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Tokatea:

Architect: Archiscape

Project architect: Amanda Yates

Sounds House:

Architect: JDA in association with Archiscape

Project architects: Amanda Yates, Stephen Bonnington, John Daish

Keegan House:

Architect: JDA in association with Archiscape

Project architect: Amanda Yates

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oceanic grounds

architecture, the evental and the in-between

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Abstract

Exploring spatio-temporal flux within architecture, this thesis presents design-based research on the temporal environments of Oceania and Western evental theory. Oceanic thought and Western theories of the event share commonalities, both holding that space and time are inseparable dimensions. This spatio-temporal concept challenges Western philosophical and architectural doxa that privilege stasis over temporal flux, and offers a mode by which to introduce alterity into architectural discourse. I move over these cultural and philosophical grounds in order to explicate and further develop a personal design practice that is of this place and time for, while there is a body of writing that documents Oceanic built environments, there is less research that considers how these may be constituted and communicated through contemporary architectural design.

The thesis posits two temporalised environments apparent within Oceanic spatial thought and practice – the shifting and extensive oceanscape, and the telluric groundspace that makes space; and describes two resultant spatial typologies – an oceanspace which is characterised by openness and mobility, and a groundspace which is both surface and space. These contentions are tested and theorised through three architectural experiments developed between 1999 and 2005: the *Sounds House*, which operates as an open and mutable spatial field; the *Ground House*, which forms monumental “interiors” that emerge from and relate to the earth; and *Tokatea*, which blends these two spatialities, fabricating a temporalised environment in between the momentary and the monumental, between interior and exterior. In presenting and discussing these speculative spaces, this thesis moves between architecture and academia, Oceania and the West, the ephemeral and the enduring, and the inside and the outside, with the aim of destabilising architecture’s discursive ground, causing its hermetic boundaries to become temporalised and fluid.

Preface

This exegesis explores a space-making practice that, like its author, has hybrid cultural origins deriving from both Polynesian and Western ancestries. The exegesis of the built work moves between these cultural conditions, discussing Pacific spatial environments and thought and Western architectural practices and theory. The Pacific and the Western are employed together as a means to unsettle assumptions and encourage emergent cultural expressions formed in the space in-between.

Employing between-ness as a textual strategy, the exegesis models the design process and its concern with destabilising fixed conditions of interior and exterior, landscape and architecture or Western and Polynesian spatial thought and environments. This is the defining quality of the design process which otherwise employs common design development practices - modelling, sketching and drawing in order to generate a spatial language. The spatial designs thus formed are tested through an iterative developmental process which continually asks is the design active, is it in motion between spatial, cultural and discursive conditions, does it therefore practice between-ness through its resistance to fixed identifications or locations?

The exegesis aims, at another level, to articulate what the emergent field of spatial design may be through the consideration of this practice of between-ness. Spatial design is established here as a discipline that is defined by its extensiveness, ranging across the fields of architecture, landscape architecture, interior and performance design as a time-based discourse, a site of spatial and discursive exchange.

oceanic grounds: architecture, the evental and the in-between

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one. introduction: in-between

To be located in and around the Pacific is to confront the undifferentiated abyss that is the ocean. Of all the grounds it is the most insubstantial because it has no particular identity, no fixed position(s) Thus Pacific theatre reflects the disparity of fixed identification and tends to deal with the moment, with the temporal environment that is filled with (e)motion¹.



Choreographer Lemi Ponifasio and architectural theorist Albert Refiti suggest that the Pacific region consists of an expansive oceanic ground that is both eternal and ephemeral, subject to movement, moment by moment. Focusing their argument on Pacific performance space, they suggest that a time-based spatiality emerges from this immersive “temporal environment”. Such an idea suggests a dense interspersal of space and the event that, while familiar to Oceanic cultures, is foreign to the traditions of Western thought² and architecture. In this thesis, I explore the temporal environment through architectural design, testing these ideas in the design and construction of three houses: the *Sounds House*, which explores durational flow via shifting boundaries and open spatial fields; the *Ground House*, which experiments with a concrete landscape that becomes surface, furniture or contained interior; and *Tokatea*, which mediates between both these spatialities. This speculative practice moves in between the conventions of the Western spatial disciplines, Western theories of the event and Oceanic spatio-temporal environments in order to open up architecture to difference.



The term “Oceania” is used by architect and theorist Mike Austin, as well as by Refiti, to describe the Oceanic

region, that extensive zone that is the Pacific Ocean and the islands within it. Spatio-temporal concepts are apparent throughout this region, recognisable in the *va* of Samoa, Tonga and Tahiti, the New Zealand Maori and Hawaiian cognate *wa*, and the *ma* of Japan. In subtly shifting ways, these terms reference an idea of temporalised space. Japanese architect Arata Isozaki describes *ma* space as that which is “perceived as identical with the events or phenomena occurring in it; that is, space recognized only in its relation to time flow”.³ This temporalised condition generates dynamic and diffusely bounded space for, as Austin asserts:

The notion of *ma* familiar in Japanese architecture becomes, in Oceanic societies, the *va*, the interval or gap that is the platform as the platform on a double hulled boat (*vaka*). In architecture this is the *marae* or the dancing ground it is the construction of openness.⁴

In contrast, Western architecture’s “entropic conservatism”⁵ and traditional concerns with enclosure, weather resistance and monumental stasis cause it to resist or ignore temporal flows and the relationship between architecture and the event. This temporal resistance is expressed as a fixed and enclosed architecture, described by architecture/performance theorist Dorita Hannah as “the discrete object of architecture”,⁶ an interpretation that is reinforced by architect Bernard Cache as the “traditional notion of a closed system or architectonic”.⁷ This notion “assumes that there are two static conditions of object: figure and ground”:⁸ the boundary of the architectural object becomes a primary architectural condition establishing a contained interior within; and outside, a ground that provides the solid foundation so necessary, as architectural theorist Sarah Treadwell suggests for the “foundational security ... [that is] at the heart of the architecture’s enterprise”.⁹ Interior and exterior become binary opposites under the effect of a

static architectural foundation and boundary that is resistant to time and its effects.

There are, however, other Western disciplines – performance design, interior design and landscape architecture – that design spatial environments in relation to the event and strongly engage temporal flow (as opposed to temporal stasis). Performance design, an emerging field, makes space for and in relation to the event. Interior design, held within the architectural boundary, operates at the more temporary and temporal end of the architectural scale and, like performance design, is closely concerned with the experience of the embodied event. Landscape architecture, the exterior or ground to architecture's object, exceeds the architectural enclosure and is concerned with processes of vegetal emergence or decay. It plans space over time, designing for the careful phasing and sequencing of growth relative to season. Landscape design may also operate on a monumental geologic timescale that exceeds the arrested time of architecture. These disciplines, then, operating on either side of the architectural boundary, exist outside of architecture's traditional concerns with temporal stasis. Together, these disciplines parallel the temporalised built environments of Oceania whose mutable and porous spaces express changing conditions of interiority and exteriority with little regard to an enclosing and static architectural boundary.

Architecture itself has been challenged to engage with the event from the modernist period onwards. In her PhD thesis, Hannah outlines how Sigfried Giedion "defined modern architecture through the incursion of time".¹⁰ Giedion's *Space, Time and Architecture: The Growth of a New Tradition* is a central text for modern architecture in establishing temporality as a primary mode by which we experience architecture. Suggesting the importance of the event, Sanford Kwinter, in *Architectures of Time*, defines the event as "a principle of individuation, indeed the

principle of individuation in a nature understood as complex and dynamic – it divides, limits but especially produces”.

¹¹ The event is then a condition of the multiple and organic flux that is nature and is a producer of change. Kwinter notes that while there is an increasing focus on time and the event in philosophical and scientific disciplines, there is a lack of a similarly rich development in the fields of art, music, literature and, by extension, architecture.¹² He calls for cultural productions, including architecture, to shift from stasis and singularity to what he calls the evental,¹³ the dynamic and the multiple, all of which are temporal states and experiences. Such a shift, he suggests, would require a change in thinking from architecture as object to architecture as a field of relations, a part of the “system of forces that give shape and rhythm to the everyday life of the body. Thus the object – be it a building, a compound site, or an entire urban matrix ... would be defined now not by how it appears, but rather by practices: those it partakes of and those that take place within it”.¹⁴

In *Architecture from the Outside*, philosopher Elizabeth Grosz also makes a call for action against architecture’s traditional association with stasis: she asserts that “Space, like time, is emergence and eruption, oriented not to the ordered, the controlled, the static, but to the event, to movement or action”.¹⁵ In order to effect change, Grosz suggests a process whereby “the series that is architecture can be intercut with an element (or several) from its outside”.¹⁶ She posits that the introduction of what is outside of architectural discourse, which she outlines as philosophy and later discusses as time, may break down the enclosing discursive boundary of architecture, establishing rather a field of change and exchange. Grosz’s use of the term “outside” draws from Deleuzian theories about the “exterior” a socio-political field within which he locates the excluded, the unthought or the marginalized. Expressed in geographical terms of outside and inside Grosz’ theorisation acknowledges both philosophical and discursive entities, but also

explicitly physical and spatio-temporal conditions. Thus, Grosz overlays the philosophical and the architectural with the intent of bringing alterity into the spatio-temporal environment of architecture.

Grosz introduces time as a condition outside of architectural traditions, and suggests that “architectural conceptions of space may be unhinged or complexified using a Bergsonian model of duration on space and spatial objects, reversing the usual spatialization of time with a temporalization of space”.¹⁷ She refers to philosopher Henri Bergson’s theories of duration that posit existence as a condition of ongoing, ceaseless flux where all is in motion.¹⁸ Linking this theory with architecture affirms a concept of spatiality that, like the temporal environment of the ocean, is formed through and from motion. Such event-based space disrupts the architectural boundary for, as Brian Massumi writes in *Parables of the Virtual*, event space is characterised not by its “boundedness, but [by] what elements it lets pass, according to what criteria, at what rate, and to what effect. These variables define a regime of passage”,¹⁹ forming a dynamic threshold rather than a static boundary.

There is now a valuable body of New Zealand writing documenting Oceanic spatial environments and the potential these have to make space that is linked to place. Academics such as Mike Austin, Albert Refiti and Sarah Treadwell have contributed to this field, as have Deidre Brown, Rau Hoskins, Michael Linzey, Bill McKay, Carin Wilson and others. There is, however, much less research that considers how Oceanic spatial thought may be constituted and communicated through architectural design. My thesis aims to contribute to this area of exploration, testing and theorising my primary contentions through my own practice as an architect. This praxis draws on Oceanic spatial thought broadly, and upon the Maori built environment specifically. In doing so, it seeks to open up Western

architecture to its outside, loosening the architectural boundary and making spaces of exchange.

Rather than engaging in the problematic application²⁰ of theory to architecture, my research employs a qualitative eureka²¹ methodology, in which theory is employed generatively as the basis for new work “but also new institutions as well”.²² This design research puts the event into practice, proceeding via an exploratory design process of wa, or the between-ness described by Massumi as that “in-between of space and time”.²³ The spatial praxis becomes then an action, a mode of operating in between in order to destabilise architecture, both discursively and spatially. This strategy builds from Deleuze’s characterisation of thought or theory as an action, described by Grosz as “active force, positive desire, which makes a difference, whether in the image form in the visual and cinematic arts, in the built form in architecture, or in the concept form in philosophy”.²⁴ The term “practice”, or “praxis”, is engaged for its etymological origins, as it derives from the Greek *prattein* or “do”, and is itself, in a sense, already an action.

This strategy of moving between is modelled in part on the work of Gilles Deleuze, a recognised thinker of the in-between. Written with Félix Guattari, *A Thousand Plateaus* is an example of a text constructed as an assemblage of disjointed sections between which the reader is invited to move. What arises as a result of this moving between subjects, concepts, discussions and texts is a theory and praxis built upon and formed as a shifting ground of relations, interconnections and fluid identities. Deleuze’s work is founded on an un-founding of identity as a fixed or whole condition which theorist John Rajchmann suggests offers a logic for thinking “not in terms of identities and oppositions but rather of ‘differences’ over which we can’t quantify and interstices between given distinctions”.²⁵ This interstitial model is able to break down fixed identification or dualistic thinking, as Grosz comments:

Deleuze, like Derrida, does not attempt to abandon binarized thought or to replace it with an alternative; rather, binarized categories are played off each other, are rendered molecular, global, and are analysed in their molar particularities, so that the possibilities of their reconnections, their realignment in different “systems”, are established.²⁶

Engaging between-ness as an architectural strategy leads to a process of inter-cutting among Western architecture and its discursive outsides: between architecture, landscape architecture and interior and performance design; between architecture and Western evental theories; between architecture and Oceanic spatial thought. Through this movement between a different “system” or practice is established, new connections made, binary conditions realigned such that the design process becomes, I propose, a wider *spatial*, rather than exclusively architectural, practice. The term “spatial practice” is informed by Lefebvre’s definition of the concept, connoting a sequence of social practices which inform how space is produced and used. Lefebvre contends that “every society ... produces a space, its own space”²⁷ through a complex spatial practice which includes the formal qualities and specific building typologies associated with a society but also the lived experience or rhythms of life within these spaces.

My usage of the term spatial practice is also influenced by Kwinter’s call to define an architectural object or urban matrix not in terms of its appearance, but rather “*by practices*: those it partakes of and those that take place within it”,²⁸ as well as by Grosz’s suggested conceptualisation of architecture as that which regulates events²⁹ as much as it regulates spaces. The concept of “spatial practice”, then, comes to stand for the act of designing or constructing a

habitat; the formal or typological qualities of the space; as well as the forming of space through the social practices of inhabitation. Unlike Lefebvre's spatial practice which "ensures continuity and some degree of cohesion"³⁰ enabling a reproduction of existing societal conditions, my usage engages the term as a strategy for discursive and spatial change. I use "spatial practice" in relation to my own design process and the built work that results but also to describe the temporalised spaces of Oceania: in this I seek to acknowledge that both the projects and the Oceanic built environments explored in this thesis are not exclusively architectural, rather they exhibit a multiple and mutable spatiality that blurs interiority and exteriority and as such exceeds architecture's traditionally static and containing discourse.

As an analysis of my spatial practice, the exegesis also moves between: each chapter begins with a specific discussion of Oceanic thought and practice, as a means of establishing a fluid ground upon or within which to operate; analogous Western theories are then explored in order to find common ground; and finally a house is reviewed as a design response that mediates between these differences. This is a potentially shaky strategy for it runs the risk of fragmenting the text, or conflating different cultures' concepts with a consequent loss of specificity, but it also reveals that Western and Oceanic spatial cultures have overlapping fields as embodied in the houses themselves, and mirrors the strategy of my exploratory spatial practice. The Japanese between, *ma*, is described by academic Richard Pilgrim as an "experiential place" which evokes "a sense of reality characterized by a dynamic, active, changing, poetic immediacy instead of being merely objective or subjective".³¹ A further between-ness then repeats in waves³² through the exegesis in the form of an experiential text and image series, which registers spatio-temporal shifts in the course of a single day in one house, *Tokatea*. Expressed in sense impression mode, a type of

stream of consciousness writing, the language is fluid and continuous in an attempt to invoke the durational flow of experience. This textual mode is limited to the house *Tokatea*, which is discussed in the final chapter that focuses on between-ness.

This thesis, then, presents design research that explores the temporal environments and shifting spatial identities of Oceania with reference to Western architecture and evental theories. It posits two activated grounds: the ephemeral mobile ground of the ocean; and a monumental and inhabited terrestrial ground that is most fully developed in Aotearoa/New Zealand. Two spatial typologies or topographies arise from these two grounds: one an oceanspace that, like the oceanic ground, is an event-based space of movement; the other a groundspace that utilises the earth itself as an immersive medium within which to sculpt volumes that are both ground-surface and space, exterior and interior.

Oceanscape

In the first chapter, I look at the connection between the built environment of Oceania and the oceanscape that Ponifasio and Refiti consider to be the primary ground in the Pacific. This shifting environment clearly registers the contiguity of space and time: it is a ground in constant movement, both enduring and subject to change over time under the influence of local turbulences, atmospheric pressures and global currents. Pacific buildings are formed by this fluidic influence, subject to drift, turbulence and tide. From this environment of ceaseless flux emerges a spatiality of motion, which is resistant to static spatial identities and characterised by an ephemeral temporality. Ceaseless change or what Sanford Kwinter describes as “profuse, organic flux”³³ is intrinsic to nature. Kwinter links

these temporal processes with spatiality, proposing that architectural space needs to engage the evental. Massumi's characterisation of event space as a "regime of passage",³⁴ rather than of enclosing boundaries, establishes a theoretical field with clear parallels with Pacific spatial thought. The convergence of such Oceanic temporalities and Western evental theories are tested in the *Sounds House*, built in 2002 and located in the Marlborough Sounds in the South Island. In my analysis of the *Sounds House*, I discuss how the temporalised boundaries of the house resist the fixity of location or spatial identity associated with the terms "interior" and "exterior", enabling an environment that changes from moment to moment in relation to environmental or programmatic event.

Groundscape

In chapter two, I suggest that the immersive and temporal environment of the ocean profoundly affects Pacific concepts of, and material practices within, the terrestrial ground. This establishes the telluric ground as being, like the ocean, enduring but also subject to fluidic flows. This ground becomes not only an extensive surface, like the sea, upon which to move but also a spatial medium that one can occupy, not with the immediacy of immersion in the sea, but in volumes dug out from the slower moving earth. Spatial strategies associated with the ground are examined, with a particular focus on Aotearoa and the Maori practice of carving and sculpting the land to make space. This earthworking activity is apparent at the micro-scale, where the ground is excavated or mounded up to form space for cooking, storage or sleeping; and at the macro-scale, where entire landscapes are terraced and moulded. Taken together these practices reveal a culture that engaged the ground as an active material with which to form space. The idea of an active ground has a parallel in Bergson's thought, who inverts the Western perception of the relationship between space and movement when he asserts that motion brings grounds into being.³⁵ In this





theory, the ground is an evental space linked intrinsically with time and motion and continually engaged in a process of becoming other in response to the spatio-temporal processes of life. These intersecting Pacific groundscapes and Western spatio-temporal theories are problematised in the *Ground House*, built in 2000 and sited on an inlet in the lower North Island of New Zealand. The house is established as a terraced concrete landscape that articulates to contain, as a recessed room or inset fireplace, to elevate above the exterior ground plane, and to service inhabitation via large-scale furniture pieces formed from the concrete ground. Through this, the ground becomes both founding surface and inhabited space subject to change.

Oceanic Grounds

In chapter three, I explore the Oceanic spatio-temporal concept of the *wa* or *va*, described by Ponifasio and Refiti as being “an opening, a gap or in-between place”.³⁶ Austin proposes that *wa* space originates from the double-hulled canoe, with its space between outriggers. This in-between space, the *va*, is an unstable and relational³⁷ condition, constituted as a field between identities that are themselves in flux. The Maori *pa*, discussed here in relation to the idea of the *wa*, is explored as a temporalised space in flux between the ephemeral and the enduring, between sky and earth, between “interior” and “exterior”. Like the *va*, Western philosophies of the in-between also problematise fixed identities and privilege relational fields. Both post-colonial theorist Homi Bhabha and Grosz posit the space of the in-between as a site within which to contest fixed identities and from which to destabilise power relations. Grosz suggests that rethinking architecture as a condition between space and time offers a way out of architecture’s conservative containment. The in-between thus becomes a way of rethinking space-making as a fluid process which occurs as and between multiple conditions of difference.

Western and Oceanic concepts of between-ness are theorised and tested in the space of the house, *Tokatea*. Built in 2005 and situated on the Coromandel Peninsula, *Tokatea* works between the spatialities explored in the first chapter, "Oceanscape", and the second chapter, "Groundscape", articulating event space as a site of temporalised boundaries that are mobile and porous oceanspaces; or spaces of foundational flux which move between founding surface, furniture and contained groundspace. These active spacescapes cause the spatial binaries of interior and exterior to become temporalised and hybridised, forming space that is in motion in-between.



Morning

Tokatea, Coromandel Peninsula, New Zealand

In the bedroom, held in a pocketed fold of the roovescape, blinds roll up, louvre walls open, fresh morning air and angling sun flooding in. Sliding walls move under pressure in channels, and the serried spaces become one line of passage between bed, change, bath and storage zones. The concrete floor of the bathroom steps down, recessing to form a tiled cavity that fills with stored rainwater, bathroom misting as hot liquid air encounters cooler zones. Warm towels are sought from within the tightly packed strandboard storage wall, and the orange wardrobe wall pleats open revealing close-set fabric folds and draping forms. The enclosing strandboard panels of the bed-bath zone fold open as a large panel pivots, opening the channel to the main volume of the house; lines of movement generate around and along the central island-kitchen as drawers slide open, plates and cutlery are laid on the island-table, vessels of liquid pool and circle on the stove, and the kettle steams, releasing fluid particles in the morning-cool atmosphere.





two. oceanscape

This chapter explores Poniñasio and Refiti's assertion that the Pacific region is characterised by the temporal environment of the Pacific Ocean, and that Oceanic spatial practice surfaces out of this fluid medium. These Pacific practitioners and theorists describe the ocean environment as one that confounds stability of identification and location: "if anything the sea severs the will to identify and tends to multiply and confuse the specificity of location – the oceanscape always pushes you hither and thither and one literally floats on it".¹ Poniñasio and Refiti suggest that, in response to these environmental conditions, Pacific space rejects fixed identifications, becoming a temporalised space of movement that shifts moment by moment. The middle section of this chapter outlines Western theories that also posit an intermeshing of space and time. Oceanic and Western thought are tested in the *Sounds House*, a house built in 2002 in the South Island of New Zealand: here the architectural boundary is temporalised, becoming a space that denies a static interior/exterior binary state in favour of a complex and interfolded spatial condition that changes through time.

Oceanspace

As a fluid ground, the ocean establishes a spatiality of openness, evident in the marae (an open meeting space) that echoes the "ultimate open space the *marae roa* the vast ocean itself, closed only by the horizon".² As anthropologists Patrick Kirch and Roger Green outline, this open space is apparent throughout the three main sub-regions of Polynesia (Western and Central Eastern Polynesia, and the outliers): the ceremonial or meeting place is almost always called the marae or *malae*.³ The siting and orientation of the marae is also determined by conditions



of openness such that the marae faces the sea and flatlands, and turns its back to the enclosure of mountains or bush.⁴ Austin asserts that this open space is a –

... surface for living that is both smooth and level It is the recreation of the horizontality of the sea, but also the smooth surface desired by the mariner after the incessant movement of the sea The marae is the operation of opening up space and shaping space by means of platforms.⁵

Fluid Fields

In Maori usage, the term “marae” is an extensive one that can connote both an entire complex, and also the open field in front of a wharenuī (meeting house).⁶ In the latter case, it is called the marae atea which evokes an etymological connection to the sea: marae-nui-atea is an expression which denotes the “vast ocean expanses, the waste of waters, sometimes alluded to as the marae or plaza of Hine-moana”,⁷ the Maori sea goddess. The open space of the marae atea is framed by an architecture of openness, the mahau (porch) of the wharenuī. This porch space is aligned with the exterior through its openness but also through the way it frames and stages the rituals associated with the marae atea. Anthropologist Roger Neich writes in *Painted Histories* that “[in] terms of the ceremonial behaviour of marae practices, the porch functions as an extension of the marae atea”⁸ and is in this sense co-extensive with the marae atea courtyard, the space that recalls the openness of the sea.

As Austin writes, it is clear that “water and boats affect Oceanic architecture in many ways from structure to construction to detail to ornament. In the Pacific, sails become floor mats (and vice versa), old boats are used as

storage structures, and both buildings and boats are held together by a technology of weaving and tying”.⁹ Like the temporal environment of the ocean, Pacific space embodies a spatiality of motion that is “thoroughly imbricated with the technologies, mythologies and aesthetics of movement”.¹⁰ The condition of movement generates an ephemeral temporality in the built environment that contrasts with Western architecture’s aspirations to durability: “Pacific Island buildings are constructed in materials that decay rapidly giving the architecture a shifting and transient quality These dimensions of architecture in the Pacific contrast sharply with the fixity associated with Western architecture”.¹¹

Breathing Architectures

The shifting and transient quality identified by Austin is evident in the fleeting duration of the lightweight constructions and in their spatial quality. Austin describes this condition as one that allows the building to breathe: “In Oceanic architecture solid walls are used only to define space that is open to the sky Pacific walls breathe and are permeable as fences and screens. Often they are temporary and suspended”.¹² The *fale* or *fare* (Samoan, Tongan or Tahitian house) is an open, undifferentiated space, defined by a sheltering roof and by operable blinds that form a temporalised boundary. The housing for a *vaka* is a similarly lightly bounded space formed by an open-ended fold that is both wall and roof. These airy architectures are defined by partial or permeable boundaries, the space within still subject to atmospheric flows of wind, sun and rain.

In New Zealand, there is a spectrum of Maori architectures that embody both evanescent events and porous spaces. These range from the open performative frames of the *hakari* or ceremonial food stage; to transient summer houses, shelters and child-birth houses; to the pervious screening afforded by *wharau* (shelter or cooking sheds) and *whare* (houses) formed from natural fibres that allow what is outside to enter into the inside.

Those whare made for child-birth were event-oriented structures,¹³ their habitation associated only with the process of giving birth. Similarly, summer encampments of whare¹⁴ or wharau¹⁵ performed as temporal acts, their construction and inhabitation linked to seasonal rites of food gathering or cultivation. The hakari was a primary example of a transient and performing architecture of openness. A massive elaboration on the whata, the open timber platforms upon which food was stored,¹⁶ hakari were many-floored skeletal stages formed from timber uprights and horizontal platforms upon which food was displayed for major gatherings. Constructed for feasts (and thereafter redundant), hakari monumentally shaped the landscape as architectural constructions which lacked architectural closure.¹⁷ The food formed an exposed interior operating to adorn and display, as the term “hakari”, similar to rakai and rakei (to adorn), suggests.¹⁸

An architecture of openness is evident also in the wharau of permanent kainga (villages). In a thesis outlining her experiences of Maori customs, written while studying for a degree in anthropology at Oxford University, Makereti¹⁹ describes a cooking structure partially open to the exterior:

Cooking was never done in a dwelling house, but in the open, or in a wharau or kauta (cooking sheds). They were shaped like a whare with uprights and rafters of wood. The sides were split boles of kaponga, tree fern, with a small space between each Smoke escaped through the door and the spaces between the uprights.²⁰

These structures had discontinuous boundaries that gave them a vaporous spatiality most evident when smoke from cooking fires issued through fragmentary walls. Referencing early colonial representations of the Maori whare, academic Sarah Treadwell observes a vaporific spatiality in “the woven house [that] is a container that leaks. It allows for the passage of wind ... and denies the external skin as a closed surface”.²¹ The early colonial experience of leaky houses may have been particularly pronounced given Best’s assertion that “In the early days of intercourse with Europeans natives lodged white travellers in rude sheds in many cases, lest they violate the tapu of better houses”.²² Treadwell quotes a colonial soldier’s experience of being in this alien space that lacked distinctions between interior and exterior, nature and culture: “Lying in such a whare at night, air blowing through walls and roof, points of light gleaming, Tyrone Power imagined he lay with nature, in a structure ‘built of reeds, wild flax, fern stalks, and rushes’”.²³

A sense of contiguity with nature is certainly evident in whare lined with kakaho (pampas reed) or raupo.²⁴ Academics Rau Hoskins and Carin Wilson’s description of a whare raupo (reed house), built following traditional techniques, also suggests a spatiality co-extensive with the exterior environment: “built entirely of natural materials ... the senses are alerted to a strong sense of connection with the surroundings wind announces itself by rustling the outer layers of the walls and roof while the air remains still inside. The soft bounce of the floor and gently filtered light of the whariki at the door contrive with the faint smells of the materials to heighten sensory awareness”.²⁵ These whare provided protection from the weather yet still “breathed”, offering a sensory space scented by the natural fibres that bounded the space. Those boundaries were impermanent, formed from quick decaying, minimally processed natural materials.

The exposure to telluric flows in these breathing architectures generated space coterminous with its temporal environment. A responsive threshold, rather than enclosing boundary, both defined and denied the interior, resulting in a doubled spatiality of interiority and exteriority. When viewed from an architectural perspective, the lightly bounded *fale*, the porous wharau and the whare all operate on architectural closure, loosening or perforating enclosing boundaries such that space becomes sensuously and experientially linked with the environment. Exterior sounds enter, breezes cool, and the architecture is permeated with scents from the surrounding landscape or from the landscape elements that form the space. These zephyrous architectures breathe and, in the case of the mobile screens of the *fale*, the transient child-birth whare or the skeletal frame of the evanescent hakari, perform as spatialised events or temporalised spaces.

Founded on shifting grounds, Oceanic space resists fixity and closure in favour of temporalised spatialities that, through mobile or porous boundaries, complicate and qualify conditions of interiority and exteriority. The fluid fields, that seem better sited in the discipline of landscape architecture rather than architecture per se, and the breathing architectures that perform, bridging between the landscape and the interior, offer opportunities for a shift in one's attitude to and practice of architecture. I turn now to Western conceptualisations that parallel Oceanic spatio-temporality as another source for architectural experimentation. The following passage discusses Western temporal thought and reflects upon how this might inflect my design work.

Event Space

A focus on the passage of time underlies contemporary Western concepts of the event. In *Architectures of Time*, Sanford Kwinter asks “What would it change in our arts, our sciences, and our technics if time were conceived as something real? ... What is it about time’s relentless fluidity, its irreducible materiality, that the modern mind finds so impossible – or repellent – to think?”.²⁶ Kwinter suggests that time is characterised by its properties of emergence or change. He writes:

No object in nature – be it organic, or mineral or entirely abstract or immaterial such as an idea, a desire, or a function – escapes the perpetual onslaught of differentiation, according to which objects are continually becoming different from themselves, undergoing transformation. It is true that change may and ought to be seen as a type of movement – the flow of matter through time.²⁷

Here he suggests that change is a spatio-temporal condition and aligns matter and time. Grosz’ work on time and its relation to space is founded upon Bergson’s theorisation of duration as that time that allows an unfolding, a differentiation and emergence. She proposes that we “conceptualize space ... as a moment of becoming, of opening up and proliferation, a passage from one space to another, a space of change, which changes with time”.²⁸ Such time-based spaces of change challenge Western architecture’s traditions of a static unchanging essence and discrete architectural object.

Focusing on the architectural object as a site for and condition of the event, architect Bernard Tschumi formulates a

radical architectural praxis that is “the discourse of events as much as the discourse of spaces”.²⁹ His architectural practice and writing display a primary concern with time, programme and inhabitation. Tschumi, like Grosz, issues a call for architecture to release itself from its doxa of stasis and to recognise the interaction of space and the evental. Architect Ignasi de Sola-Morales also theorises architecture as an “event, resulting from the intersection of forces capable of situating an object that is ... contingent”³⁰ and time-based. When time is perceived as a pervasive field concomitant with a spatial territory, the architectural object becomes an object-event, an active spatio-temporal condition. Deleuze theorises this active object as the objectile,³¹ both object and event, that is subject to time and to differentiation.³²

Writing in *Parables for the Virtual*, Brian Massumi discusses the spatial nature of the evental, proposing that event space is characterised not by enclosing boundaries but by “what elements it lets pass”.³³ Architecture’s traditional hermetic boundaries are here eroded, letting in, like Oceanic spaces, evental flows from the outside. This thesis posits that temporality problematises and renders contingent the spatial identities of interior and exterior, site and space as boundaries become sites of passage. The *Sounds House* acts as a site within which to test an evental architecture of fluid boundaries that blurs inside and outside.



Sounds House

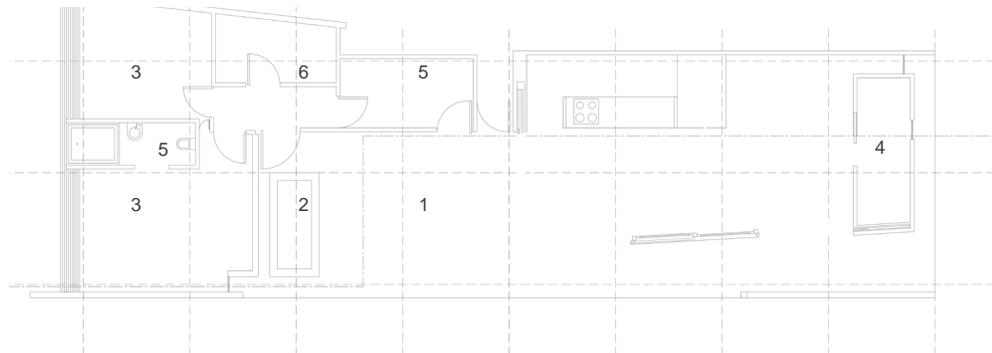
Sited on a steep, bush-clad hill, the *Sounds House* overlooks a tight channel of the Marlborough Sounds. Built in 2002, the house is 150 square metres. Designed for a semi-retired couple who had spent a lot of time on boats, the house is compact and operable such that the space can be trimmed, by the adjustment of louvre walls or the rearrangement of large sliding panels, to suit weather and inhabitational event. A folding element that is both wall and roof establishes the house as a temporalised spatial field that varies in degrees of interiority or exteriority: the public space of the house is an open zone with mobile panels that form layered thresholds; the private space recalls Oceanic breathing architectures enclosed with poriferous boundaries.



Fluid Fields

To enter the house, one passes through a tight passage and enters into the exterior. The timber deck and sectioned roof frame an expansive view of bush, sky and sea. This central openness recalls the original marae-nui-atea that is the ocean. The spatial and materially fluid properties of the ocean are apparent in the enfolding exterior boundary of the house: this timber-framed, ply-clad envelope is surfaced with a liquid applied waterproof membrane, rendering a continuous and extensive element that flows from wall to roof, and frames a spatial fluidity that remembers the ocean's shifting surface which confounds spatial fixity. The chamfered roof channels water to a rain-water tank for domestic use, and down a wall to a series of folded concrete storm steps that sluice water down the hill to a small pond. An outdoor bath is located next to this water wall, a constructed remembrance of Oceania's primary ground. The lightly defined platform cites also the marae or *malae* of Polynesia operating like the "open air living room"³⁴ that Austin speculates marae were. The platform particularly recalls the Maori marae atea, that space contiguous with

1. outdoor room
2. outdoor bath
3. bedroom
4. study
5. bathroom
6. service/storage



plan - open phase





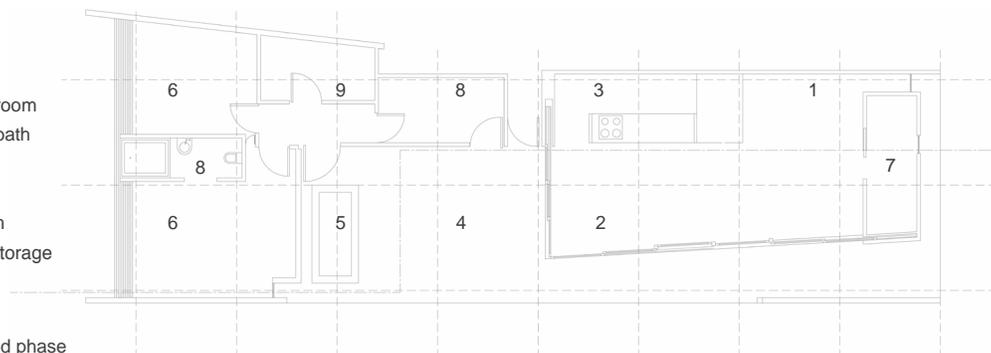
the mahau in front of the whareniui, for, like the marae atea, this timber field is open yet also framed by an adjacent architectural structure.

The house, like boat-based Oceanic architecture, is “imbricated with the technologies ... of movement”,³⁵ as louvres adjust, sliding panels retract and doors pivot open to form fluid or porous spatial territories rather than defined architectural containment. The space formed between timber landscape and partially enclosing roof shifts spatial register, changing phases through time and under inhabitation between open and closed. In its open phase, louvre walls open and glassy sliding doors retract into cavities in walls or slide over glass panels; in this mode, kitchen, dining and living spaces are partially interior, partially exterior, contiguous with the timber stage and sheltered only by the folding roof. In closed mode, the extensive timber platform, protected by the partial wrapping roof-wall, remains an ambiguous space between inside and out.

Breathing Architectures

The private zone, like Maori wharau and whare, has defining boundary walls that resist architectural enclosure through their permeability. The spaces of bathroom, lobby and bedrooms enfilade as small cells that interconnect to form passage. The bathroom pivots open at one end allowing the showering inhabitant to look across the partially enclosed timber courtyard to the exterior: this timber platform extends into the bathroom as decking that provides a surface for passage over the channelled shower water below. The bedroom pods are close to the sea view but open instead to the morning sun and the bush-clad valley: end walls composed of glass louvres both repetitively demarcate and also undermine the clarity of the spatial boundary. These louvre walls form space that, like Oceania’s

1. living
2. dining
3. kitchen
4. outdoor room
5. outdoor bath
6. bedroom
7. study
8. bathroom
9. service/storage



plan - closed phase





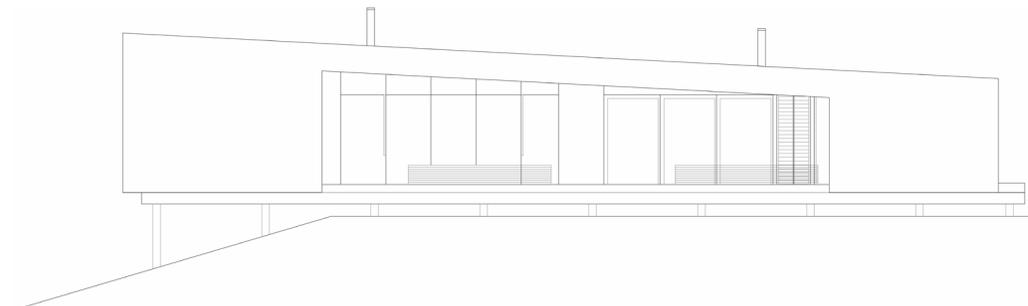
airy architecture, breathes in the exterior as louvres ripple open in the heat of the day, allowing in bird song and breeze, and then, with the cool of the night, fold back to a serried surface.

Conceived as an evental spatial field, the boundaries of the house are multiple and mutable: discontinuous and perforated roof-walls that form open zones; sliding panels that demarcate or dematerialise space dependent on their contingent location; interlinked rooms and louvre walls that form defined but permeable space. The resultant temporalised space is characterised by fluid boundary conditions that render spatial location and identity as conditional and contingent. Here spatial definitions of interior and exterior are problematised as an effect of temporalisation: space becomes characterised not by its boundedness, its interiority or exteriority, but by its flux between these conditions.



Conclusion

I have moved in this chapter between the temporal environments of Oceania and Western evental thought as a means of reflecting upon and influencing my spatial practice, and of working outside of the fixities of Western architecture. Western theories on the event posit that boundaries break down under the effects of time, forming mobile sites rather than static spatial containers, while Oceanic spaces operate as time-based open fields or as atmospheric architectures contiguous with the exterior. Exploring these ideas through architecture leads to an erosion of the enveloping architectural boundary, evident within the *Sounds House* with its limited liminalities established by a discontinuous wall or roof and its serried and mobile glazed panels. This incomplete dissolution of the architectural boundary complicates spatial distinctions between interior and exterior. The *Sounds House* shifts in

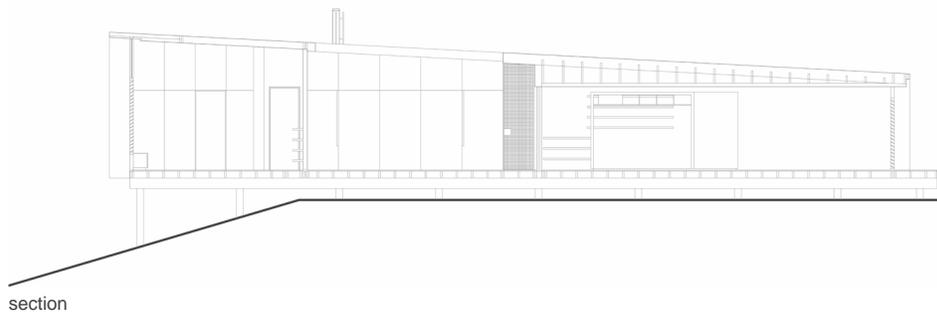


elevation





its readings between interiority and exteriority as the bounding glassy walls of the living space slide away, or the glass louvre walls of the bedroom pivot open: qualities of outside and inside become time-based, changing in response to emergent, diurnal or seasonal events. In the following chapter, “Groundscape”, architecture’s discursive and spatial “outside”, the ground, is engaged to make its “interior” as an experimental expression of Maori earthworking practices which mould the ground for inhabitation.





Noon

Tokatea, Coromandel Peninsula, New Zealand

The island-kitchen exerts strong tidal pulls upon the inhabitants; frequent but uncertain lines of flow form between fridge and bench, pantry and bench; flurries of movement occur as taps are opened, rain-water pools, steam issues, fragrant leaves steep; a second high tide occurs as the sun centres in the sky, again generating an intricate criss-crossing of flow lines as plates, cups, cutlery, fridge, milk, hob, bread are sought until the island-table focuses movement. The island-table, both anchored and adrift, floats now in a space in between interior and exterior, focusing a point of intense flow between partial enclosure and artificial landscape, reconstituting itself in shifting registers in response to environmental flows of wind, rain, sun and the movement patterns of the inhabitants.





three. **groundscape**

In this chapter, I suggest that the ocean environment, explored in the previous chapter as a condition that inflects Oceanic space-making, also inflects Polynesian conceptions and practices of the terrestrial ground: the ground itself is rendered as a time-based medium open to change which, like the ocean, can offer both a surface over which to move and a space that can be inhabited. This chapter explores this ground-based space-making in Polynesia, with a particular focus on New Zealand and the indigenous practice of excavating and forming the land to provide spaces for cooking, food storage and inhabitation. These modelled architectural landscapes present a malleable ground that is both scape and space, both outside and inside. Paralleling this Oceanic practice, Western concepts of active matter and generative grounds are explored in the philosophies of Bergson, Deleuze, Eisenman, Grosz and Cache, whose architectural work moves between exterior and interior spatialities, between geography and furniture: these notions are explored for their adjacencies with Polynesian groundscapes. Concluding this chapter, Pacific and Western ideas of ground are explored via the *Ground House*, a building that terraces into its site as an inhabited landscape, thereby refiguring architecture's object/ground binary relationship as an interfolded condition.



Groundspaces

The primary site of this chapter is the ground itself. The term "ground" is employed in an extensive and cross-cultural manner, connoting the soil, the surface and substance of the earth, as well as a defined territory of land or sea, and the planet itself and the ecological systems within which humanity operates. "Ground" is also used to denote an area of knowledge, for this discussion is located in Oceania and focused on the dwellings of New Zealand. The Maori

term “whenua” describes both ground and placenta, signifying the inseparable interaction of the natural environment and humanity. This conceptualisation of the ground as body conveys the contiguity between humanity and the land and is apparent through Polynesia and the wider Oceanic region, as New Zealand ecologist Geoff Park notes:

Words like *whenua* – *fenua*, *fonua*, *fanua* – and with similar meaning, can be heard in Tahiti, Samoa and Tonga respectively; wherever in the Pacific that Polynesian cultures reached. But *whenua*’s roots are far older than anything Polynesian. An ancient Austronesian concept from when people first entered the south-west Pacific, *whenua* shares linguistic roots with the *vanua* of Fiji and the *banua* of Bali, both conceptualisations of identity in which the historical relationship between human beings and the land is vital.¹

In Maori origin narratives, the land is body, the body of Papatuanuku from whom all humans descended. The land is neither static nor inert but is rather dynamic and living for “[t]o the Maori of old, not only human beings, but everything, such as trees and all plants in the forest, fish, birds, animals, mountains, and rivers, had a mauri or life principle”.² This cultural account establishes humans as being embedded within the natural order, a concept in keeping with the original Greek meaning of the term “nature” as being “everything”,³ but a radically different position to that understood within the Judeo-Christian tradition.⁴ In the Polynesian world-view, there is a sense of connection to the land rather than separation, a nature-culture continuum, rather than a nature-culture binary opposition.⁵

The Polynesian practice of working the ground⁶ to form place or space can also be understood in terms of this nature-culture continuum, where the natural environment is mediated to form a condition somewhere in between.⁷

This practice of earthworking⁸ is part of a complex of monumental architectures evident across Polynesia which range in type from earth or stone platforms or temples (the *heiau* of Hawaii, and raised stone *malae* of Tonga and Samoa), earthen or stone mounds for habitations or burial places, and ditch and bank fortifications.⁹ This chapter focuses on the moulding of the ground to form defined zones that operate as “furniture”, offering sites for sitting or resting or as raised ground platforms for inhabitation or ceremonial rituals; or where spatial volumes are excavated or banked up from the earth to afford accommodation.

Described as field monuments by anthropologist Patrick Kirch,¹⁰ Tongan *'esi* (sitting or resting platforms for chiefs) furnish space, providing a raised earthen and/or stone-filled element upon which to recline.¹¹ Other Tongan mounds functioned as elite burial sites or as pigeon-snaring platforms. The shaping of earth is apparent in Samoa also where “the majority of mounds were foundations for pole and thatch houses”,¹² providing elevated grounds upon which to live. In the *umu* (earth oven), found throughout Polynesia, the ground provides a matrix or mould within which space can be shaped to provide a vessel for hot rocks and wrapped food and an insulating earth layer. The “bell-shaped pits and bin pits that were commonly used in tropical Polynesia for storing fermented breadfruit paste”¹³ again utilise this technology, spatial volumes being excavated from the earth. On Niue, “earthen enclosures up to 1.5 m high and 10-60 m in length”¹⁴ have been found, though it is not clear what their function was.

The forming of spatial volumes from the ground is apparent also in the hilltop refuges of Polynesia which were fortified by the “common Polynesian method of isolating an area by cutting trenches across narrow access routes”.¹⁵ Examples include the *pu'uhonua* of Hawaii,¹⁶ as well as the hilltop refuges of Futuna and Aloft which include the

common feature of ditch and bank construction¹⁷ and the widespread fortifications of “Tonga and Samoa as well as Fiji, and ...’Uvea”.¹⁸

This Polynesian “landscaping” tradition is apparent then at both the micro-scale, where the earth becomes furniture or vessel, a contained “interior” within which to cook or store food, and at the macro-scale, in monumental architectural landscapes. In New Zealand, these earthworking techniques are developed to a degree unseen elsewhere in Polynesia. At the small scale, the landscape became used to make the partially recessed whare, discussed more fully in chapter three. Tropical Polynesia’s excavated breadfruit pits became, in New Zealand, the rua, partial or fully subterranean food stores such as the rua kopiro, a pit “in the ground into which water was conducted, and in which hinau berries were steeped, and, in later times, maize”,¹⁹ as well as the much more common winter kumara stores which were central to the agricultural economy. The fully subterranean kumara store was known as the rua korotangi, a well-like small underground chamber “often rectangular, sometimes circular. The orifice is just large enough to allow a person to pass down a rude step ladder, or possibly by means of utilising steps of earth left during excavation. The chamber widens out below”.²⁰ Ethnographer Elsdon Best also references accounts of water storage pits or cisterns, though he notes that this was not a common usage. The Polynesian umu transferred to New Zealand, taking on a second name, hangi, and using the vegetation of the new land to wrap food once wrapped in tropical leaves: “A rounded hollow was dug in the ground, usually circular, and with a diameter of 2 feet or more and a depth of 1 foot at the deepest part”.²¹ Earth was heaped over the whole, leaving a faintly steaming, earthen-scented and insulated mound. Taku-ahi (a “small pit fireplace lined with four stones”)²² similarly used the ground as a heat-proof vessel.

Performative Landscapes

It is in the architectural landscapes of New Zealand, however, that the elaboration of the groundscape becomes most apparent. Thus, when discussing the monumental landscapes, or pa, of New Zealand, archaeologist Ian Barber writes that “the number of Maaori pa is without precedent in Polynesia”.²³ This is apparent also in archaeologists Michael Kolb and Boyd Dixon’s description of a defensive settlement on Maui as “a true stronghold, being a natural hill fortified with a palisade, although nowhere near the size of the monumental Pa fortresses in New Zealand”.²⁴ Austin, one of the few architectural commentators who have discussed pa, links this earthworking practice with architectural monumentality, suggesting that the New Zealand landscape –

... is a constructed landscape. More importantly, every prominent hill, island, headland or spur in the North Island of the country known as Te Ika a Maui (the fish of Maui) has been shaped for settlement for hundreds of years. There are numerous stories attached to these carved and tattooed artefacts. Maori repeatedly reinforce how important the land is to their world view. these carved and terraced hillsides, known as pa, are our monuments.²⁵

Treadwell, in her text “Categorical Weavings: European Representations of the Architecture of Hakari” also refers to the terraced landscapes of Maori, describing them as “massive architectural constructions” and an “architecture of the ... land”.²⁶

The term “pa” means to block up, obstruct or close off an open space,²⁷ as well as to clump or group together.

Both of these meanings are evident in the use of the term to describe fortified villages or fighting stockades. In this thesis, the term “pa” refers to an architecture that is marked by major and monumental earthworks, while a kainga, by contrast, is understood as a settlement without major earthworks, though minor earthworking practices are evident here also in the form of rua, hangi, taku-ahi and, in colder areas, recessed whare. The major earthworks that distinguish pa include ditch and bank constructions and terraces,²⁸ along with a characteristic elevation of site and clearing of vegetation. Terracing was a practical response to achieving a flat living platform on steep hills and ridges, while the elevation, fosse and bank structures provided defense against attack. Elevation and the clearing of the bushland enabled the terraced landscape to perform as a monumental site.

Pa varied across territories dependent on resource levels, topographies and population densities. Something in the order of 6000 pa sites have been discovered and it seems that pa proliferated in a short period of time, during the fifteenth and sixteenth centuries.²⁹ In their monumental scaling, they represented an enormous commitment of resources. New Zealand historian Anne Salmond, in the text *Two Worlds*, links pa with an attempt to claim status through a display of prosperity, asserting that at this time “population pressures and a growing competition for resources and prestige were being reflected in the construction of elaborate fortified villages (paa) and foodstores, the secret burial of the dead, and the display of wealth in greenstone ornaments and probably also in carving”.³⁰ Archaeologist Douglas Sutton, writing in his text *The Archaeology of Pouterua*, also ascribes a performative function to pa, asserting that it –

... may well be significant that many of these pa sites began as large storage facilities Concentration

of a large amount of food in one place implies that display was also an important component of such sites, demonstrating success to other groups the elevated position, while taking advantage of natural defensive features, also had an element of display. The alteration of the large, physically dominating cone was a clear statement about “place” and the ownership of “place”. Simply clearing the forest vegetation and forming terraces broadcast a highly visible statement about occupation of the landscape. Covering those terraced spaces with structures filled with stored wealth amplified that statement.³¹

Sutton goes on to assert that the practice of pa building was time-consuming and that, if defense was the only reason for these structures, it is likely that pa would have been hidden. Instead, the pa on volcanic cones “advertised their presence even more strongly than before by constructing highly visible lines of demarcation across the rim of the cone and around its highest points”.³² This description suggests a dual role of both spectacle and defensive structure for pa, a duality which is evident also in Cook’s account in *The Journals of James Cook on his Voyages of Discovery, I: The Voyage of the Endeavour, 1768–1771*: “Tupia hath all along told us that they were Mories (marae) or places of Worship, but I rather think that they are places of retreat or stronghold where they defend themselves against the Attack of an Enemy”.³³ Sutton suggests that it is probable that pa were “both strongholds and marae. Pa are complex monuments and were important to people in various ways, which included ceremonial, symbolic and defensive purposes”.³⁴ These monumental landscapes, like other Polynesian monumental architectures, are concerned with the “creation and intensification of highly visible, material symbols made up of strongly demarcated or bounded areas, placed so that they dominate the surrounding landscape”;³⁵ as such, these constructed landscapes performed as signifiers of place and identity.

Historian James Belich also questions the assumption that these pa were primarily defensive sites, suggesting rather that pa “were so difficult to take that there was often little point in trying They are evidence of the presence of reserves, not their absence. They must post-date, or emerge in tandem with, the successful shift by some groups from an extractive to a sustainable economy”.³⁶ The idea of a sustainable economy underpins archaeologist Ian Barber’s theories on pa: discussing the overuse and subsequent failure of a primary food resource, Barber questions whether “paa of the fifteenth and sixteenth centuries at least may represent a monumental reaffirmation of and appeal for the extension of a more beneficent and productive order into a now more permanently capricious island world”.³⁷ Barber goes on to suggest that the act of working the land may have been understood as an integrating or networking practice with the earth itself: he writes, “In its symbolism, the paa landscape ... united expressions of ‘cultural’ landscaping with ‘natural’ sacred ancestral [land] paa building extended and reintegrated the traditional landscape”.³⁸ There is, in this theory, a complex culture-nature continuum established through these landscape-building practices.

In both these macro-scaled landscape architectures, and the micro-sized groundspaces, the ground is used as a building material, structure and generator of space. In this Polynesian paradigm, the relationship between interior and exterior is blurred and multiple, the exterior, or landscape, becoming itself a mode by which to make interiority or to furnish inhabitation. Spaces such as those in the terraced pa or the subterranean rua become topographic interiors whose floors and partial walls are contiguous with the earth. This acculturated ground is neither solely “natural”, in the contemporary Western sense, nor entirely “cultural”; it is another condition, an active and shifting

groundspace. In terms of the Western spatial disciplines, these geospaces work outside of the architectural figure/ground model with its polarising boundary, instead blending “architectural” figure and ground to form space. In the following section, Western conceptualisations of the ground are explored that also render nature and culture, site and space, as fluid and intermeshed conditions.

Geophilosophies

Challenging traditional Western philosophy, Elizabeth Grosz writes that rather than seeing nature as “either fixed origin, given limit, or predetermined goal, nature, the natural, must be seen as the site and locus of impetus and force, the ground of a malleable malleability, whose plasticity and openness account for the rich variability of cultural life, and the various subversions of cultural life that continue to enrich it”.³⁹ She conflates nature with matter, asserting that nature is “materiality in time, materiality whose only destination is futurity, openness, and endless ramification”.⁴⁰ Her argument is founded upon Henri Bergson’s characterisation of matter as “an undivided flux”⁴¹ and a “perpetual becoming”.⁴² Matter in this sense is productive and mobile rather than static and neutral. When Bergson writes that “Space is not a ground on which real motion is posited; rather it is real motion that deposits space beneath itself”,⁴³ he suggests a world in which space is an event and effect of movement, the ground itself a condition in flux. Brian Massumi also destabilises the idea of a constant and static ground when he asserts that the “ground is not a static support any more than the air is an empty container. The ground is full of movement, as full as the air is with weather, just at a different rhythm from most perceptible movements”.⁴⁴ He goes on to describe the ground as “a dynamic unit of continual folding, uplift and subsidence”.⁴⁵

Deleuze's body of work, particularly that written with psychoanalyst Félix Guattari, has been described as a "geophilosophy" given its concerns with political or social territories or geographies. In their 1994 text *What is Philosophy?*, they claim that it was Nietzsche who "founded geophilosophy"⁴⁶ through his assertion that philosophy is inherently territorial, emerging in some locations and not in others. This geophilosophy is dynamic, expressed in terms of territorialisations and de-territorialisations as well as trajectories and vectors of movement. Political or social conditions are discussed using spatial metaphors of interiority and exteriority, the interior conflated with power and control, the exterior with the new and discursively other. Through the topology of the fold (le pli), the inside and outside are seen to conflate and merge. Deleuze's geophilosophy resists a static delimitation of territory, supporting rather a philosophical ground that is continually in flux and subject to change. Deleuzian scholar John Rajchmann proposes that this de-territorialising philosophy asks us to be at home in an Earth that is prior to the "territories of family, clan, or nation",⁴⁷ thus separating us from our primary identities; yet one can argue that, for Oceanic cultures at least, the earth is the primary mat(t)er, the origin and source of identity.

Discussing the traditions of Western architectural discourse, architectural theorist Peter Eisenman writes that traditional architectural theory "assumes that there are two static conditions of object: figure and ground ... the ground is seen as a clear neutral datum, projecting its autonomy into the future".⁴⁸ In his article "Unfolding Events", Eisenman asserts that architecture must address the evental and must therefore question the founding assumptions of a static object and ground. Rather than architecture being founded on a ground datum that is formed of neutral matter, matter itself, in the tradition of Leibniz, becomes understood as explosive⁴⁹ and active. The ground or site of architecture is then no longer the neutral context framed by an architectural object but is rather a dynamic territory.

This explosive materiality of matter is folded back into the other static condition of traditional architecture, the object: Eisenman suggests that Deleuze's work on the objectile offers a new architectural object that is "no longer concerned with framing space but, rather, with a temporal modulation that implies a continual variation of matter".⁵⁰ Here both object and ground are in flux, the frame or distinction between the two eroded by the fluid force of the evental.

In his text *The Fold*, Deleuze references architect and theorist Bernard Cache's work on the objectile and asserts that this is where "the object becomes an event".⁵¹ *Earth Moves*, Cache's text written after years of following Deleuze's seminars at the University of Paris, outlines a philosophy and practice of architecture which editor Michael Speaks describes as exploring the relationship "between the exterior (geography) and interior (furniture) of architecture".⁵² For Cache, these are intermingled: there is "no object, no matter how small, that does not have its geographical component",⁵³ for geography is "not the field next door, nor even the neighbouring district, but a line that passes through our objects, from the city to the teaspoon".⁵⁴ The geographical surface is, in this thinking, an extensive, continuous and scale-less condition. The interior, which Cache conflates with furniture, both exists within this topography, and manifests as territory, for while furniture can be understood as "a replication of architecture, furniture is also that object that is directly connected to our bodies ... furniture supplies the immediate physical environment in which our bodies act and react; for us, urban animals, furniture is thus our primary territory".⁵⁵ Here furniture becomes a site of exchange between interior and exterior. Cache discusses the Moebius strip as an exemplar of a topography that problematises the very notion of distinct and separate conditions of interior and exterior. Rather than a binary of interior or exterior, the Moebius strip exhibits conditions of both "inside" and "outside", which change as one moves along it. Architectural structures made in response to this topography become ceaseless spaces of

passage, oscillating in a cycle from the inside of the looping surface to the outside. This conceptualisation works against the idea of an autonomous architectural figure distinguished from its ground suggesting rather that, as Cache asserts: “Geography is not the surroundings of the building, but rather the impossibility of its closure”.⁵⁶

While these Oceanic and Western conceptualisations of ground are not the same, coming as they do from different cultures and environments, there are zones of overlap which include a concept of the environment as active and generative; and examples of spaces which, unlike the architectural figure/ground relationship, show a complex interfolding of “geography” or ground with the interior. Putting these ideas into practice in architecture requires an opening up of architecture’s discursive boundaries to Oceanic thought, Western theories on duration and other disciplinary zones such as landscape architecture and interior and performance design: the stable ground of architecture becomes an active and inhabited groundspace. The *Ground House* engages these Oceanic geospatialities and Western geophilosophies to explore a spatial surface that interfolds inside and outside, thereby embodying Cache’s assertion of the impossibility of architectural closure.



Ground House

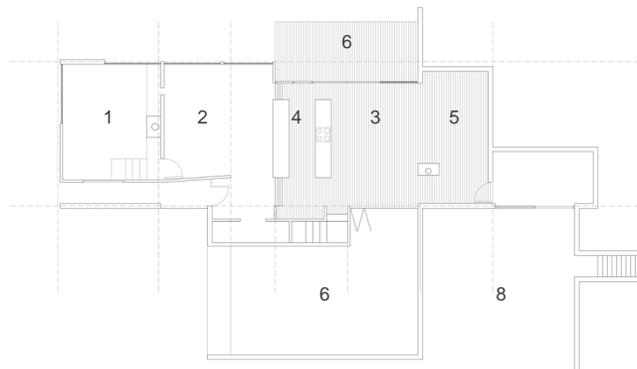
Sited on a gently sloping terrain in Whitby, in the lower North Island, the *Ground House* is surrounded on three sides by housing with, to the north, a panoramic view to an inlet. Designed for a young couple with three children, the two-storey house has kitchen, dining, summer living space, winter lounge and two outdoor living zones, with bedrooms and bathrooms upstairs. The house is 260 square metres and was built in 2000.

Operating as a terraced, inhabited landscape, the *Ground House* blurs boundaries between ground surface and space. This mutable surface begins below ground in the recessed winter lounge, which evokes recessed whare and rua kai in its siting within the earth, then folds up to the dining and then kitchen levels. The concrete surface extends across the summer lounge, level with the outdoor living spaces to either side. This continuous surface articulates to make and furnish space, remembering as it does the geospatial language of Oceania.

The ground plane is problematised in the winter lounge: when seated one is at eye level with the exterior ground plane. This spatial strategy remembers Oceanic practice in which the ground is utilised as a spatial matrix, the “natural” profile of the land moulded to form space as in the terraced pa landscapes, or the small-scaled groundspace of the recessed whare puni. Like Tongan ‘esi, this mutable “ground” furnishes the winter room, recessing 30 mm below the finished slab level to form an indented hearth; folding up to hold the fireplace, recessed within like the taku-ahi; and folding horizontal to become the mantelshelf over the fire and the ground datum of the adjacent dining space.



1. winter living
2. formal dining
3. informal dining
4. kitchen
5. summer living
6. outdoor room
7. service/storage
8. carport



plan

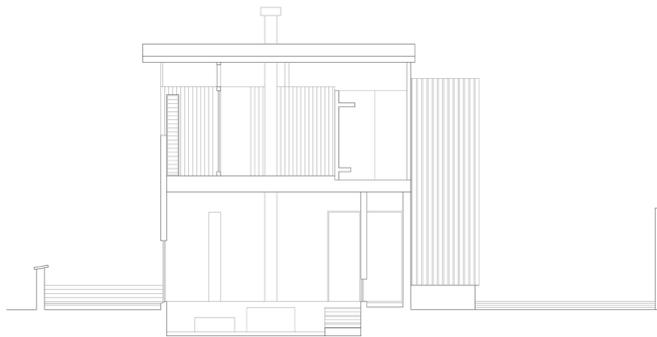




In the other two terraces of the house, the undulating concrete “ground” both defines spatial territories, marking the extent of the dining and kitchen zones through a level change; and furnishes space, as the concrete surface bends horizontal becoming the kitchen bench. The surface of the bench, like the concrete floor slab, is ground back to expose the cut surfaces of aggregate and shell. Hobs are set into this cut “ground” plane, the oven positioned below recalling the hangi. The grinding process is an excavational one, cutting back through the upper layer, the fines and slurry, to expose sectioned spheres of aggregate and particles of shell just as ancient middens are exposed. The summer lounge, with its timber strip-flooring overlay, lies on the same terrace as the kitchen. The outdoor room to the south side of the summer lounge is protected from the prevailing winds by the body of the house and the concrete and perforated block walls that define it. Beyond the summer room a store area holds garden equipment and laundry. This space, like the service and storage zones of rua kai, is submerged within the ground as a kind of earthen vessel.



This extensive and moulded ground plane operates, in the manner of the ground-based space of Oceania, between furniture, interiority and landscape. As in Cache’s geospatial practice, space becomes a Moebius loop, a continuum of interior and exterior, of landscape and furniture, of geography and object. Space is formed and furnished in the *Ground House* with a massive materiality literally composed from earthen aggregate and shell. Through these spatial strategies, the *Ground House* destabilises Western distinctions between nature and culture; between architecture, landscape architecture and the interior; and between surface and space.



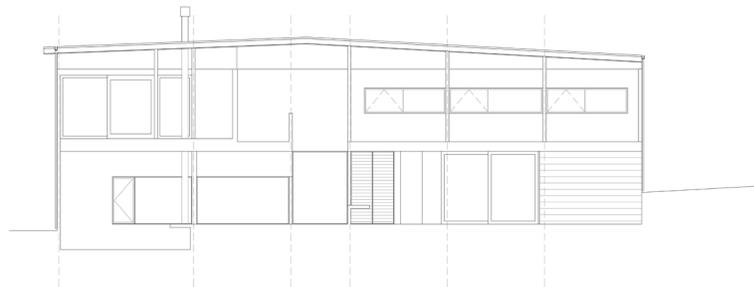
section





Conclusion

Defining the ground as a mutable and mouldable condition, “Groundscape” explores Oceania’s ground furnitures and spaces, with a particular focus on the monumental landscapes of New Zealand. Western geophilosophies are discussed in a further attempt to draw in that which is outside of traditional architectural practice; Cache’s experimental architectures, which link exteriors with interiors and territories with furniture, embody such geospatial theory. Both cultures’ geospatial concepts are then explored via the *Ground House* which breaks down the binary architectural figure/ground, interior/exterior defining boundary in favour of a more complex and unstable condition in which the “ground” becomes the architectural object, the notional “exterior” forming space, as in the recessed winter room or furnishing the interior, as in the kitchen bench which emerges from the continuous concrete ground. This undermining of architecture’s traditionally stable foundation establishes the ground for a practice that moves between difference. The final chapter explores this condition of between-ness, evident in both Oceanic and Western thought, as a spatio-temporal condition that engages change and constructs new compounded identities, whether cultural, discursive or spatial.



section



Afternoon

Tokatea, Coromandel Peninsula, New Zealand

The heat of the day builds as the sun climbs into the west. As the land-mass warms, energy gradients form, heat waves shimmering up off concrete and rock, drawing new air up from the constant sea, over the fluid contour of the house, displacing, refreshing. Louvre walls fan open as gills, making porous and patterned breathing boundaries which cast prismatic lights; flow-paths form along the glassy boundaries as sliding doors skim over each other until the interior-exterior boundary is eroded and multiplied. The exterior draws in, the interior extends out through this multiplying erosion; fantails spiral through the air; blue-green sea below backgrounds lacy manuka; a tui's flight-path tracks the house diagonally from pohutukawa below to kowhai above; local shell sand is mimicked by the speckled, particulate strandboard wall and ceiling lining, this lining bleached and whitened as if by the action of sun and salt; the sloping concrete wall-floor and bench seat extends out to the sloping rock.





four. oceanic grounds

To operate in between is to move in a field constituted only by relational networks, in a space that therefore lacks static definition or territorial fixity. This final chapter explores both the Oceanic concept of *wa* or *va*, and Western philosophical concepts of the in-between as a strategy for bridging between these eventual ideas and architectural doxa in order to make a more dynamic and responsive space. *Va* space, like the ocean, exists as a shifting site of interrelation and connection, while Western ideas of the in-between offer another conceptualisation of a site where established identities are eroded as an effect of interchange between. These spatialities of between-ness are then discussed in relation to the Coromandel house *Tokatea* that shifts between the fluid and mobile spatiality discussed in chapter one, “Oceanscape”, and the groundspaces described and analysed in chapter two, “Groundscape”.

Ponifasio and Refiti suggest that the concept of the *va* derives from the primary Pacific ground, the ocean: “Polynesians designate the ocean as the *va* or *wa* an opening, a gap or in-between place”.¹ Anthropologist Tevita Ka’ili confirms this connection, asserting that the term “ocean”, or “moana”, signifies between-ness and that it is possible that “the word ‘moa-na’ originated from the word ‘moa-’ lit. (sic) means ‘middle space/in-between space’”. Thus, moana is the ‘space between’ islands. In Tonga, ‘moana’ and ‘vaha’ (space between islands) are sometimes used interchangeably”.² The ocean, or moana, can in this sense be understood only in terms of its association and relationship with other (island) entities.

Samoa poet and playwright Albert Wendt asserts that between-ness is constituted as a responsive condition³



when he writes of how the Samoan view of reality is framed around “the concept of *Va*, or *Wa* in Maori and Japanese. *Va* is the space between, the between-ness, not empty space, not space that separates, but space that relates, that holds separate entities and things together”.⁴ Thus the relational space formed within the *va* is not only that of the sea, but also one constituted socially. Ponifasio and Refiti echo this relational role for *va* space in their proposition that the ocean “disconnects people and things, not in a negative way but as a reality that provides a way to bond them ‘positively’”.⁵ Ka’ili delineates the etymology of this relationship, in the Tongan language, noting that “*Vaha* is the open sea space between two islands, and *vaha’a* is the intervening space between two things/persons. *Vaha* indicates the relational space between the two islands, and *vaha’a* signifies the relations between things/persons”.⁶

Built space or artefacts may also be understood in terms of *va* or *wa*. Refiti identifies the *va* as a primary spatio-temporal condition:

... central to any sense of space in Polynesia is the *va* or the in-between space, a relational opening up inhabited by deities/community/land/family a region of the unlimited, a focus charged with ambiguity and duality – a place inhabited by the *va* or sacred in-between space that allows entities/time/space to collapse together in an interconnectedness.⁷

Japanese *ma* space shares this quality of exchange for, as Pilgrim notes, it “seems to operate at, cross, and even deconstruct a number of boundaries”. This particular quality of “between” space as a site of interchange renders boundaries as necessarily inconstant, discontinuous or implied conditions; what defines the space of the

in-between is the shifting relations among the constituent entities (whether islands, people or architectures). This yields a condition where, as with the fluid sea, *va* space seeps or extends and is subject to ebbs and flows as the location of the bounding entities shift and the relations between change.

Between Ocean and Earth

This thesis suggests that Polynesian built environments operate in between two distinct topographies, the oceanspaces and groundspaces outlined in the preceding two chapters. The fluid open spaces and transient breathing architectures generated in response to the ocean, and the groundspaces that operate as surface and as dwelling space, are both apparent in Polynesia in shifting relations dependent upon local custom and geography. In New Zealand, these two topographies are evident at the smaller scale, in spaces such as the recessed whare that combine transient “woven” fabrications with enduring earthworks, and in the monumental landscape architecture of the pa with its ephemeral timber constructions. This combination of transient fabricated plant matter with excavated earth-formed structures lies somewhere between architecture and landscape, between “culture” and “nature”. This architectural environment existed in a larger context understood in Maori mythologies as a space between Papatuanuku, the earth-mother, and Ranginui, the sky-father. The spatial field between these two bounding entities, according to myth, remains one of fluid and relational connection evident in the mists that rise from the ground and the morning dew or rain that fall from the sky.

The combination of oceanspaces and groundspaces is apparent in the semi-subterranean rua tahuhu food store. Best describes these as usually having no built side walls as “the sides of the excavated pit formed walls, but ...

the triangular ends of the roof were a part of the built structure. Some had a shallow porch at the front end”.⁹ Best’s description of the timber fabrication forming the roof and in-fill wall structure includes a note that the “space within a rua tahuhu between the front wall and the central ridge-post (or first intermediate posts) is termed the moana”:¹⁰ this may refer to its siting as an intermediary between exterior and interior, its etymology referencing the between-ness of the moana.

A further between-ness is apparent in the recessed whare found in the colder regions of New Zealand. These whare were partially recessed into the ground, a space formed, like the rua tahuhu, from transient lightweight timber or bound herbiage and from the insulating mass of an excavated and mounded earth. The whare puni was a house, as Best describes it, constructed to induce warmth:

The whare puni, or sleeping houses, so much used in winter time ... were remarkable for sunk floors, low walls, and the fact that earth was heaped up against the walls outside, and sometimes the roof also was earth covered Angas tells us of his coming out of such a den on a winter morning dripping with perspiration. These hothouses were from about 14 to 30 feet in length. In some cases the floor was excavated to a depth of about two feet.¹¹

Describing the construction of a carefully worked whare, Makereti notes that the outermost layer was earthen and insulating:

As a further precaution against the cold, the earth was heaped up against the tuparu (raupo) to a cubit¹² (whitianga) or more in height. The back and front walls were finished in the same way, except that the packing in the mahau (open porch) was of a more ornamental nature.¹³

The completed whare became both an architecture formed of serried layers of bound raupo and other quick-decaying materials, and a mounded earthen structure. This combination of fibrous fabrication and moulded ground is expressed as a performative architectural landscape in the Maori pa, whose terraced peaks and serried palisades framed the skyscape.

Architectural Landscapes

Lieutenant Julien Crozet's account of a pa in the Bay of Islands, reproduced in the 1891 text *Crozet's Voyage to Tasmania, New Zealand, the Ladrone Islands, and the Philippines in the Years 1771–1772*, describes an area of New Zealand that was heavily marked by carved pa landscapes with their lightweight palisading, platforms and whare. Visiting a hill-top fortified village, Crozet writes that they encounter at the top –

... a palisade formed of piles, driven straight and deeply into the ground, seven or eight feet high, Then followed a ditch about six feet broad, and about five to six feet deep, but this ditch was only placed on the land side, where an enemy might approach Inside the village, at the side of the gate, there is a sort of timber platform, about 25 feet high The interior of the village is composed of two rows of houses ranged side by side along the two sides of the palisades which form the enclosure, and every house is furnished

with a penthouse, which serves as a kitchen The space which divides the two rows of houses ... serves as a sort of parade ground, and extends the whole length of the village. This parade ground is raised about a foot higher than the surrounding ground on which the houses stand. It is raised by means of soil brought there and beaten down This whole space between the two rows of houses is only occupied by three public buildings, of which the first and nearest to the village gate is the general magazine of arms.¹⁴

The spatiality of the pa described by Crozet oscillated between built structure and landscape: between the screen wall of the timber palisade and the indented fosse; between the closure of the labyrinthine palisaded paths and then the openness of the central raised marae; between the lightweight timber platforms or pataka (raised storehouses) and the monumental terracing of the hill. At the centre of the pa was that in between space the raised ground of the marae atea, which references the original space of between-ness, the ocean or marae-nui-atea.

Pa inhabited multiple zones at the same time then, exhibiting an architectural monumentality, but one generated via the landscape; forming an “architectural” enclosure, yet with an evanescent lightweight materiality that breathed, forming space that was simultaneously interior and exterior. These groundspaces and oceanspaces are found both in the macro-scaled pa, and also at the micro-scale in individual dwellings or storage elements. Denying a unitary spatial identity, these dual typologies formed space between conditions, both landscape and space or outside and inside. These spaces operated between temporalities also, being both enduring and monumental markers in the landscape, and also ephemeral, quick-decaying fabrications. Moving between cultures but exploring contiguous territory, the next section explores Western ideas of the in-between which theorise identity and location as contingent

conditions subject to change and interchange.

The In-between

The in-between is a “term of relation”,¹⁵ a space of the middle or margin, an active zone of indeterminate emergence. As a concept, it is apparent in shifting forms across a range of disciplines, from post-colonial and post-structuralist thought, to feminist and queer theory. What is constant across these fields is an understanding of the in-between as a site where fixed identities are eroded and as a result anti-hegemonic change is enabled. This continual condition of change leads Massumi to conflate in-between-ness with the evental, calling the event “that in-between of space and time”.¹⁶

Bhabha theorises the in-between as a disruptor of hegemonic cultural practices through its destabilising of coherent or static identities¹⁷. He emphasises culture’s in-between, those interstitial spaces between cultures and people that are continually subject to influence and change, which he also names the Third Space. He criticises the West’s production and imposition of superior and inferior binary oppositions preferring instead the ongoing making of identity occurring in the “contradictory and ambivalent space of enunciation”¹⁸ that is the Third Space. In Bhabha’s formulation of between-ness, this relational space becomes a site that undermines entrenched binaries, generating new, complex and mutually marked identities. For Bhabha, “all forms of culture are continually in a process of hybridity”,¹⁹ hybridity here characterised as a liminal condition critical of defined and static identity. The hybrid begins as an attempt to replicate the dominant colonial identity, but fails, producing something new in the space in between, a trans-cultural form with a complex, interfolded identity.

In *Architecture from the Outside*, Grosz develops Deleuzian thinking on the in-between and difference as a means of rethinking architectural doxa and developing new spatial formulations. She builds also upon the writings of Bergson, whom she describes as the “first great thinker of the in-between”.²⁰ Bergson’s focus on becoming frames the in-between as “the only space of movement, of development or becoming”.²¹ As a space that disrupts fixed identities, the in-between is “the very site for the contestation of the many binaries and dualisms that dominate Western knowledge”²² and is therefore also a site of difference which she posits as “another mode of formulating questions of becoming, futurity, betweenness, and thus a way of problematizing conceptions of being, identity, and self-presence that dominate both thought and building in the present”.²³ Difference in this sense is a spatio-temporal condition, “not simply the collapsing [or circulation] of identity, it is also the rendering of space and time as fragmented, transformable, interpenetrated, beyond any fixed formulation”.²⁴

This in-between space, defined by bounding entities, is a space of change, providing a temporalised condition in flux relative to the change or interaction of its constituting entities. Grosz asserts that the in-between is also an action, a way to think and make space. The in-between is not only a space but also a time, an event – as Massumi describes it, the “unfounded and unmediated in-between of becoming”.²⁵ Grosz suggests therefore that to open up architecture to its outside is to –

... refuse to conceptualise space as a medium, as a container, a passive receptacle ... and instead to see it as a moment of becoming, of opening up and proliferation, a passage from one space to another, a space

of change, which changes with time space too must be reconfigured not as ... regulating processes and events so much as accompanying them.²⁶

This Western space of the in-between is, like the *va*, a “space without boundaries of its own”,²⁷ its identity an influenced and fluid condition. These Western theories of between-ness and the Oceanic *wa* are activated in the Coromandel house named *Tokatea*. Between-ness becomes praxis as movements occur between Oceanic built environments, Western theory and architecture; between geotectonic groundspaces and ephemeral oceanspaces; between architecture, interior and performance design and landscape architecture; between built space and the evental.





Tokatea

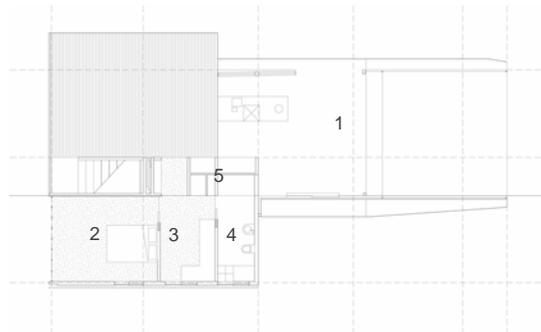
The word *Tokatea* means white rock, the house taking its name from the large expanse of rock over which it terraces.²⁸ The building contours to the sloping site, closing to the houses to the west and south, and opening to the sea and bushclad headlands to the north and east. Built in 2005, the lower floor of the two-storeyed 140 square metre building is home to a retired couple, while at the upper level is a small holiday studio for me, their daughter. The couple were familiar with an architectural process, having been lucky enough earlier in their lives to have a surgery designed by architect John Scott. Scott's work is a primary influence in my design practice, his architectural language inflecting my work in multiple ways. In this house this influence is evident in the flecked strandboard surfaces that evoke Scott's use of particleboard, the large panel doors and pivot doors, and the solid massing of concrete; perhaps more importantly, Scott's concern with making powerful spatial experiences leads to my focus on the experiential rather than the formal. The house is at stage one at present, stage two comprising the construction of a timber landscape that will fold over the articulating roof, as a roof-deck and stair down to the existing timber platform of the outdoor room, and down again as a stepping timber platform that orients to a small bay and the morning sun. The following text imagines that this timberscape has already been constructed.



Oceanspace: Fluid Fields

Recalling the ocean, a spatial language of fluidity and mobility is expressed repeatedly in the house in different modes and scales. A liquid applied waterproof membrane surfaces the folding timber-framed, ply-clad roof. Rainwater is collected from this surface and reticulated to a tank beneath the house, rainwater the sole source of water for the building. Flow channels extend along either side of the angling concrete wall/floor; 150 mm deep the channel directs

1. outdoor room
2. bedroom
3. change
4. bathroom
5. service/storage



plan - open phase





stormwater, allowing interior and exterior concrete surfaces to be level. These negative details speak to the fluidic and the in-between; they are apparent also at cladding or lining interfaces and as handles to the aluminium joinery.

A lightweight timber deck, layered over the membrane roofscape, extends from the upper terrace of the site and over the roof of the studio; it steps down the angled roof-face, across the roof-deck and down to the timber platform of the outdoor room. From here the timber platform extends inside as timber strip-flooring, or outside to the east as a stepping terrace that meets the ground. This timber field forms an artificial landscape that mediates between and connects the upper and lower levels of the site: this continuous surface recalls the extensive and connective seascape, the marae-nui-atea.



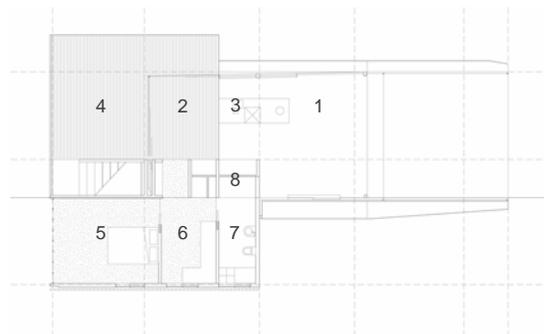
The house is established, like Oceanic buildings that respond to their temporalised environment, as an architecture of movement: roller blinds extend and retract; a storage wall is rendered active as doors open and close; cavity slider doors retract into walls; thin, full-height windows slide over the face of the exterior fibre-cement cladding. Mobile glass walls and louvres shift, setting the public space of the house into motion, causing it to phase change between interior and exterior. When fully open, the dining space sits between interior and exterior, its timber flooring contiguous with the extensive timber landscape that connects the upper and lower terraces of the site.



Oceanspace: Breathing Architectures

The private zone of the house is, like permeable Oceanic architectures, a space of passage formed from boundaries that operate as thresholds. To enter this zone, one moves through a thick, inhabited wall that establishes and then

1. living
2. dining
3. kitchen
4. outdoor room
5. bedroom
6. change
7. bathroom
8. service/storage



plan - closed phase





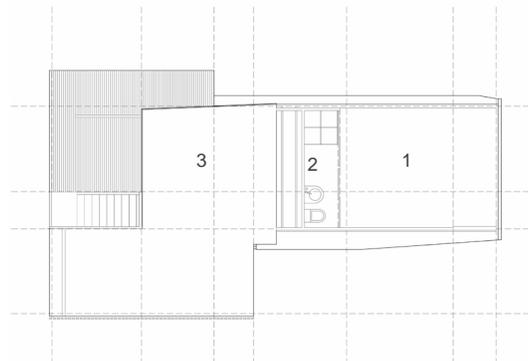
erodes the boundary between public and private. This bounding wall is not solid as it appears but rather has deep and repetitively reiterated gaps that act as shelves within which books, flowers, photos may be set. Once through this thick threshold, space is moderated again, expanding, the ceiling high and framing down to the sea view. Bathroom, change space and then bedroom enfilade, boundaries between these spaces established as sliding doors are drawn closed and then denied as doors deploy back into the cavities of walls. Bathroom, change and bedroom all have exterior walls with full-height windows that slide away over the face of the cladding. When the window panels are moved to their open register, these rooms exist between interior and exterior, strongly bounded, yet dematerialised at these points of breach. The wall of louvres at the sea-ward end of the bedroom also repetitively erode or mark the spatial boundary, as the louvres open or close. The studio space, enfolded in the landscape-roof, breathes too bounded as it is on two sides with louvres that open to reinforce and dematerialise the boundary.

Groundspaces

An articulated concrete ground plane retains the upper terrace of the site, then folds to form the small terrace that establishes the ground plane for the upstairs studio, then angles down the rocky slope creating the angling wall-floor of the living space of the house. This landscape scaled terracing invokes the architectural landscapes of the pa. The concrete ground is articulated to furnish the main living space, rendering it suitable for living and working. The concrete surface pinches to forms a bench-seat at the base of the angled wall-floor and folds up to form an oversized concrete kitchen bench. The aggregate for kitchen bench and floor is sourced from the same site, flecked with grey stones and white shells, reminiscent of middens. Recessed within the elevated surface is the hob, beneath it the oven. Rua kai of a sort are held within this extended ground plane, the pullout pantry containing cooking essentials,



1. studio
2. bathroom
3. roof deck



plan - studio





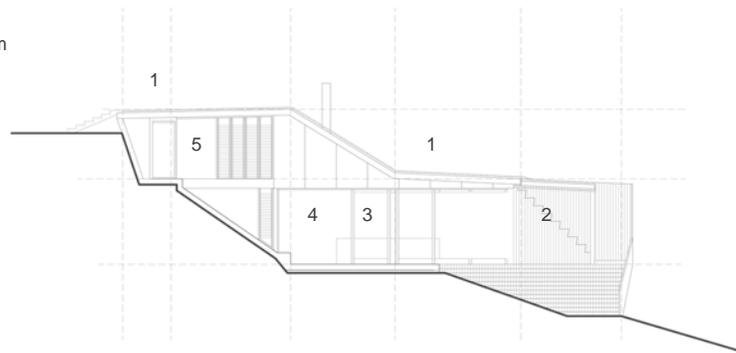
olive oil, tea, salt. Also within this artificial earthen vessel are the plates, cups, pots and pans; pullout rubbish, recycling and compost bins; and three different kinds of water vessel, two sinks and a dishdrawer. At the end of the bench is the fire, held in a cavity within the artificial ground, another kind of taku-ahi. The articulated concrete surface extends into the bathroom, stepping down to form a cavity within which to bathe.

The house renders the interior and the exterior as time-based and connected conditions: the exterior artificial landscape of the roof, the in-between space of the timber platforms of outdoor room and dining zone, and the contouring concrete of the living space link as a type of Moebius strip. Under inhabitation these spaces change register: when the sliding doors of the architectural boundary close, forming interior space, the concrete landscape surface reads as a massively-scaled furniture element; as sliding panels and louvres open the timber field of the outdoor room and dining zone become one, while the moulded concrete surface becomes a kind of landscape which is contiguous with the sloping rock of the site.

Conclusion

Oscillating between cultures and disciplines, this project, *Tokatea*, operates as a site where fixed spatial and discursive identities are eroded and new formulations emerge. Working between Oceanic spatio-temporalities and Western evental theory, I test here a mode of thinking and making that creates difference or alterity through the activation of the *va* and Western spatio-temporal thought. The spatiality of the house moves between the open dynamic platforms and the airy architectures explored in chapter one, "Oceanscape", and the surface-furniture-space continuum of chapter two, "Groundscape". As such, *Tokatea* embodies a central proposition of this thesis,

1. roof deck
2. outdoor room
3. kitchen
4. living
5. studio



elevation







that Polynesian built environments are constituted as both fluid oceanspaces and modelled groundspaces and tests these spatial conditions in a contemporary environment. *Tokatea*, formed from a mobile and perforated enclosure and a changing and inhabited ground, is experienced as a spatialised event that shifts between and overlays conditions of inside and outside.





five. conclusion: becoming

This thesis has sought to inter-link and mediate Oceanic and Western spatial thought and built environments through design-based research, fabricating theories within architecture and then reflecting upon these as architectural texts to be read. This process of inquiry is an ongoing one, its findings not always clear or easy to articulate, yet evident when experienced in space and time. What has resolved, as the embodied research has been refigured in the exegesis, is the extent to which the three houses explored are based on a conceptualisation of space generally, and architecture specifically, as being formed through temporal processes and as dynamic events. These projects, and their exegesis, aim to test a becoming other of architecture as a complex and wide-ranging spatial discipline that incorporates object, event, experience and environment.

This reconceptualisation of architecture as subject to durational flow is founded on the shifting grounds of Oceania and Western theories of the event. This temporal environment, one at odds with architecture's desire for a firm foundation, causes a rupture in the boundaries of architecture, forming space in flux characterised not by its "boundedness, but [by] what elements it lets pass".¹ I proposed, in the chapter "Oceanscape", that temporalised space is characterised by a blurring of the conditions of inside and outside as boundaries are rendered fluid. The spatial effects of these mobile boundaries are tested in the *Sounds House*, which becomes a site of passage, a mutable and breathing threshold that renders the "interior" and "exterior" as time-based, in the case of the open field of the living space; or co-extensive, as in the porous bedroom spaces with their breathing louvre walls.

Delving into mutable telluric territories in “Groundscape”, I suggested that this mobile ground is also a site where interior and exterior binaries are complicated and rendered fluid. Using the ground to form “interior” space perturbs the architectural figure/ground relationship: the architectural object becomes ground; ground, the exterior, becomes interior. Geography here, as posited by Cache,² prevents architectural closure, forming rather a topographical continuum that extends through into our built spaces and furnishings. The *Ground House* explores this continuous field via an extensive and moulded concrete ground that both forms and furnishes space. This geospatial continuum passes between surface, furniture or contained interior as a topography of becoming that rejects the static and founding architectural ground in favour of a conceptualisation and practice in-between the inside and the outside.

I proposed in “Oceanic Grounds” that Polynesian spatial practice is founded upon the two grounds explored in chapters one and two: the time-based surface of the ocean; and the space-making surface of the terrestrial ground. Working between the spatial strategies of the *Sounds House* and the *Ground House*, *Tokatea* combines operable boundaries and open fields with a mutable ground that forms and furnishes space. As boundaries become mobile thresholds, and the foundational ground forms space, the binaries of interior and exterior become problematised and mutualised, architecture’s enclosure and foundations unsettled. Architecture under these conditions becomes refigured as an event, a becoming other of interior and exterior.

When the architectural object becomes event based it also, I suggest, becomes discursively other as a spatial, rather than exclusively architectural, discourse. This thesis, and my larger research and teaching practice, are sited within a spatial design programme in part because of my interest in working between the spatial conditions

and discourses of architecture, landscape architecture, and interior and performance design. This testing praxis is well sited within the spatial design discipline a field that, like performance design, is still finding its discursive place. My practice and its exegesis offer speculations about what that place might be, suggesting spatial design as an extensive site of spatial and discursive exchange. In a sense, the praxis explores a temporalisation not only of space but of the Western spatial disciplines; as a project moves between conditions of interiority and exteriority so may it be understood as moving between discourses. Thus *Tokatea*, when closed against weather or the night, operates as an architecture whose boundaries are secure, resistant to flows of rain or wind, the concrete landscape a monumentally-scaled interior which furnishes the space; when opened up this concrete landscape becomes an architectural landscape that is co-extensive with rock, bush and sea. Moving between these spatial registers and disciplines the house performs the evental rhythms of life.

I have sought, in this thesis and in my larger practice, to render architecture more open to its outside – to the temporal, as discussed in “Oceanscape”, to the exterior, as discussed in “Groundscape”, and to the doubled spatial practices of Oceania, as discussed in “Oceanic Grounds”. As a praxis the projects explored here embody questions which are tested through the experience of inhabitation: these speculative spaces may be understood as time-based sites that are formed as much by their inhabitants’ responses to the evental flows of weather or programme as by their architectural frames. Like the mutable ocean or groundscapes that they respond to, these spacescapes are constantly becoming other, moving between a spatiality of the inside and the outside dependent on their register of use. These projects form part of a praxis focusing on Pacific-oriented space that performs: this work questions what a spatial discourse and practice might be through experiential explorations in time, space and place.



Night

Tokatea, Coromandel Peninsula, New Zealand

Slipping back down into the house, the morning routine plays backwards as the sliding panels of the main volume begin to seal in response to the sudden chill; blinds extend down; louvre breathing walls rotate shut; and bedroom-bathroom sliding window panels close from their register over the cladding. The fire at the end of the island-bench is lit, drawing the space with a flickering orange light, outlining a field of warmth; the inhabitants recline onto the sloping wall-floor and movement slows, pooling. The moon casts a line of light over the shifting surface of the sea, a reflected reminder of the next day, and the next, pulsing on in waves



notes

one. introduction: in-between

¹ Ponifasio and Refiti, *The Labyrinth of the World and Paradise of the Theatre*, 140.

² Sanford Kwinter suggests that Western religious/scientific orthodoxy is founded on “late Greek and early Christian cosmologies” and that for the Greeks “[t]ime ultimately had to be abolished from the ontological schema” in favour of static ideal forms. See Kwinter, *Architectures of Time: Toward a Theory of the Event in Modernist Culture*, 217 and 37.

³ Isozaki, *Ma: Space-Time in Japan*, cited in Pilgrim, “Intervals (‘Ma’) in Space and Time: Foundations for a Religio-Aesthetic Paradigm in Japan,” 267.

⁴ Austin, “Pacific Building: The Construction of Tradition,” 7 (CD Rom).

⁵ Cache, *Earthmoves: The Furnishing of Territories*, xix.

⁶ Hannah, “Event-space: Theater Architecture and the Historical Avant-Garde,” 22.

⁷ Cache, *Earthmoves*, viii–ix.

⁸ Eisenman, “Unfolding Events,” 424.

⁹ Treadwell, “Earthquake Weather,” 208.

¹⁰ Hannah, “Event-space: Theater Architecture and the Historical Avant-Garde,” 26.

¹¹ Kwinter, *Architectures of Time*, 49.

¹² Ibid.

¹³ Sanford Kwinter characterises the evental as being “concrete, plastic, and active (i.e. evental)” in Kwinter, *Architectures of Time*, 69 n. 29.

¹⁴ Ibid., 14.

¹⁵ Grosz, *Architecture from the Outside: Essays on Virtual and Real Space*, 116.

¹⁶ Ibid., 64.

¹⁷ Ibid., xxi.

¹⁸ Bergson, *Creative Evolution*, 355.

¹⁹ Massumi, *Parables for the Virtual*, 85.

²⁰ Grosz notes, in *Architecture from the Outside*, that Deleuzian theory is “resistant to the notion of ‘application’ (theory is not so much to be applied as to be used)”, 60. She comments also that Deleuze’s theories of difference suggest that theory, or thought, should be engaged as an action or operation, drawing in difference through engaging with what is outside of itself, 62.

²¹ Ulmer, “The Euretics of Alice’s Valise,” 3–10.

²² Ibid., 4.

²³ Massumi, *Parables for the Virtual*, 57.

²⁴ Grosz, *Architecture from the Outside*, 62–63.

²⁵ Rajchmann, *The Deleuze Connections*, 52.

²⁶ Grosz, *Architecture from the Outside*, 65–66.

²⁷ Lefebvre, *The Production of Space*, 31.

²⁸ Kwinter, *Architectures of Time*, 13.

²⁹ Grosz, *Architecture from the Outside*, 120.

³⁰ Lefebvre, *The Production of Space*, 33.

³¹ Pilgrim, "Intervals ('Ma') in Space and Time: Foundations for a Religio-Aesthetic Paradigm in Japan." 266.

³² Virginia Woolf's *The Waves* is remembered in this text construction.

³³ Kwinter, *Architectures of Time*, 4.

³⁴ Massumi, *Parables for the Virtual*, 85.

³⁵ Henri Bergson, *Matter and Memory*, 217.

³⁶ Lemi Ponifasio and Albert Refiti, *VASA: A Collaborative Project of Lemi Ponifasio and Albert Refiti*, np.

³⁷ The term "relational" is used here to connote connection or interaction. It does not refer to the usage of the term in relational art and aesthetics, though there is some overlap with the concept of the production of relations and interactions.

two. oceanscape

¹ Ponifasio and Refiti, *The Labyrinth of the World and Paradise of the Theatre*, 140.

² Austin, "Pacific Building: The Construction of Tradition," 7.

³ Kirch and Green, *Hawaiki, Ancestral Polynesia: An Essay in Historical Anthropology*, 254.

⁴ Austin, "A Description of the Maori Marae," 233.

⁵ Austin, "Paradise to Panorama: The Rediscovery of the South Pacific," 7 (CD Rom).

⁶ Austin, "A Description of the Maori Marae," 236.

⁷ Best, *The Land of Tara and They Who Settled It. The Story of the Occupation of Te Whanga-Nui-A-Tara (The Great Harbour of Tara) or Port Nicholson, by the Maori*, 133.

⁸ Neich, *Painted Histories: Early Maori Figurative Painting*, 127.

⁹ Austin, "Pacific Island Migration," 226.

¹⁰ Ibid., page.

¹¹ Ibid., 227.

¹² Austin, "Pacific Building: The Construction of Tradition," 7 (CD Rom).

¹³ Makereti, *The Old-Time Maori*, 127.

¹⁴ In *The Old-Time Maori* Makereti defines the range of whare, from the very small, raupo (bulrush)-lined whare to the larger whare puni, or whare whakairo (carved or designed house), 288.

¹⁵ Best notes in *The Maori Vol. II*, that wharau is a term used to denote "a shed, a rude shelter erected by travellers, and also a long narrow shed in which canoes were kept", 562. Makereti describes a wharau (or kauta) as a "cooking shed", *The Old-Time Maori*, 39.

¹⁶ Makereti, *The Old-Time Maori*, 161.

¹⁷ Treadwell, "Categorical Weavings: European Representations of the Architecture of Hakari," 268.

¹⁸ Best, *The Maori As He Was: A Brief Account of Life as it Was in Pre-European Days*, 219.

¹⁹ Makereti is also known as Maggie Papakura. She was born in 1873 in Matata, New Zealand.

²⁰ Makereti, *The Old-Time Maori*, 160–1.

²¹ Treadwell, “Categorical Weavings: European Representations of the Architecture of Hakari,” page.

²² Best, *The Maori Vol. II*, 561.

²³ Treadwell, “Categorical Weavings: European Representations of the Architecture of Hakari,” 266.

²⁴ See Makereti who describes a range of types of whare in detail in *The Old-Time Maori*, 289.

²⁵ Hoskins and Wilson, “Te Whare Raupo: Back to the Future?,” np.

²⁶ Kwinter, *Architectures of Time*, 4.

²⁷ *Ibid.*, 7–8.

²⁸ Grosz, *Architecture from the Outside*, 119.

²⁹ Tschumi, *Architecture and Disjunction*, 149.

³⁰ de Sola-Morales, *Differences: Topographies of Contemporary Architecture*, 16.

³¹ The term “objectile” refers also to architect and writer Bernard Cache’s theorisation, discussed in Cache, *Earthmoves*.

³² Deleuze, *The Fold: Leibniz and the Baroque*, 88.

³³ Massumi, *Parables for the Virtual*, 85.

³⁴ Austin, “A Description of the Maori Marae,” 231.

³⁵ Austin, “Pacific Island Migration,” 227.

three. **groundscape**

¹ Park, *Theatre Country: Essays on Landscape and Whenua*, 240–1.

² Makereti, *The Old-Time Maori*, 182.

³ In the Western tradition, the understanding of the word “nature” has shifted over time. The term derives from the Latin *natura*, or what a thing is, its character or essence. *Natura* derives from the Greek *phusis*, a term whose meaning developed to encompass “everything”. Evernden notes that in this usage there can be “nothing that is not ‘nature’ – it has no opposite Over time however this expansive definition reduced to the point where ‘nature’ is now commonly understood as ‘the world apart from human influence’”. *The Social Creation of Nature*, 19.

⁴ Evernden comments that in the Judeo-Christian tradition, “God is regarded as the creator of nature, meaning that nature in this demoted sense is distinct from God, but also that He is related to it as a creator or artisan is to a piece of work, or as a master to a servant”. *The Social Creation of Nature*, 21.

⁵ Nature and culture, in the Western tradition, may be described as a binary pairing within which relative status has shifted over time. In the current formulation of this pairing, nature is subordinate to culture; culture is active, it is creative, it is human generated; nature is that which is not human, it is lacking in agency.

⁶ There are, of course, remains of monumental stone platforms or temples throughout Polynesia (see Kirch and Green, *Hawaiki, Ancestral Polynesia*). These are seen in Tonga and Hawaii (see Kirch, “Monumental Architecture and Power in Polynesian Chiefdoms: A Comparison of Tonga and Hawaii,” 206–222) as well as in Samoa, ‘Uvea, Rotuma, Niue and Rapa nui (Clark, “Geophysical Investigations at the Pulemelei Mound”). My particular focus in this study, however, is on those mounds, platforms and spaces formed from the earth.

⁷ There are also complex and shifting cultural and environmental drivers for the monumental architectural practices that are apparent throughout Polynesia, which include the display of status, establishment of political hierarchies and “the assertion of territorial ownership of productive regions”. Clark, “Geophysical Investigations at the Pulemelei Mound.”

⁸ It is unclear whether ritualised proscriptions (tapu) covered the fabrication of groundspaces, and this is an area of research that I would like to take further. However, Makereti notes, in relation to the initiation of new and important houses, that construction must be continued once started for “the site chosen has been made tapu, and already the body of Papa-tu-a-nuku the Earth Mother has been prepared by digging holes for the four corner pegs to mark it”, Makereti, *The Old-Time Maori*, 283.

⁹ Kirch and Green, *Hawaiki, Ancestral Polynesia*; Clark, “Geophysical Investigations at the Pulemelei Mound.”

¹⁰ Kirch, “Monumental Architecture and Power in Polynesian Chiefdoms: A Comparison of Tonga and Hawaii,” 210.

¹¹ Other mound types were chiefly burial mounds and pigeon-snaring mounds. Ibid.

¹² Davidson, *The Prehistory of New Zealand*, 89.

¹³ Salmond, *Two Worlds*, 38.

¹⁴ Clark, “Geophysical Investigations at the Pulemelei Mound,” 7.

¹⁵ Tuggle and Tomonari-Tuggle, “Prehistoric Agriculture in Kohala, Hawaii,” 311–12. Best notes that the number of Polynesian fortifications is probably under-reported, “At the Halls of the Mountain Kings: Fijian and Samoan Fortifications, Comparison and Analysis,” 438–9.

¹⁶ Kirch, “Monumental Architecture and Power in Polynesian Chiefdoms: A Comparison of Tonga and Hawaii,” 217.

- ¹⁷ Kirch, "Ethno-archaeological Investigations in Futuna and Uve'a (Western Polynesia): A Preliminary Report," 49.
- ¹⁸ Davidson, *The Prehistory of New Zealand*, 90.
- ¹⁹ Best, *Maori Storehouses and Kindred Structures*, 107.
- ²⁰ Best, *The Maori Vol. II*, 589.
- ²¹ Makereti, *The Old-Time Maori*, 163.
- ²² Best, *The Maori Vol. II*, 314.
- ²³ Barber, "Loss, Change, and Monumental Landscaping: Towards a New Interpretation of the 'Classic' Maori Emergence," 869.
- ²⁴ Kolb and Dixon, "Landscapes of War: Rules and Conventions of Conflict in Ancient Hawai'i (And Elsewhere)," 526.
- ²⁵ Austin, "Kiwi Architecture: Modernism Recycled," ix.
- ²⁶ Treadwell, "Categorical Weavings: European Representations of the Architecture of Hakari," 272.
- ²⁷ Best, *The Maori Vol. II*, 305.
- ²⁸ Sutton, *The Archaeology of Pouterua*, 232.
- ²⁹ Belich, *Making Peoples: A History of the New Zealanders: From Polynesian Settlement to the End of the Nineteenth Century*, 80.
- ³⁰ Salmond, *Two Worlds*, 39.
- ³¹ Sutton, *The Archaeology of Pouterua*, 233.
- ³² *Ibid.*, 232–3.
- ³³ Beaglehole, *The Journals of James Cook on his Voyages of Discovery, I: The Voyage of the Endeavour, 1768–*

1771, cited in Sutton, *The Archaeology of Pouterua*, 237.

³⁴ Sutton, *The Archaeology of Pouterua*, 237.

³⁵ *Ibid.*, 238.

³⁶ Belich, *Making Peoples. A History of the New Zealanders: From Polynesian Settlement to the End of the Nineteenth Century*, 80.

³⁷ Barber, "Loss, Change, and Monumental Landscaping: Towards a New Interpretation of the 'Classic' Maori Emergence," 876–7.

³⁸ *Ibid.*

³⁹ Grosz, *Architecture from the Outside*, 98

⁴⁰ *Ibid.*, 100.

⁴¹ Bergson, *Matter and Memory*, 263.

⁴² *Ibid.*, 287

⁴³ *Ibid.*, 217.

⁴⁴ Massumi, *Parables for the Virtual*, 10.

⁴⁵ *Ibid.*

⁴⁶ Deleuze and Guattari, *What is Philosophy?*, 102.

⁴⁷ Rajchmann, *The Deleuze Connections*, 95.

⁴⁸ Eisenman, "Unfolding Events," 424.

⁴⁹ *Ibid.*, 425.

⁵⁰ Ibid.

⁵¹ Deleuze, *The Fold: Leibniz and the Baroque*, 19.

⁵² Cache, *Earthmoves*, xvii.

⁵³ Ibid., 70.

⁵⁴ Ibid.

⁵⁵ Ibid., 30.

⁵⁶ Ibid., 70.

four. **oceanic grounds**

¹ Ponifasio and Refiti, *VASA: A Collaborative Project of Lemi Ponifasio and Albert Refiti*.

² Ka'ili, "Tauhi Va: Creating Beauty Through the Art of Sociospatial Relations," 11 n. 1.

³ This quality of interrelation is a primary quality of va space as understood by Tongan, Niuean, Samoan, Tokelauan and Uvean-Futunan cultures for whom, as Ka'ili notes, va means both space between and "social relationship," "Tauhi Va: Creating Beauty Through the Art of Sociospatial Relations," 18 n. 17.

⁴ Wendt, "Afterword: Tatauing the Postcolonial Body," 402.

⁵ Ponifasio and Refiti, *VASA: A Collaborative Project of Lemi Ponifasio and Albert Refiti*.

⁶ Ka'ili, "Tauhi Va: Creating Beauty Through the Art of Sociospatial Relations," 16 n. 12. Ka'ili notes that "Samoans, as well as all Moana (Oceanic) cultures, think about social relations in a spatial fashion", 20. The Japanese term

ma also includes a relational and social component for “*ma* also means ‘among’ *ma* clearly begins to take on a relational meaning – a dynamic sense of standing in, with, among, or between. Related to this, it also carries an experiential connotation since to be among persons is to interact in some dynamic way”, Pilgrim “Intervals (‘Ma’) in Space and Time: Foundations for a Religio-Aesthetic Paradigm in Japan,” 256.

⁷ Refiti, “The Forked Centre: Duality and Privacy in Polynesian Spaces and Architecture,” 1.

⁸ Pilgrim, “Intervals (‘Ma’) in Space and Time: Foundations for a Religio-Aesthetic Paradigm in Japan,” 257.

⁹ Best, *The Maori* Vol. II., 591.

¹⁰ Best, *Maori Storehouses and Kindred Structures*, 106.

¹¹ Best, *The Maori* Vol. II., 578.

¹² Best defines a cubit as the length measured from “elbow to finger tips,” *The Maori As He Was: A Brief Account of Life as it Was in Pre-European Days*, 125).

¹³ Makereti, *The Old-Time Maori*, 306–8.

¹⁴ Crozet, *Crozet’s Voyage to Tasmania, New Zealand, the Ladrone Islands, and the Philippines in the Years 1771–1772*, 29–33.

¹⁵ Massumi, *Parables of the Virtual*, 57.

¹⁶ *Ibid.*

¹⁷ Bhabha, “Culture’s In-between.”

¹⁸ Bhabha, *The Location of Culture*, 37–9.

¹⁹ *Ibid.*

²⁰ Grosz, *Architecture from the Outside*, 92.

²¹ *Ibid.*, 92–93.

²² *Ibid.*, 93.

²³ *Ibid.*, 95.

²⁴ *Ibid.*

²⁵ Massumi, *Parables of the Virtual*, 71.

²⁶ Grosz, *Architecture from the Outside*, 119.

²⁷ *Ibid.*, 91.

²⁸ The name Tokatea is “a significant name in these parts, given the mana of Tokatea (Castle Rock) the resting place of Hei, and Huarere, the chiefs That name seems to fit the description of (the) site, & further commemorates the maunga” (Peter Johnston, personal communication, Ngati Hei Kaumatua, 2005).

five. **conclusion: becoming**

¹ Massumi, *Parables of the Virtual*, 85.

² Cache, *Earth Moves*, 70.

Glossary

NB: Maori terms unless otherwise noted

'esi	sitting or resting platforms for chiefs (Tongan)
fale	house (Samoan)
fare	house (Tongan, Tahitian)
hakari	ceremonial food stage
hangi	earth oven
kainga	village
kakaho	pampas reed
kaponga	tree fern
kauta	cooking shed
kumara	sweet potato
mahau	porch
marae	open meeting space
marae atea	open field in front of the wharenuī
mauri	life force, life principle; talisman
moana	ocean
pa	fortified village, fighting stockade; to block off or obstruct an open space; to clump together

pataka	raised storehouse
rakai, rakei	to adorn
raupo	bulrush
rua	food store
rua kai	subterranean food store
rua kopiha	subterranean food store with water conducted into it
rua korotangi	a well-like storage pit, especially for kumara
rua tahuhu	semi-subterranean food store
taku-ahi	stone-lined fire pit
tapu	ritualised proscription; sacred
tuparu	raupo
umu	earth oven
va	opening, space between (Samoan, Tahitian, Tongan)
vaha	space between islands (Tongan)
vaka	canoe (Samoan, Tongan)
wa	opening, space between
wharau	shelter, cooking sheds
whare	house
whare puni	warm house or sleeping house
whare raupo	reed house

whare whakairo	carved or designed house
wharenui	meeting house
wharau	cooking shelter
whata	open timber platform upon which food was stored
whenua	ground, placenta

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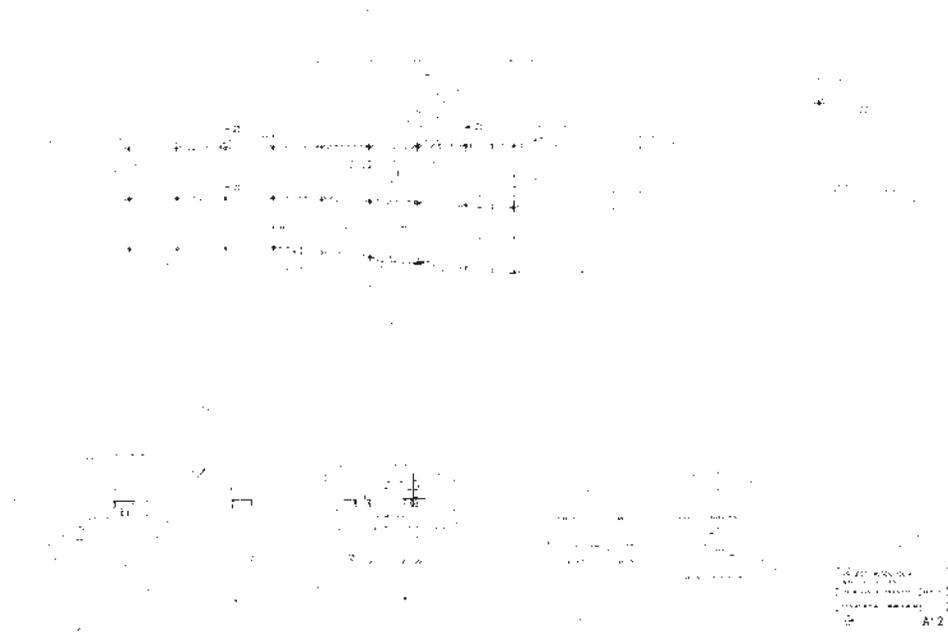
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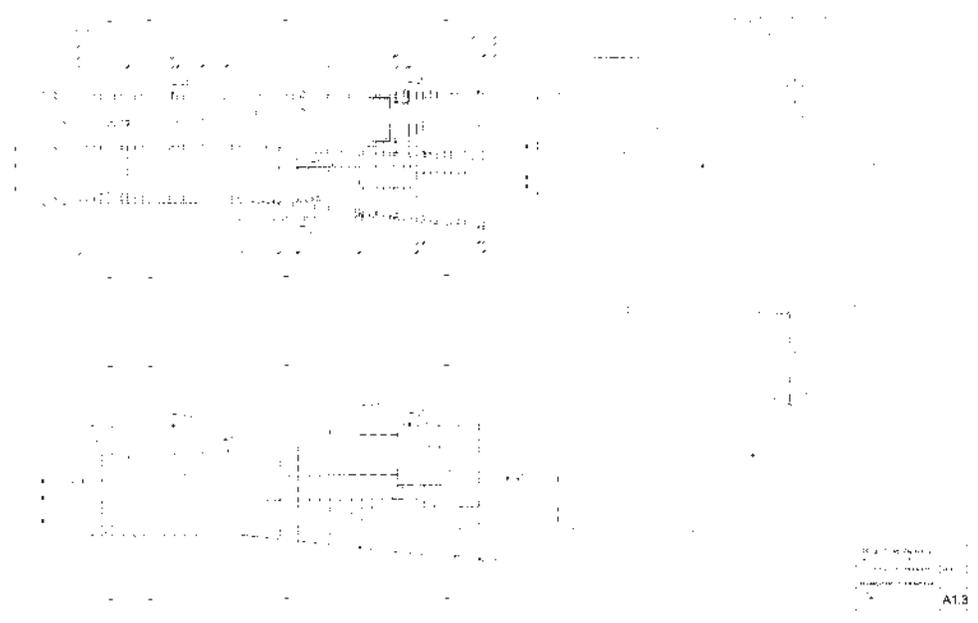


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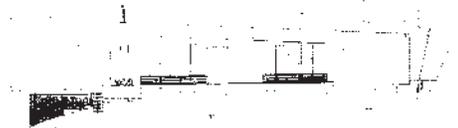


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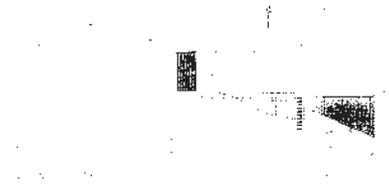
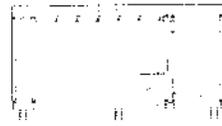
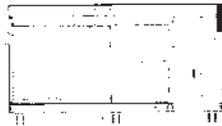


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JDA

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 1000 North 1st Street, Suite 100
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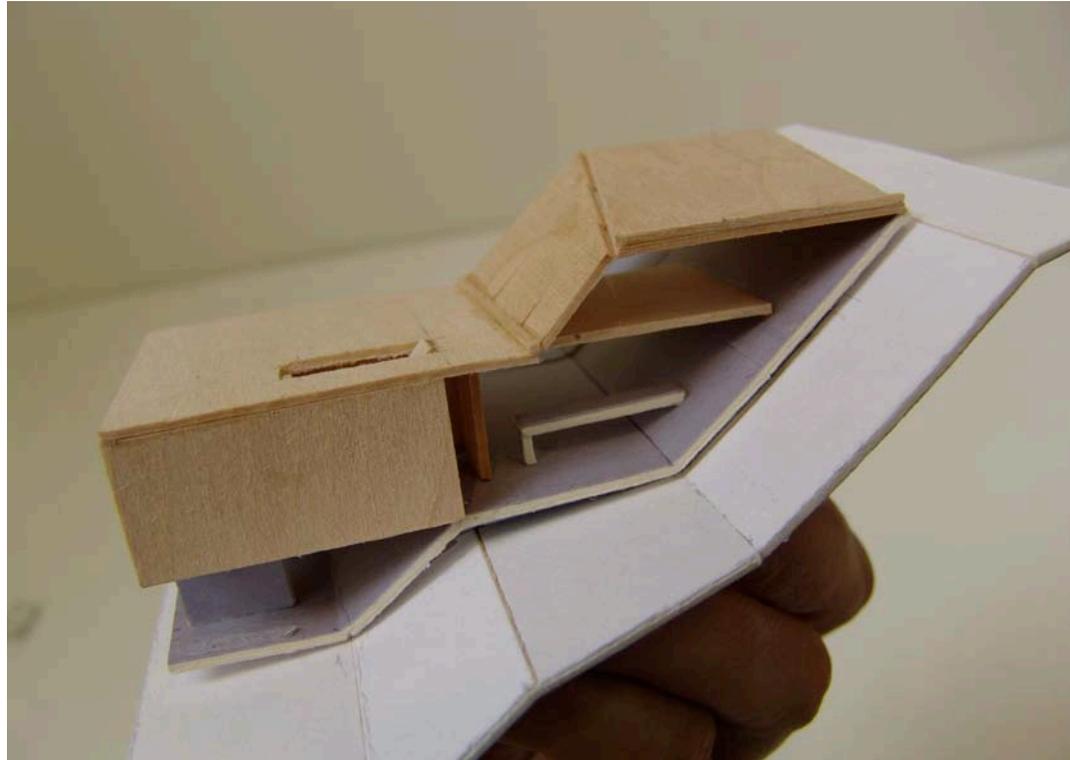
Kegan House

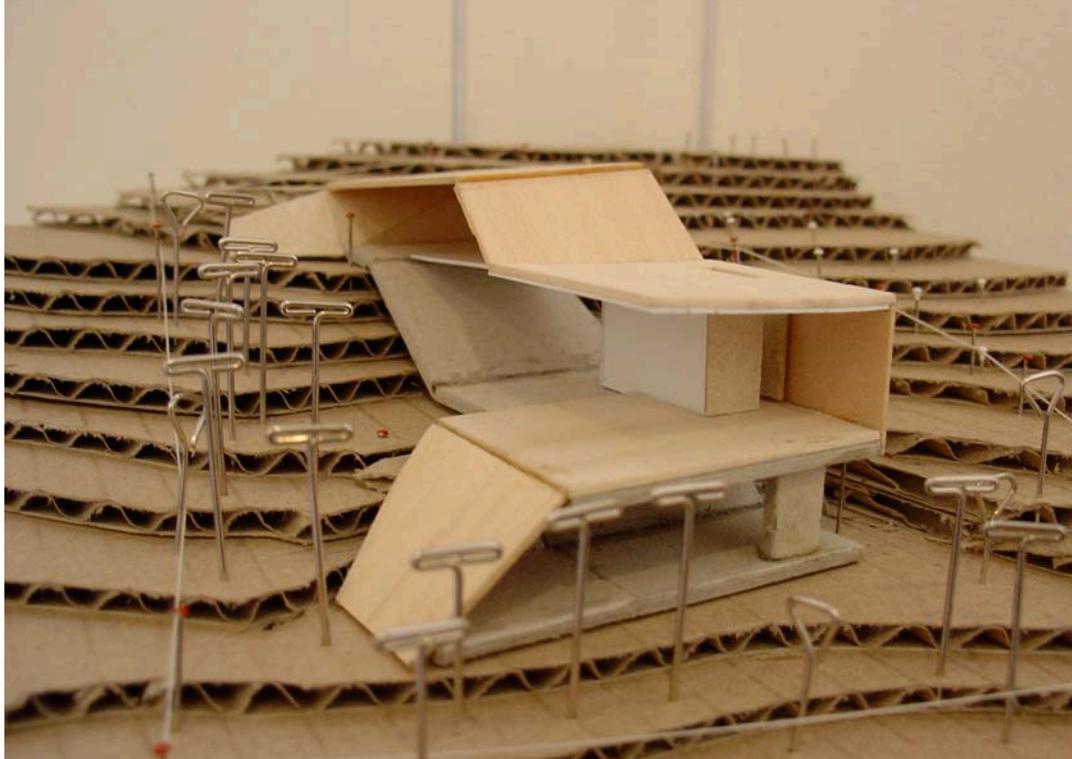
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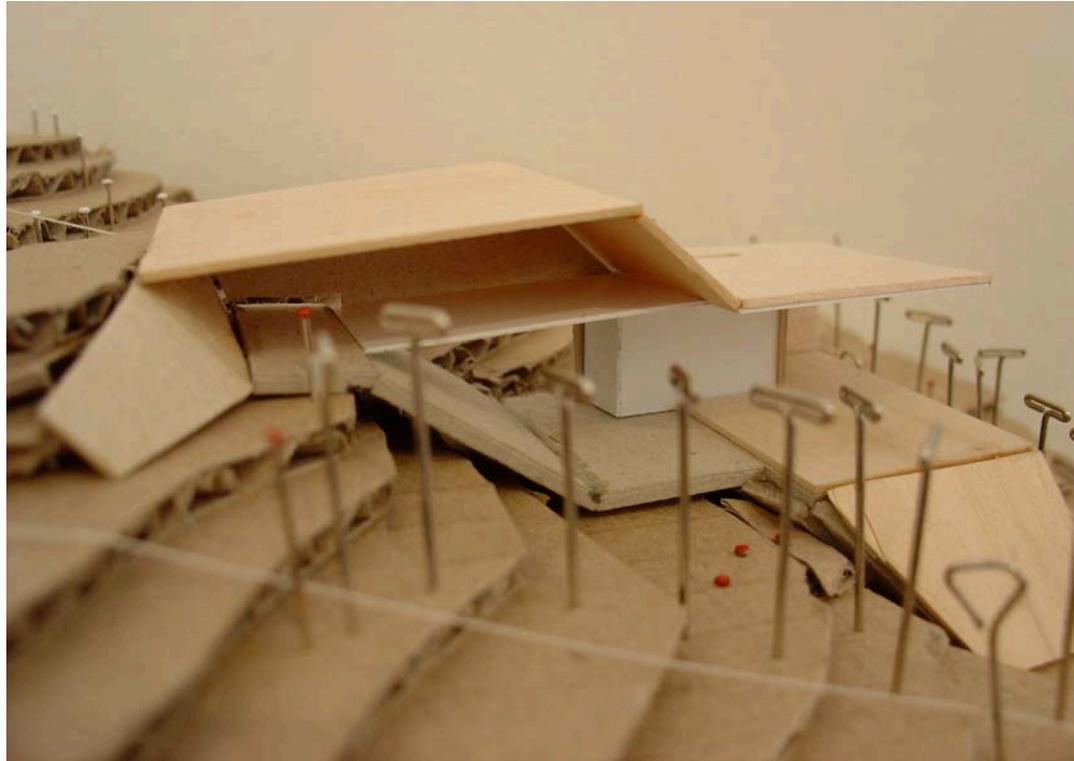
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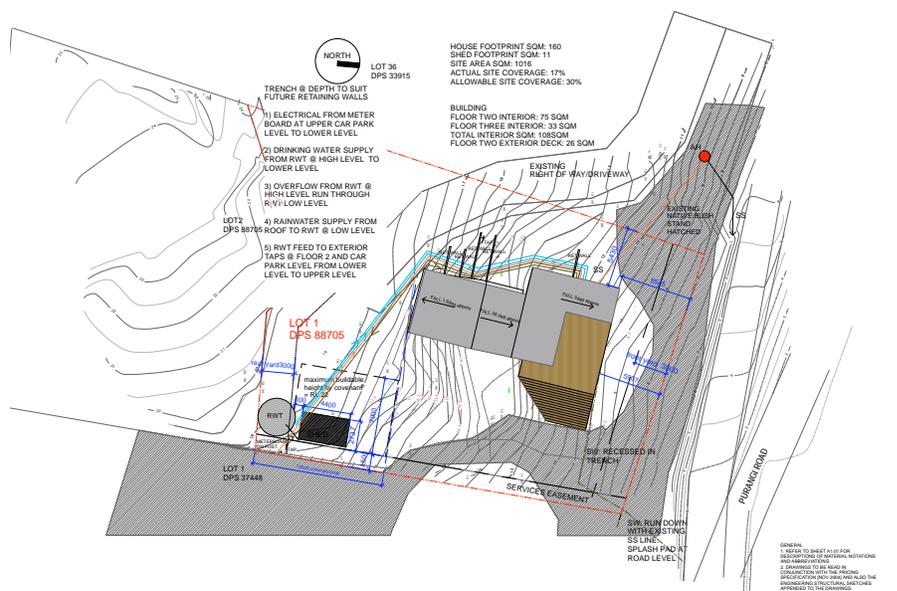
Tokatea











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 ARCHITECTS
 PROJECT DETAILS
 0201: STAIR HOUSE for Chris and David Yates
 1081 Puranga Rd., Pāramiri Bay, Whangārei
 CONSTRUCTION ISSUE
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 1:200 @ A3
 PLAN_site
 1.02

GENERAL:
 1. REFER TO SHEET A1.01 FOR
 RECAPITULATION OF ALL GENERAL NOTATIONS
 AND DIMENSIONS.
 2. CONSULT WITH THE ARCHITECT
 BEFORE ANY WORK IS COMMENCED.
 3. ALL DIMENSIONS ARE TO FACE UNLESS
 OTHERWISE SPECIFIED.
 4. REFER TO THE ARCHITECT FOR THE
 LOCATION OF ALL SERVICES AND THE
 DEPTH OF ALL TRENCHES.
 5. REFER TO THE ARCHITECT FOR THE
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 DEPTH OF ALL TRENCHES.

