteemed Salone Satellite, Milan's International Furniture Fair. Receiving the prestigious Australian Design Award in 2006, her 'Terrain' table was acquired for permanent collection by the Art Gallery of Western Australia in 2011.

**SUE GALLAGHER**
Sue Gallagher is a Senior Lecturer in Spatial Design, and previous Associate Head of School Academic in the School of Art & Design at AUT University. Trained as an architect (Bachelor of Architecture First Class Honours, The University of Auckland) and as a performance designer (Master

of Arts Scenography with Distinction, Central Saint Martins London and in partnership with the Hogeskool van Kunsten), Sue has explored performance based spatial practice in various projects including; the NZ national pavilion at the Prague Quadrennial of Performance Design and Space in 2007, 2011, 2015, the Auckland Arts Festival; set design for the inaugural performance of the New Zealand Dance Company, and is a past Chair of IDEA: Interior Design Educators Association.

ROSS JENNER
Ross Jenner teaches at the University of Auckland. He has a PhD from the University of Pennsylvania, has practised in the UK, Finland, Switzerland, and New Zealand, taught at various institutions in Australia and the US, was Commissioner for the NZ Section of the XIX Triennale di Milano, published in several books and journals, and is an editor of *Interstices*.

SAM KEBBELL
Sam Kebbell is a senior lecturer at Victoria University of Wellington and a founding director of Kebbell Daish. Architects. He is currently working on his Ph.D. at RMIT University in Melbourne, and in 2015 was an ADAPTr Research Fellow at the University of Westminster in London. He graduated from Victoria University of Wellington with a B.Arch (1st class Hons), and completed his Masters of Design in History and Theory at the Graduate School of Design (Distinction) at Harvard (Cambridge, USA) in 1999. Sam worked in Boston,

New York, and Amsterdam before returning to practice and teach in Wellington.

ASHLEY MASON
Ashley Mason is a PhD candidate in Architecture by Creative Practice at Newcastle University, UK. Her work engages the potentials of textual-spatial practice in addition to exploring absent-present narratives within architecture. Alongside her research, she is also Editorial Assistant for the journal *arq: Architectural Research Quarterly*.

YASSER MEGAHED
Yasser is currently in the writing up phase of a PhD in Creative Practice at Newcastle University's School of Architecture, Planning and Landscape. He is one of the team comprising Design Office—a design research practice operating out of the university. Previously, Yasser worked as a senior architect and design team leader with the Architecture and Urbanism Group in Cairo. Yasser has a BA and MSc in Architecture from the Architecture Department of Cairo University. His research interests include questions of quality in architecture, modes of practice in architecture, and shifting relations between theory and practice in architecture.

MICHAEL MILOJEVIC
Michael Milojevic is a professional teaching fellow at the University of Auckland's School of Architecture and Planning. Growing up in the Little Italy area of Toronto, he designed event installations for large multicultural events on fifty sites across the city, also overseeing Balkan related

projects in his hometown, as well as abroad in Chicago and Auckland.

SEAN PICKERSGILL
Dr Sean Pickersgill teaches architecture within the University of South Australia's School of Art, Architecture and Design. With a focus on developing innovative design approaches at all levels of the undergraduate and graduate curriculum, his work on the inter-relationship between modes of critical thinking in philosophy and design practice has been published internationally, alongside literature on the consequences of contemporary digital technology in the practice and understanding of architectural design.

GRACE SALISBURY MILLS
Grace Salisbury Mills is an architect and urban designer, originally from Wellington but currently based in Brooklyn, New York. Having recently finished a MSc. in Architecture and Urban Design at Columbia University on a Fulbright Scholarship, she now works as a designer at WXY Studio in Manhattan, focusing efforts on the interface between public space, urban infrastructure and architecture. She is also a Teaching Fellow in the Urban Design program at Columbia University. Grace completed her M.Arch between Victoria University of Wellington and The Royal Danish Academy of Fine Arts in Copenhagen.

RACHEL SARI-DEWI MURRAY
Rachel Sari-Dewi Murray is a recent graduate of the M.Arch (Prof) programme at Victoria University of Wellington. Having completed a 5-month

exchange programme at Paris' École Spéciale d'Architecture in 2013, she is currently rounding off an architecture internship in Helsinki, where her residence just so happens to overlook a swampland.

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### ADAM SHARR

Adam Sharr is the Head of the School of Architecture, Planning and Landscape and Professor at Newcastle University. He is Editor-in-Chief of Cambridge University Press' international architecture journal arq: Architectural Research Quarterly, Series Editor of Thinkers for Architects, published by Routledge, and principal of Adam Sharr Architects. Adam is author or editor of six books on architecture including Heidegger's Hut (MIT Press, 2006), Reading Architecture and Culture (Routledge, 2012) and Demolishing Whitehall: Leslie Martin, Harold Wilson and the Architecture of White Heat (co-written with Stephen Thornton, Ashgate, 2013). Alongside his own architectural practice, Adam works with APL's Design Office research consultancy.

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### DIANNE SMITH

Dianne Smith is Associate Professor and Director of Research and Graduate Research Studies at Curtin University's School of the Built Environment. Dianne's research focuses on discriminatory design (with particular reference to everyday design for the cognitively impaired), environmental meaning and experience, as well as the impact of colour. Additionally, she is interested in how creative practices enable alternative ways to see situations and associated problems. Recently she co-edited and co-authored M2:

Models and Methodologies for Community Engagment (Springer, 2014), Perspectives on Social Sustainability and Interior Architecture: Life from the Inside (Springer 2014); Occupation: Ruin, Repudiation and Revolution (2015) and has been a core member of the Lakhnu Sustainable Development Project in northern rural India (2011–2016). Dianne has also undertaken leadership positions with the Design Institute of Australia (DIA) and IDEA (Interior Design/Interior Architecture Educators association).

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### MARK SOUTHCOMBE

Mark Southcombe studied Architecture at the University of Auckland and Victoria University of Wellington. He is Architecture Programme Director at the School of Architecture Victoria University of Wellington, an award winning Director of Southcombe Architects in Wellington, and a fellow of the NZIA. He teaches design studio and research methodologies courses at Victoria University of Wellington. His current design and research is focused on collective urban housing.

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### JEREMY TREADWELL

Jeremy Treadwell is a senior lecturer at the School of Architecture and Planning within the University of Auckland. He teaches design, architectural history, and building technology. His current areas of study focus on the tectonics of Polynesian architecture.

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### SARAH TREADWELL

Sarah Treadwell is an Associate Professor at the University of Auckland's School of Architecture and Planning. Her research investigates the representation of architecture through consideration of ground and spatiality. She focusses on turbulent ground, both politically and literally, as well as on the atmospheric and the allusive, specifically grounds which are not contained by conventional categories of site or foundation. Her work is carried out across both written and visual practice, with much attention afforded to the relationships between text and image. With a longstanding interest in gender related issues, Sarah has written on the work of contemporary artists and on representations of motels, suburbs and interiority. Her work has been published in various books and journals including Architectural Theory Review, Space and Culture and Interstices. Sarah's visual work has been exhibited at Te Tuhi, Pakuranga, the Gus Fisher Gallery, University of Auckland and the Adam Art Gallery—Te Pātaka Toi in Wellington.

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### SIMON WEIR

Simon Weir is a lecturer of architecture at the University of Sydney, Australia. Seen most prominently in his study of surrealism, Weir's theoretical research focusses on the foundational mythologies of architectural culture and the philosophy, art and architecture of classical antiquity.

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