

NOMADOLOGY IN ARCHITECTURE

EPHEMERALITY, MOVEMENT AND COLLABORATION

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Declaration:

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CONTENTS

| | |
|----------------------------|-----|
| ACKNOWLEDGEMENTS | iv. |
| LIST OF ILLUSTRATIONS..... | v. |
| ABSTRACT | vi. |

| | |
|--|---|
| INTRODUCTION: CHALLENGING WESTERN ARCHITECTURE | 1 |
|--|---|

Contexts – Nomadism – Nomadology and Nomad Thought – Applications – New interest in Nomadism – Strategies – Diagramming – Ephemerality – Movement – Collaboration

CHAPTER

SECTION I. CONTEXTS

| | |
|--|----|
| 1. DIAGRAMMING ARCHITECTURE | 21 |
| Diagrammatic Distinctions Between Verticality and Horizontality in Architecture – Diagramming in Recent Architectural Thought – Architects Using Diagrams – Rhizome – Epigenesis – The Primitive Hut – Fire as diagrammatic architectural agent and tool – Diagramming Performance | |
| 2. MOVEMENT AND ARCHITECTURE | 40 |
| Chora and Genius Locomotionis – Static versus Moving – Military architecture | |

SECTION II. APPLICATIONS

| | |
|--|-----|
| 3. TENTS AND COLLAPSIBLE ARCHITECTURE | 50 |
| Tent literature prior to the 1990's– Contemporary Literature about Tents – Tent as Symbol – Tent as Structure – Applications of Tents – Nineteenth Century Military use of Tents – New Developments in Tent Literature | |
| 4. BEDOUIN NOMADOLOGY AND ARCHITECTURE | 77 |
| Arabs, the Archetypal Nomads – Western Constructions of 'Arab' and 'Nomad' – The Black Tent – Mobility – Gender – Variations of the Bedouin tent – Politics of Space in Arab Culture | |
| 5. NOMADIC RESISTANCE | 102 |
| Strategies of Occupying Contested Space – White Invasion of Australia – The Meaning of the Tent Embassy – Architecture for Reconciliation | |

SECTION III. STRATEGIES

| | |
|---|-----|
| 6. ARCHITECTURE AS PERIPATETIC PRACTICE | 118 |
| Peripatetic Practices – Interpretive City-Walking Diagrams – Ephemerality – Movement – Possibilities for Peripatetic Practice – Activism and Agency – Machines and Latent Desire – Collaboration – Collaboration, Collectivity, Choreography – Peripatetic Reconciliation | |

| | |
|-------------------|-----|
| WORKS CITED | 139 |
|-------------------|-----|

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ILLUSTRATIONS

| Figure | Page |
|--|------|
| 1. Drawing of 'Tortoises' from the Stürzenacker's edition of Vitruvius..... | 6 |
| 2. Main Nomadic Peoples by Region | 10 |
| 3. Torvald Faegre's drawing of a Bedouin dwelling floor plan | 27 |
| 4. The two pages devoted to Nomadic Architecture in Bernard Rudofsky's exhibition catalogue for Architecture Without Architects..... | 51 |
| 5. Commanche Lodge..... | 77 |
| 6. The Sibley Tent | 78 |
| 7. Construction of the 'oriental' Black Tent type, left – without cross band; and occidental type, right – with cross band. | 92 |
| 8. Drawing of plan and section of a Bedouin Tent..... | 94 |
| 9. Floor Plans, Two Pole and Three Pole Mutair Bedouin tents | 95 |
| 10. Bedouin Tent Layout | 96 |
| 11. Zemmour Tent Layout | 97 |
| 12. Beni Mguild Tent Layout | 97 |
| 13. Djebel Amour Tent Layout | 98 |
| 14. Moor Tent Layout..... | 99 |
| 15. Kurd Tent Layout | 100 |
| 16. Baluchi Tent Layout | 100 |
| 17. Tibetan Tent Layout | 101 |
| 18. Construction of a Tuareg Mat Tent. | 103 |
| 19. T-ridgepole frame Tuareg Skin Tent | 106 |
| 20. Teda Tent Layout..... | 104 |
| 21. The beginnings of the Aboriginal Tent Embassy at Provisional Parliament House, Canberra, 1972 - as an umbrella, four activists and some placards..... | 113 |
| 22. Afghan Refugee Camp | 130 |
| 23. Healing Walk Redfern, Sydney 27 September | 136 |
| 24. Gabra Women erecting an armature tent..... | 146 |

ABSTRACT

This thesis investigates the theoretical and practical importance of nomadic ways of life for architecture. *Nomadology* is a construction of Deleuze and Guattari's 'counter-philosophy', challenging authenticity and propriety, in this case, in the context of architecture. This thesis describes how *nomadology* may serve contemporary architectural practice and criticism; challenging static, permanent, and heroically solitary ways of working and dwelling. *Nomadology in architecture* proposes ways for thinking and working temporally, dynamically, and collaboratively. The thesis suggests strategies – diagramming, ephemerality, movement, and collaboration – as ways of reconciling nomadism and architecture.

The 'Contexts' section of this thesis surveys Western and global contexts of understanding nomads and nomadology, and how these pertain to architecture. Western conceptions of architecture have inhibited the study of nomadology in architecture. A case is made for challenging biases in Western views of architecture, for critically employing the ideas of the diagram and the rhizome in architectural criticism, and for recognising the role of movement.

The 'Applications' section shows, through practical examples, that the potential of nomadology is latent in spatial and environmental practices of architectural production and architectural criticism. This section of the thesis identifies the significance of nomads as users and exponents of architecture, despite their frequent exclusion from architectural history. Tent architecture, practices of nomadic resistance and Bedouin life practices are considered as key examples.

The 'Strategies' section suggests ways of applying principles of nomadology. This final section expands on the potential for 'peripatetic' practices of architecture. Processes of reconciling settled and nomadic tendencies in architectural projects are outlined. Strategies are described by which engendering and collaborating may be the means for creating architecture. The continuing research into, and interpretation of *nomadology in architecture* are proposed as a basis for critical theorisation and reflective practice of architecture.

INTRODUCTION

CHALLENGING WESTERN ARCHITECTURE

There is a pressing need to challenge a certain cultural bias in Western architecture and theories of architecture. In the context of the increasing globalisation of architectural cultures, an imperative to challenge Western sedentary bias arises from the need to reaffirm the value of diversity in architectural cultures. Traditionally, nomadic cultures have been strongly affected by capitalist western culture through increasingly 'Western' globalisation. However, global culture also adopts and deploys nomadic strategies in the West. The present thesis proposes ways of approaching reconciliation of these divergent cultures that still articulate and promote the benefits of cultural difference. The conflict between increasingly globalised Western architectural cultures, and the often invisible and marginalised architectural cultures of non-Western and traditionally nomadic societies, suggests that cultural difference that might fruitfully be much better addressed by architecture in the future.

Theoretical and ideological challenges to sedentary or 'state' architecture have long been rallied from Western intellectuals outside the professional circle of architects. Such criticisms challenge the state apparatus, positing the idea that mechanisms of sedentary architecture are monuments of contemporary culture.

In the latter part of the twentieth century in particular, these social criticisms became more widespread and accessible through mass electronic communications. The nineteen sixties emerged as a decade of popular ideological revolutions in Western culture and concomitant developments in globalisation of culture. The sixties were notable also for *avant-garde* Western architectural projects emerging from these concerns. Constant Nieuwenhuys' *New Babylon* (1956-74), and Cedric Price's *Potteries Thinkbelt* (1964) are examples of architectural projects that challenged the static and sedentary tendencies of architecture from within the European

architectural discipline. Ephemeral, pneumatic and collapsible architecture of the time was a visible part of social and political activist movements. However, the seeds for these architectures had already been sown in the beginnings of modernism. In thinking about the Western and European city at the beginning of the twentieth century, as seen in the work of Walter Benjamin and Oswald Spengler, a discussion around the 'flaneur' began to emerge in increasingly internationalised Western urbanism as a symbol of a new democratic architecture.¹

After the first and second world wars in the twentieth century, a broader understanding of nomads and architectural nomadology emerged. Diagrammatic architectural strategies – movement in architecture, ephemeral architecture, and the importance of collaboration in architecture all re-entered the debate and regained significance.

This introductory chapter gives an account of the main lines of argument of the three sections of the thesis; in contexts, applications and strategies.

¹ Francesco Dal Co describes the *flaneur* (after Oswald Spengler) as a civilised nomad hunting for and gathering ideas in the metropolis at beginnings of modernity. Francesco Dal Co, *Figures of Architecture and Thought : German Architecture Culture, 1880-1920* (New York: Rizzoli, 1990), 13-69.

In Australian English, the *flâneur* (French) is defined as an idler or loafer. G. A. Wilkes and W. A. Krebs, *Collins English Dictionary*, 4th Australian ed. (Glasgow: HarperCollins, 1998), 585.

Contexts

The contexts for challenging sedentarism in architecture and for considering nomadology in this thesis pertain to both the theory and the practice of architecture. The professional practices of architects have become increasingly scrutinised and commercially contested in the twentieth century. In Australia, for example, the regulation of the societal role and 'brand' identity of architects has been investigated by the Productivity Commission in a federal governmental inquiry.² In the Western world, by the middle of the twentieth century, architects had become regarded as specialists in the business of building with military-industrial capital. This thesis suggests that architects in the Western world had therefore developed a strong vested interest in sedentary settlement.

However, architects can more broadly provide leadership to societies in the development of liveable environments, whether fixed, permanent and solitary, or portable, temporary, and communal. This thesis argues that the possibilities of the latter have often been neglected, and that this imbalance may be acknowledged and rectified. It is argued here that architects may become more socially engaged by constructing environments strategically.

The *Ten Books* of Vitruvius, a work that is usually regarded as the earliest Western work of architectural theory, touches on concepts of portability, temporality and collaboration as some of the key ways of thinking about and making architecture. In inventing some of the first buildings, according to Vitruvius, humans modelled them on the way swallows built their nests.³ Elements of motion are critical to Vitruvius' writing on the use of water, hoisting machines, and the machines of defence such as the 'tortoise'.⁴ For Vitruvius, portable and temporal elements were clearly part of architecture. However, in the subsequent two millennia of Western history, these

² Productivity Commission, "Review of Legislation Regulating the Architectural Profession," (Canberra: Productivity Commission, 2000).

³ Pollio Vitruvius and Morris Hicky Morgan, *Vitruvius: The Ten Books on Architecture* (New York: Dover Publications, 1960), 38.

⁴ Tortoise in Chapter XIV *ibid*, 311- 315

concepts appear to have become less significant. They have been neglected by architects, or relegated to the specialist military and engineering disciplines.

Western architecture has become largely concerned with sedentary life. This preoccupation has both ecological and communication implications. The domination by humans of natural landscapes they occupy forms part of a defensive attitude to civilisation as 'settlement'. The communication of architectural knowledge as a hierarchical, finite and universal set suggests a permanent and static phenomenon. Architectural theory appears to have been generated by the invention of printing and type.⁵ Printed information in the fifteenth century also became available on a previously unprecedented scale, while the Internet or world-wide-web has done this on a wider scale still within the technological Western elite. History has traditionally been constructed in a linear way, and this thesis argues that there has too often been a tendency to employ conceptions of architectural history as linear or 'arboric' in such big picture overviews of architecture as Patrick Nuttgens' *The Story of Architecture*.⁶ This linear view suggests chronologically progressing from 'primitive and nomadic' towards an 'advanced' state of 'settled civilisation'. One-way directional linear concepts of the progress in architecture and history are significant. There is a danger this may be used as a justification for changing the physical natural environment, which has contributed to extensive displacement of nomads. The sedentary bias, it may be suggested, contributed to the construction and fortification of a profession of architects during the last century. The sedentary bias sets up an exclusive culture of permanent, static and heroically individualistic buildings as the sole 'civilised' works of architecture.

Vitruvius' designs for the 'tortoise' – an architectural machine designed to penetrate fortifications – clearly set out to challenge to the permanence of static architecture. (See Figure 1) The type has often been emulated in military engineering, but seems to have been largely neglected by

⁵ Mario Carpo's argument on this subject was recently published in: Mario Carpo *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory* (Cambridge: MIT Press, 2001).

⁶ Patrick Nuttgens, *The Story of Architecture*, 2nd. ed. ed. (Oxford: Phaidon, 1997).

architects.⁷ There is some resemblance between the mobile tortoise and the automobile, (not to mention military armoured combat vehicles) which were invented almost 2000 years later, following the animal-drawn chariot. The automobile in the twentieth century became one of the most critical influences in contemporary developed cities. Vitruvius, in the last words of his *Ten Books on Architecture*, dismisses the power of nomadic machines over sedentary architecture in his time. He writes; "not by machines, but by the opposition to the principle of machines has the freedom of states been preserved by the cunning of architects".⁸ Vitruvius dismisses the potential power of the machine in relation to the defensibility of architecture; a proposition that this thesis revisits.

In the present age of intelligent machines, September 11, 2001 saw the diabolical strategic victory of an ideological machine⁹ over an indefensible sedentary establishment. This theoretical context of a perennial conflict of nomadic and sedentary is further explored in the context section, and reflected upon in the concluding chapter.

⁷ Manuel de Landa's work on Intelligent Machines Manuel De Landa, *War in the Age of Intelligent Machines* (New York: Zone Books, 1991). and Jesse Reiser and Jason Payne's work on diagrams of aircraft and combat Jesse and Payne Reiser, Jason, "Chum: Computation in a Computer Saturated Milieu," *Kenchiku Bunka* 53, no. 619 (1998). are examples of work addressing the potential of strategic machines.

⁸ Vitruvius and Morgan, *Vitruvius: The Ten Books on Architecture*, 318.

⁹ The machine referred to here is in the ideological sense of a civilian guerilla movement, (the accused Al-Qaeda network), coopting a machine in the literal sense – the hijacked civilian commuter aircraft.



Fig. 1. Drawing of 'Tortoises' from the Tenth Book of Vitruvius.¹⁰

This thesis suggests that, to a greater degree than ever before in the 'developed' and 'developing' parts of the world, dwelling environments will require greater architectural attention and consideration, and their conception may have quite the opposite characteristics to those of sedentary peoples described above. Increasingly, dwelling environments will be premised upon being temporary, dynamic, portable and collaboratively produced.

The thesis considers the tendency to consider architects as specialists in a society, the opposite of nomads, as generalists and opportunists. The collaborative aspect in architecture is complex, yet significant for understanding architecture as process rather than material outcomes. This thesis argues the need for a space for collaboration between architects, designers and others. It suggests the common misconception about architects as soloists derives from a diminution of the scope of the activity of environmental design as patrons and users of architects' services understand it.

Architects and designers, as often promoted in traditional Western circles, are often characterised

as part of a demographic in the capitalist developed world as autonomous heroic white males. The architect as 'Fountainhead', as he is portrayed in Ayn Rand's novel¹¹ represents a stereotype of the modern architect as young, strong, male and 'white'¹². Hence, the challenge presented to the Western tradition by Labelle Prussin's work *African Nomadic Architecture* has three important politically radical dimensions. Prussin shows that vernacular practices of so-called 'primitive' black people are significant as architecture—embodying aesthetics of dwelling. Secondly, the true architects are primarily women builders and 'home-makers'. Thirdly, African nomadic structures are not monumental or permanent.¹³ In the Western institutions, as Francesca Hughes has noted, "the absence of women from the profession of architecture remains, despite the various theories, very slow to change and very difficult to explain."¹⁴

The long-standing Western bias in thinking about architecture, which the academy has reinforced with its increasing orientation toward industry, has led to a global bias among state powers toward sedentary forms of dwellings and settlement. As Hugh Brody has noted in his extensive anthropological studies, the settled peoples of the world have forced hunter-gatherer societies into the margins of the world.¹⁵ Rene Guenon's philosophical observations on the 'solidification' of the world also highlight the problematic nature of sedentary dominance over nomadic societies.¹⁶ However, the sedentary bias and its effects of subjugation need to be challenged, exposing ways in which architecture might articulate ecological and social issues. There are important reasons to

¹⁰ (*bearbeitet und herausgegeben von Erich Stuerzenacker*) Marcus Vitruvius Pollio, *Ueber Die Baukunst*, Bauwerksdienstaussgabe ed., 1 vols., vol. 1 (Essen: Bildgut Verlag Essen, 1938), n.p.

¹¹ Ayn Rand, *The Fountainhead* (Cassel, 1953).

¹² Richard Dyer writes about the international 'race' of 'whites'. Whites must be seen to be white, yet whiteness as race resides in invisible properties and whiteness as power is maintained by being unseen. Richard Dyer, *White* (London; New York: Routledge, 1997), 45.

¹³ Labelle Prussin, *African Nomadic Architecture : Space, Place, and Gender* (Washington: Smithsonian Institution Press : National Museum of African Art, 1995).

¹⁴ Francesca (ed) Hughes, *The Architect; Reconstructing Her Practice* (London: MIT Press, 1996), x.

¹⁵ Hugh Brody, *The Other Side of Eden; Hunter Gatherers, Farmers and the Shaping of the World* (London: Faber and Faber, 2001).

¹⁶ René Guénon and Lord Northbourne, *The Reign of Quantity and the Signs of the Times* (London: Luzac, 1953).

defend cultural difference, and to resist state attempts to force assimilation into Western sedentarism. Understanding difference will acknowledge and help liberate the role of architecture.

In the context of what is identified as a sedentary bias, the thesis considers some of the meanings of nomads and architecture in the chapter on diagrams, and why the tension between these opposing concepts provides a useful framework for the challenge to Western architecture.

Ephemerality and movement, key features of nomadism and nomadic architecture— which challenge sedentary views— are introduced as the basis for a set of concerns which runs through the thesis.

In order to approach issues of time and movement, in the chapter on movement, the thesis addresses the concept of mapping space as a ‘performative’ humanistic activity. The potentials of human movement and ephemerality to unsettle are considered in the central part of this thesis.

The important roles of counter-cultures as activist forms of challenge to Western architecture are highlighted. Activism in architecture and literatures of nomadology provides the background for the later chapter and concluding remarks on performative agency.

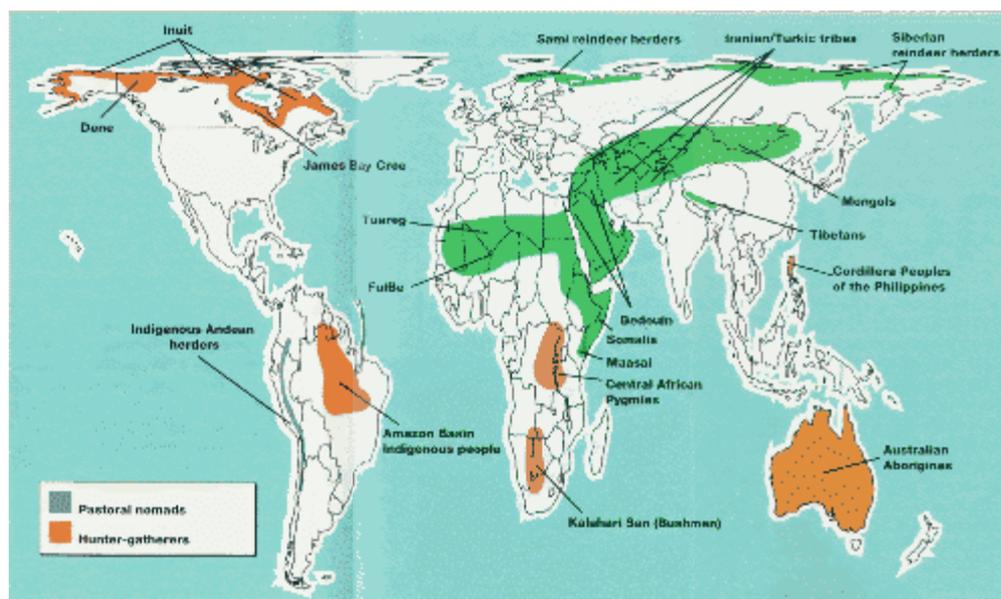
Nomadism

The mythology of the nomad has been created and maintained largely by sedentary peoples.¹⁷ It is necessary at the outset to distinguish between sedentary and 'unsettled' peoples, in terms of the anthropological and philosophical dimensions of such a distinction. Hugh Brody's *The Other Side of Eden* articulates the difference between nomads and sedentary people through the spread of Christianity and the history of interpretations of the Bible¹⁸. The alignment of ‘settlement’ with ‘civilisation’ has been developed historically, and settled is regarded as more advanced or evolved than nomadic life. The connection has been a major justification for repressing, relocating, or re-educating nomadic and hunter-gatherer societies.

¹⁷ Khaldun Ibn and Franz Rosenthal, *The Muqaddimah: An Introduction to History*, 2nd ed. (London: Routledge & K. Paul in association with Secker and Warburg, 1967).

¹⁸ Brody, *The Other Side of Eden; Hunter Gatherers, Farmers and the Shaping of the World*.

Based on research by UNESCO, The *Commission on Nomadic Peoples*, by Khazanov and others, *New Internationalist* magazine in 1995 produced a facts sheet on Nomads as part of a themed issue on this topic.¹⁹ Three main groups of nomads were identified; pastoralists, hunter-gatherers and travelling workers. There were then estimated to be 30 to 40 million pastoral nomads in the world, moving with their households in search of pasture for their animals. Populations of hunter-gatherer groups such as Inuit, Kalahari San, Amazonian and Australian indigenous peoples are difficult to quantify, as they are difficult to 'capture' using organs such as Census surveys. Their particular 'nomadisms' are characterised performatively by their movement based on hunting or gathering food, rather than racial or biological characteristics. The third group, sometimes known generically as travellers, is the Roma, Gypsies or other travelling and seasonal workers, who are neither hunter-gathers nor pastoralists. While the Roma or Gypsies are supposed to have travelled from North India to Europe about 1000 years ago, elements of these cultures are spread globally today. The groups of nomads are indicated in the global map of main nomadic peoples. While the first two are identifiable, the *Roma* or *Rom* are too widely spread to register as a figure on the mappable zones.



¹⁹ Wayne Ellwood, "Nomads," *New Internationalist*, no. 266 (1995): 18-19.

Fig. 2. Main Nomadic Peoples by Region²⁰

While traditional pastoral nomads and hunter-gathers may still be mapped approximately as shown, other travellers, such as Roma or Gypsies are extremely dispersed and can no longer be precisely mapped.²¹

Nomadology and Nomad Thought

The term *nomadology* was apparently coined in translation from Deleuze and Guattari's French term *nomadologie*.²² Their later work *A Thousand Plateaus* is described by the translator in the introduction as an exercise in the positive, affirmative thought that came from Anti-Oedipus.²³

Nomadism can also be usefully understood from a philosophical perspective. Deleuze used the term "*nomad thought*" in relation to the process in the philosophical work of F.W. Nietzsche, describing Nietzsche's way of thinking outside and across institutional boundaries, as decodification and recodification of thought. For example, Deleuze calls Nietzsche's thought a "machine of war— a battering ram— a nomadic force."²⁴

Like state philosophy, nomad thought goes by many names. Spinoza called it "ethics". Nietzsche called it "the gay science". Artaud called it "crowned anarchy". To Maurice Blanchot, it is the "space of literature". To Foucault, "outside thought".²⁵

Besides nomad thought, an apparently slippery construct, this thesis will be concerned, rather, with nomad performance. It is important to critically consider the problem of defining nomads,

²⁰ Ibid.

²¹ Terrorist attacks in 2001 have added further paradox to the world understanding of surveillance and of mapping people. There was an apparent but frustrated belief, following the September 11 attacks in America, that in a search for ideology and a bookable perpetrator behind global terrorism, retaliatory violence can be focused on a specific location, for example, the labyrinthine Tora Bora Caves near Kandahar in Afghanistan.

²² Gilles Deleuze and Félix Guattari, *Anti-Oedipus : Capitalism and Schizophrenia* (New York: Viking Press, 1977), 181.

²³ Brian Massumi in Gilles Deleuze and Félix Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1987), xi.

²⁴ David B. Allison, *The New Nietzsche : Contemporary Styles of Interpretation*, 1st MIT Press pbk. ed. (Cambridge, Mass: MIT Press, 1985), 149.

who are often considered in a broad sense loosely as 'outsiders' or 'others' – those who are unfamiliar to settled Western peoples. The thesis sets out to do this by means of an outline of literature. The Western concept of architecture in the literature– as an intellectual and spiritual culture distinguishable from pragmatic building – was barely taking hold in the antipodes at the beginning of the twentieth century. Until the nineteen twenties in most states of Australia, and as late as the -fifties and -sixties in the territories, there was no regulation or qualification required for architects²⁶. Meanwhile, in Europe, the social role of architecture was changing drastically with the effects of the industrial revolution. Georges Bataille's 1929 article on architecture criticised it as a restrictive cultural edifice. He described architecture as a structure that "smothers social life under a stone monument."²⁷

In this protest against the complicity of architecture with industrialism and capitalism, the idea of liberating architecture from its role as a structure for reinforcing sedentary hierarchies is challenged. Bataille understood the storming of the Bastille as a revolt of the masses against the civic monument.²⁸

This idea has existed well beyond the last centuries in the Western world. The applications section to follow considers some of the ancient and primordial challenges to sedentary architecture posed by the tent. A set of strategies is extracted which the thesis suggests will be of value to reconciling local and global practice in architecture today.

²⁵ Massumi in Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*, xiii.

²⁶ A legal 'state' definition of architects in Western Australia was established only in 1929, with the act of parliament entitled 'Architects'. Like similar acts in all states and territories in Australia, it has been challenged by the Productivity Commissions 2000 *Review of legislation Regulating the Architectural Profession*. Productivity Commission, "Review of Legislation Regulating the Architectural Profession."

²⁷ Denis Hollier, *Against Architecture: The Writings of Georges Bataille* (Cambridge, Mass: MIT Press, 1989), 46.

²⁸ *Ibid.*, x-xi.

Applications

Case studies of three examples illustrating nomadology in architecture comprise the 'Applications' section of the thesis. These are tents, nomadic resistance and Bedouin nomadology. The examples address the inference that orderly structure is a suffocating imposition on a free and liberal society. The primary critiques of 'architecture' as a structure raised by French intellectuals in the 1960s were philosophical and social.²⁹ As Hollier has noted, throughout the sixties, etymology was called upon to make a connection between structuralism and architecture through the Latin verb *struere* (construct). "The student uprising of 1968 has often been described as a revolt against the structuralist establishment."³⁰ Resonances of parallel resistance began to appear also in the antipodes, for example with Black power or indigenous rights, as it is further discussed in the chapter on nomadic resistance, which follows. Again in the present turn of the century, the hierarchical and linear structures are being subverted by the rhizome and the Internet model of reality, which is suggesting an endless interconnected network.

The movement called "*architecture autre*", for example, was an "omnibus term for a range of architectural ideas of the 1960s including Biomorphism, ad *hocism*, bowellism."³¹ In the nineteen nineties, it is widely argued in ecological, anthropological and avant garde architecture circles, that there is a need to re-balance Western conceptions of studying architecture with "other" viewpoints.³²

²⁹ Marc Dessauce, ed., *The Inflatable Moment: Pneumatics and Protest in '68* (New York: Princeton Architectural Press, 1999), 7.

³⁰ Hollier, *Against Architecture: The Writings of Georges Bataille*, ix.

³¹ Alan Bullock and Oliver Stallybrass, *The Fontana Dictionary of Modern Thought* (London: Collins, 1977), 48-49. The European movement toward "Other architecture" was ostensibly inspired by new uses of materials, but its proponents must have been aware of a resurgence of interest in "other" cultures and "primitive" architecture as seen in Bernard Rudofsky's 1964 MOMA exhibition "Architecture without architects". See also Simon Sadler, *The Situationist City* (Cambridge Mass.: MIT Press, 1998).

³² The idea of cross cultural education as a process rather than a product or a curriculum is discussed in Stanislaus Fung, "Crossings, Cultures, Histories and Architectures," *Ideas Notes Book (Institut Perakabentuk Dalam Malaysia, IPDM)* 1, no. 1 (1994).

New Interest in Nomadism

Accompanying deeply altered views of the world, as evident in strategies and diagrams of architects work at the beginning of the twenty-first century, there has been a revived interest in the model of nomadism as it relates to architecture. Vilém Flusser suggested in 1990 that nomadology – as a way of thinking about the then approaching turn of the century – marked one of the main revolutions of developed societies in history. In an essay *Zelt*, ('Tent') Flusser suggested a return of developed society to nomadism through communications, a movement that he regarded as being of similar global significance to that of the original agricultural revolution.³³

This thesis suggests that nomadism and nomadology can be connected to the strong movements associated with ecology and environmental awareness today.³⁴ Interest in human connections with nature, through 'deep ecology' as a lived bodily experience, following the more empirical scientific perspective of ecology, has revived interest in low energy, low impact and ephemeral dwelling. In the Western capitalist world these movements may be seen as a reaction to the achievements of materialism and capitalist architecture in state power structures and institutions.

In the beginnings of architectural modernism in Europe in the early Twentieth Century, nomadism assumed an ideological importance, symbolically associated with freedom and democracy.

Popular interest in nomadism underwent a revival in the nineteen sixties, coinciding with the space race and increased international travel and communication. The 'architecture' of the world wars was challenged by liberated, democratic society and the hierarchical, vertical organisations of institutional authority were similarly challenged. In 1999 the Architectural League of New York held an exhibition entitled "*The Inflatable Moment: pneumatics and protest in '68.*" The exhibition suggested that there may be a contemporary movement interested in finding the contemporary relevance of the sixties' activism in challenging architecture. The Utopie Group in

³³ Vilém Flusser, "Nomaden," in *Auf, Und, Davon; Eine Nomadologie Der Neunziger Jahre*, ed. Horst Gerhard Haberl, Krause Werner and Strasser, Peter (Graz, Styria, Austria: Droschl for Steirische Herbst, 1990).

1968 described two possible approaches available to architecture students: "to *avoid* architecture - perceived as a bourgeois formalist occupation – or to be *against* architecture – the image and agent of social inertia."³⁵ Recent research suggests that in the context of the early twenty-first century, with developments in globalisation and cyberspace, these interests are being revived.³⁶ Tents and nomadic architecture have, on many occasions, been regarded by sedentary peoples as unpredictable or unsettling. As architectures, these have become symbolic of cultures and peoples who seem incalculable, chaotic and hence unpredictable. Unpredictability, ephemerality, unexpected or sudden movement, and 'tribalism' – groups of people working together – all have an unsettling effect on settled peoples. Nomadology has become a tool of political and architectural resistance, by providing methods for deconstruction – challenging established control. Nomadic architecture has played a significant role in this challenge, being dynamically portable, adaptable, temporary and conducted by numbers of kin or tribe.

In the antipodean context, and for Australia in particular, nomadology provides a rich set of potentials for thinking about architecture. Stephen Muecke, for example, has been a proponent of this thinking in Australian cultural studies, especially in *Reading the Country*.³⁷ As Muecke et al. have written, of the ideas of Deleuze and Guattari applied to the concept of nomadology;

For (*Deleuze and Guattari*), nomadology is the study of nomadism, (nomadism being more than just a way of life of a people) and it is a philosophy which has been developed in recent years, by scholars looking for ways to contest the Greco-Roman philosophical traditions which have grown up with advanced Western capitalism and continue to be its support. So it is more

³⁴ The connection of ecological nomadism in the *Wandervogel-bewegung*, a conservative German 'boy-scout' movement of the 1930s, with environmental fascism is an area which requires further investigation, as the work of Karl Wittfogel suggests. <http://www.fh-lueneburg.de/u1/gym03/homepage/chronik/wittfogl/wittfogl.htm>

³⁵ Dessauce, ed., *The Inflatable Moment: Pneumatics and Protest in '68*, 7.

³⁶ Catherine de Zegher, and Wigley, Mark, *The Activist Drawing: Retracing Situationist Architectures from Constant's New Babylon to Beyond* (Cambridge, Mass: MIT Press, 2001).

³⁷ Krim 1952- Benterrak, Stephen Muecke, 1951- , and Paddy Roe, 1912-, *Reading the Country : Introduction to Nomadology / Krim Benterrak, Stephen Muecke, Paddy Roe; with Ray Keogh, Butcher Joe (Nangan), E.M. Lohe* (Fremantle, W.A.: Fremantle Arts Centre Press, 1996), 173.

than a way of designating the 'behaviour' of a 'people', i.e. as nomadic as opposed to agricultural or sedentary-type peoples. These are the anthropological definitions of nomadism, ones that see nomadism as being a kind of second nature to a whole group of people. As long as whole races or communities can be designated or defined as being *of a certain sort*, then the grounds for racism remain intact."

The proposed counter-strategy is to "call nomadism a practice and a knowledge, potentially present in relation to any event, potentially effective in relation to any struggle for survival".³⁸

Thus the relation of nomadology to architecture, as this thesis extrapolates, is that architecture can be a similarly responsive culture, using timing, movement and collaboration to respond to extant environments.

Nomadology refers to the study of 'ways' of thinking and living as nomads. The most authoritative and 'original' use of the term is probably that in Gilles Deleuze and Felix Guattari's work, *Mille Plateaux: Capitalisme et Schizophrénie*, where they use 'nomadologie' to suggest "the opposite of a history".³⁹ The thought process of the nomad underlies the work of an unrelated group of philosophers who relate critically to the complicity of official philosophy with the state. "The critique of negativity, the cultivation of joy, the hatred of interiority, the exteriority of forces and relations, and the denunciation of power" are the forces Deleuze describes at work in *A Thousand Plateaus*, which may be applied in everyday life.⁴⁰ Nomadology is not usually associated with architecture. Rather, it might be considered as the antithesis of the institutions of 'civilised' architecture. Nomadology can be understood as a shifting critique of a sedentary

³⁸ Ibid., 241.

³⁹ Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*, 23.

⁴⁰ Lucretius, Hume, Spinoza, Bergson and Nietzsche are examples. The description is from the rear cover, Deleuze & Guattari 1987

position often implicit in Western (occidental) architecture, a system that might be connected to what Deleuze calls an Oedipal system.⁴¹

Deleuze and Guattari published *Anti-Oedipus: capitalism and schizophrenia* as a guide to modern life- the translator's foreword calls it a user's manual for the anti-fascist life. As a protest against all forms of fascism and control, the book has been declared as a handbook for the activist. The influence of the thinking of this book is widely manifested in new readings of practices of 'nomadology' in the West and non-West– practices that connect the sixties and the present through activism. Situationist and activist idealism proposes architecture as a nomadic response to a physical and social situation.

With the publication of recent re-examinations of situationist architecture such as de Zegher and Wigley's *Activist Drawing*⁴² the gap between architecture and activism in the sixties and the present has been closed somewhat. This and other new reviews of *New Babylon* are bringing new attention to previously neglected material. Constant Nieuwenhuys' work effectively reflects the invention of the World Wide Web in the project *New Babylon* (1956-74). The project is diagrammatic of a free and interwoven 'nomadic' space without hierarchy. It is horizontal in operation rather than vertically organised.

In the Middle East, where the Bedouin and the settled people have played out a perennial but arguably co-dependent social opposition, a notable advocate of nomadology emerged in the fourteenth century. *The Muqaddimah: an introduction to History* may be seen as an indigenous account of the background to the complementary opposition of nomads and sedentary people. Although the work has only been available in English since the nineteen fifties, it presents for Western readers an account of nomadic and sedentary life patterns in the Arab world as it is discussed in more detail in chapter 4 to follow. The historian Ibn Khaldun describes the sedentary

⁴¹ Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*.

⁴² de Zegher, Catherine and Wigley, Mark (editors) *The Activist Drawing: Retracing Situationist architectures from Constant's New Babylon to beyond* Cambridge, Mass: MIT Press 2001, also Sadler, Simon, and AD special Issue *New Babylonians* Ian Borden, ed.

bias deriving from the different values of Bedouins and settled people. Nomadism is a relative tendency, and as Ibn Khaldun has noted in *The Muqaddimah*, people naturally tend to oscillate between settled and nomadic life.⁴³

Strategies

Four key strategies are extrapolated in this thesis to propose ways of practising nomadology in architecture. Diagramming is a means of conveying performativity of architecture, and ephemerality, movement and collaboration are reviewed with respect to the interpretation and deployment of architecture. Nomadic value systems have played an important role on the fringes of mainstream societies in the critique and challenge to Western sedentary societies. Challenges to Western systems of architecture are presented by temporal nomadism, spatial nomadism (movement), along with the collaborative and shared experience of making spaces.

Diagramming

The diagram is a visual representation of the way something works, rather than how it looks. It is an abstraction and a reduction of something. It is a mode of notation, but also a model of thought, and in this sense, nomadic architecture can be understood to share certain abstract qualities with the diagram. For designers, the diagram constitutes a form of visual thinking – a ‘thought-image’.⁴⁴

Ephemerality

The contingency of architecture upon variable and negotiable time frames is addressed in practice in the conclusion. Architecture’s perceived relevance, in particular to ‘users’ who are not architects, appears and fades away, dependent upon the user or beholder to find architecture within the environment. Traditions of ephemeral architecture encompasses a wide range of marginal yet

⁴³ Ibn and Rosenthal, *The Muqaddimah: An Introduction to History*.

⁴⁴ Like Bijlsma, Dean Wouter, and Udo Garritsman, "Diagram," *OASE* 48 (1998): 1.

culturally substantial structures, environments, and scales, from traditional single women's windbreaks of Central Australia⁴⁵ to touring concert sets for pop music supergroups like U2.⁴⁶ Ephemeral architectural phenomena are discussed in this thesis in order to distinguish architectural values in the differences between permanent architecture incorporating movement, and moving or perpetually re-constructed environments.

Movement

Movement in architecture has been employed consciously in Western cultures – as it has by non-Western cultures – in articulating social and physical change within architectural environments, often expressed through dynamic objects and rituals. Movement, privacy and enclosure have assumed various new architectural roles in the context of changing communications technology since the late nineteen eighties, as the changing cultural meanings of architecture and place have changed in the internet-affected Western world.

Movement and ephemerality are elusive qualities of architecture that are difficult to represent materially, so that pragmatic issues of mapping become important. Such concerns have been a fascination of many architects in the second half of the twentieth century and have required applied lateral thinking to facilitate the task of mapping. Important proponents were the architects associated with the International Situationist movement.⁴⁷ Mapping provides the evidence of activity and performance of humans and technology tracing the environment and its manipulations. These tracings continue to provide potentially very rich material for architectural research.

⁴⁵ The Yunta (as the single women's windbreaks are called) of the Warlbiri are the subject of a PhD thesis in architecture; Cathy Keys, "Unearthing Ethno-Architectural Types," *Transition*, no. 54 (1997).

⁴⁶ Robert Kronenburg, *Portable Architecture, Architectural Press New Technology Series* (Oxford, Boston: Architectural Press, 1996).

⁴⁷ See Sadler, *The Situationist City* and also de Zegher, *The Activist Drawing: Retracing Situationist Architectures from Constant's New Babylon to Beyond*.

Collaboration

An example of late twentieth century developments in changing theory about architectural space in the context of Western world communications and globalisation is found in Vilém Flusser's work in the 1980s and early 1990s. Flusser identified new difficulties in the visualisation and perception of distinctions between public and private. He notes that public and private are increasingly confused in the context of ubiquitous contemporary communications. Vilém Flusser was a notable commentator on the Western implications of nomadology, in particular in central Europe, until his untimely death in 1990. Opening a conference on Nomadology as part of the cultural festival of a major European Arts Festival, the Styrian Autumn, in 1990, Flusser referred to the context of the reconciliation of Eastern and Western Europe through the then recent demise of the Iron Curtain. Flusser presented some challenges to elements of architecture of the Western developed world, such as the tent and the screen, prompted by new thinking about communications. Flusser posited the suggestion that in the changing world of communications and the globalised environment, with the transparency of private life, the invasion of the public into the private would lead to a form of cultural 'homelessness'.⁴⁸

For groups marginal to the settled Western world, challenge is imperative for physical and spiritual survival. Besides this, *avant gardes* challenge Western architecture voluntarily from within. It is a valuable intellectual by-product of developed societies that a surplus of ethical and critical effort remains in reserve for challenging the complexes of sedentary states, which although they are made to appear permanent and invincible, are also merely complex social constructions. The introduction has set out to suggest that this process of challenge may in fact be internal to the process of architecture.

⁴⁸ Vilém Flusser, "Nomaden, Zelte," *Auf, Und, Davon: Eine Nomadologie der Neunziger Jahre*. 2 (1990).

Radical thinking about nomads and nomadology has had an understandably mixed reception from Western establishment. Yet in some institutions, the challenge to Western culture and architecture suggested by nomads has been fostered.

Architecturally considered, Hakim Bey's concept of the *T.A.Z* suggests a process rather than a canon or exemplar. Bey writes, "What we like about Palaeolithic life has been summed up by the Peoples-Without-Authority School of anthropology: the elegant laziness of hunter/gatherer society, the 2-hour workday, the obsession with art, dance, poetry & amorousness, the "democratization of shamanism," the cultivation of perception--in short, culture."⁴⁹ The extension of these ways of thinking about ephemerality, movement and collaboration into architectural criticism and practice is the aim of this thesis.

Architecture today need no longer be considered as a monument which smothers social life, as Bataille considered in his 1929 essay.⁵⁰ The notion that architecture is a means of controlling and incarcerating people in solitary and inflexible permanent structures should be challenged in today's networked and fluid societies. Tendencies for oppression through architecture must be challenged, and to be effective, resistance must remain alive and regenerative through collaboration. The challenge itself against the sedentary, static and hierarchical side of architecture is what makes it critical. This thesis takes up such a challenge by examining ways to challenge the settled, inanimate and the static in architecture through movement, ephemerality and processes of collaboration.

⁴⁹ Hakim Bey, *The Temporary Autonomous Zone; Ontological Anarchy, Poetic Terrorism* (New York (Brooklyn): Autonomedia, 1991). also available: <http://www.t0.or.at/hakimbey/taz/taz2b.htm>

⁵⁰ Hollier, *Against Architecture: The Writings of Georges Bataille*, 46.

CHAPTER 1

DIAGRAMMING ARCHITECTURE

Diagrammatic thinking, for the purposes of this thesis, is regarded as an abstract strategy that connects architecture to its agency. A set of ideas abstractly associated with the diagram in architecture can be considered as tools that may be used strategically for thinking and making architecture. The present chapter considers the diagram as a device for thinking about and making architecture, in order to provide a context for examples applied to nomadology in the applications section in the middle of the thesis. Nomadology can be understood to play a role in architecture that is primarily functional and strategic rather than pictorial and visual. Hence most of the architectural elements and ideas explored in the thesis are concerned with strategy, and conveyed by architectural diagrams. The diagram provides a means of showing connections between disparate phenomena, as a basic architectural gesture. The diagram is of central importance in the practice of architecture as a system that reconciles opposites – for example; public and private, male and female, interior and exterior. The diagram is unlike a drawing; it is not an ideal picture, but a working tool, one which can make connections and which can organise and maintain different types of information, including those varying in time, in a set of graphic configurations. Diagrams act as embodiments of neutrality and essence, ostensibly eschewing the charisma and atmosphere of phenomenal architectural artefacts.

Studying diagrams, from the structuralist work of the nineteen fifties to the recent interpretations of critics such as R.E. Somol and Anthony Vidler opens ways of reading processes and artefacts of architecture which challenge many of the conventions and theories of Western architecture, by understanding architecture as ephemeral event contingent upon space and collaboration.

Diagrammatic Distinctions Between Verticality and Horizontality in Architecture

Diagramming offers a critical basis for re-thinking fundamental relationships between architecture and dwelling. Diagramming vertical and horizontal is an example. Horizontality may be associated with nature and femininity, while verticality tends to be traditionally associated with the erect and the artificial. Adolf Loos famously associated the horizontal line in art with the feminine and the prostrate landscape, contrasting this with the erect vertical mark of the artist 'violating' the horizontal with the intrusion of the vertical.⁵¹

Western architecture has often relied on a vertical, gravitational hierarchy of elements; foundation, wall, roof. The firm and permanent basis is established as a foundation before building. Load bearing walls bear on foundations or footings, the roof structure bears vertically on those in compression. By this reckoning architecture is often associated therefore with structures that are assertively permanent, static, and vertical, such as in the tradition of Gothic cathedrals and towers, which soar heavenward, more theomorphic than anthropomorphic, conceived as remaining for eternity. Rather than being prostrate or horizontal, the idealised great works of Western architecture are conspicuous artificially constructed 'erections'. By exercising physical or symbolic command over territory, verticality often symbolises domination of human will over nature. The vertical approach to architecture symbolises bold intrusion into what are considered unoccupied environments. Erecting a flag or staking a land claim are powerfully symbolic examples of vertical symbolism in ostensibly initiating territoriality, something Western architecture has often reiterated through Colonial history. The will to dominate nature has often led to a Western conceptualisation of architecture as largely a vertical phenomenon.

⁵¹ With his characteristic dry irony, Adolf Loos argued that the horizontal in art was the significant symbol of the feminine and the vertical of the masculine. "All art is erotic"... "The first ornament ever invented, the cross, was of erotic origin. The first work of art, the first artistic act, which the first artist scrawled on the wall to give his exuberance vent. A horizontal line: the woman. A vertical line: the man penetrating her. The man who created this felt the same creative urge as Beethoven, he was in the same state of exultation in which Beethoven created the Ninth." Ornament and Crime (cited from <http://groups.yahoo.com/group/wittgenstein/files/ornamentandcrime.txt>)

On the other hand, architect and public intellectual of turn of the 20th Century Vienna, Adolf Loos wrote of the symbolism of the horizontal architecture of the tomb as the most essential architectural form. Loos' description of a primordial encounter with a simple grave in the woods emphasises the horizontal; the emotional gravity of architecture is associated with a symbolic human resting place.

"When we come across a mound in the woods, six feet long and three feet wide, heaped up with a spade into a pyramid, then we become serious and something inside us say: here someone lies buried. *That is architecture.*"⁵²

Loos asserts that the tomb and the monument are the only forms of architecture that have anything to do with art. Thus he draws attention to the primordial cultural significance of these respectively horizontal and vertical forms of artifice.⁵³ Despite the emphasis on the vertical of such canonical Western architectural thought, it becomes evident, that in considering nomadology and nomadic architecture, the origins of architectural process and constructions in these cases are significantly horizontal. Investigating and interpreting some elements of horizontality in architectural process and artefact can reveal the deeper ecological and sociological meanings. Horizontality is applied as a particular way of thinking about tents, and also reflects a view of how social systems operate horizontally.

Diagrammatically considered, the tent and other nomadic machines are architectural exceptions which challenge these logical foundations of Western architecture.

The tent, for example, operates primarily horizontally in structure and inhabitation with only minimal struts acting vertically to prise some space from the ground plane. The stays and the fabric or vellum of which the tent is made acts obliquely to the ground- tending towards horizontality. Other nomadic machines, the mobile architecture of the caravan, 'rolling stock',

⁵² Paul A. Johnson and Stanley Tigerman, *The Theory of Architecture : Concepts, Themes & Practices* (New York: Van Nostrand Reinhold, 1994), 75.

⁵³ *Ibid.*, 55.

railway carriages (doubling as homes for sleeper tramps, for example - a modern nomadic tribe in the USA⁵⁴) and other dwellings in motion, primarily employ horizontal forces of movement.

⁵⁴ Sleeper tramps are one urban nomadic tribe identified by James Spradley in a paper entitled *Adaptive strategies of urban nomads : the ethnoscience of tramp culture* James Spradley, "Adaptive Strategies of Urban Nomads : The Ethnoscience of Tramp Culture," (1972).

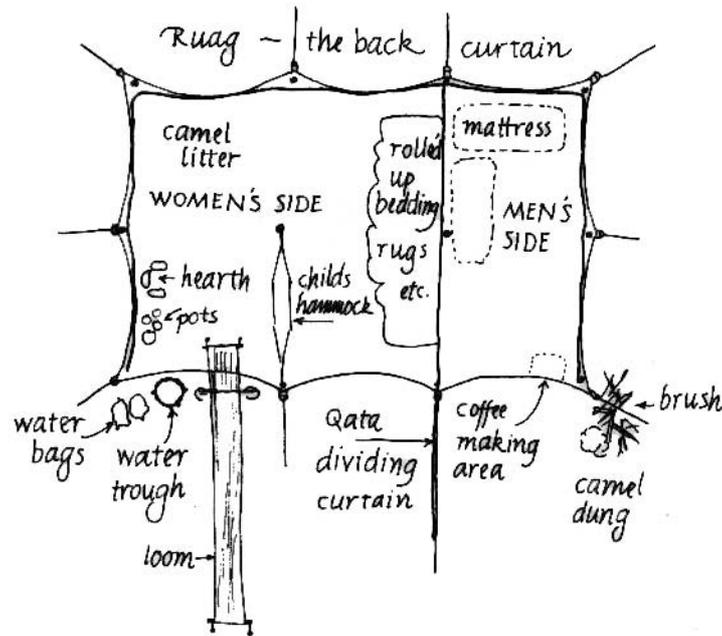


Fig. 3. Torvald Faegre's drawing of a Bedouin dwelling floor plan.⁵⁵

In chapter 3 to follow, tents are illustrated as examples of ephemeral, mobile and collaborative architecture. The way they are diagrammed by anthropologists and experts outside architectural theory such as Torvald Faegre offer something to the study of nomadic architecture. The plan is understood in a new way as a kind of privileged view which equally can be understood as a kind of critical system of living. The elements of the architecture all share these qualities of impermanence and collaboratively established importance.

The diagram of the tent above is essentially a 'lay-out', more like a furniture layout, than an architectural 'plan' *per se*. A diagram depicts a provisional strategy for living, rather than a definitive prescription suggested by a plan. The omniscient or privileged view of the tent plan, more so than in a hut, is completely unlike the actual experience of the tent spaces and the critical separation of the interior of the dwelling. The diagram suggests a detached strategy, while the plan allows the critical division of visual contact between male and female by the Qata – the dividing curtain – to be violated. There is an ambiguity here; where does the 'architecture' begin and end? It seems that the loom, bedding and hearth must all be considered strategically and

⁵⁵ Torvald Faegre, *Tents : Architecture of the Nomads*, Anchor Books ed. (Garden City, N.Y: Anchor Press/Doubleday, 1979), 24.

diagrammatically as part of the architecture. The Qata, for example, is not structural in the load-bearing sense, yet is clearly a critical element of socially structuring the architecture of dwelling – visually separating the occupants by gender. Nomadic architecture applies extensive horizontal thinking, as well employing physical horizontal movement. Many examples of nomadic architecture are formally ‘weak’ and tentative rather than assertive. Architecture is described by theorist Mark Cousins as a weak discipline, one without a self-perpetuating closed discourse, as found in other professional disciplines such as law and medicine, which are constitutively secret.⁵⁶ Rather, architecture is a combination of other knowledges.

With an understanding of both the theoretical and the practical modes of ‘horizontality’ in architecture examined in this section, the principles of diagramming in architecture may now be applied on a broader scale to contemporary architectural thought and practice.

Diagramming in Recent Architectural Thought and Practice

Diagramming in architecture has been the subject of a resurgence of interest in the last few years, as evident in a special issue of the journal *Daidalos* entitled *Diagrammania*⁵⁷, the special issue of Dutch architecture journal *OASE* on Diagrams, and *Architecture New York* magazine’s issue 23 on Diagram Work.

This new interest in diagrams apparently derives from some newly developed understandings of their use and role in architectural process, which have been prompted by Deleuze and Guattari and

⁵⁶ Mark Cousins *Building an Architect* in Hill, ed. *Occupying Architecture* Jonathan (ed) Hill, ed., *Occupying Architecture : Between the Architect and the User* (London ; New York: Routledge, 1998), 14-15. The notion of 'Weak architecture' is developed by Ignasi de Sola Morales in an essay of the same name and by Peter Eisenman. The latter is reviewed in Pallasmaa's *Hapticity and Time* Juhani Pallasmaa, "Hapticity and Time. (Discussion of Haptic, Sensuous Architecture.)," *The Architectural Review* v207, no. i1239 (2000).

⁵⁷ *Diagrammania* issue no. 74, 2000

others.⁵⁸ Theorist Sanford Kwinter notes that Deleuze's main contribution is to identify the diagram with what he calls the "abstract machine".⁵⁹

Deleuze and Guattari's concept of the diagram has been widely interpreted for application in architecture by architects such as Peter Eisenman, Jean Nouvel and Marcos Novak.⁶⁰ Other theoretically engaged practitioners, who have been using and reflecting on diagrams as a tool for thinking about new architecture include Rem Koolhaas, Ben Van Berkel, Greg Lynn and Kazuyo Sejima. . In his *Diagram Diaries*⁶¹, Peter Eisenman presents his own approach to diagrams in architecture, as both a design tool and a heuristic instrument for the analysis of the architects working conditions.⁶² The diagram is used as an 'active' practical armature in the generation of Eisenman's designs, but also as a 'reflective' graphical tool of analysis of functional contexts. Eisenman's approach to diagrams in architecture can be compared to that of Cedric Price. Cedric Price's architectural practice has extended the boundaries of the traditional Western twentieth century discipline. His extensive occupation with temporality, movement, and collaborative processes contribute to what has been described as an "architecture of performance"⁶³

Cedric Price's architectural work is a useful example in using diagrams in a way that develops systems rather than building physical monuments. Price's work is so occupied with logistics of procuring, making, and flexible and portable inhabiting, that the work can be described as strategic. Its pictorial visual imagery is clearly secondary. Price's collaborative practice demonstrates the importance of flexibility, impermanence and collaboration in architecture, as

⁵⁸ Gerrit Confurius, "The Architecture of Architecture: On Peter Eisenman's "Diagram Diaries" (Book Review)," *Daidalos*, no. 74 (2000): 86.

⁵⁹ Sanford Kwinter "The Hammer and the Song" in OASE no 48 1998 p.34

⁶⁰ T Adams, "Diagrams of Interface: Deleuze and Guattari's Legacy to Architects" (Department of Architecture, University of Auckland, New Zealand, 7 December 1996 1996).

⁶¹ Peter Eisenman, *Diagram Diaries* (London: Thames & Hudson, 1999).

⁶² *Ibid.*, 87.

⁶³ Mary Lou Lobsinger, "An Architecture of the Performance," *Daidalos*, no. 74 (2000): 22.

evident in the structure of his 1984 monograph.⁶⁴ Price is an exemplary proponent of diagramming, a process in his work which provides the means of manipulating and processing these concerns with flexibility and impermanence. This set of concerns is significantly similar to many nomadic peoples' concerns in the use of architecture; the size, timeframes and logistics of encampments, functional accessorisation and their collaborative erection and dismantling.

Christopher Alexander, mathematician and architect, appears to invert the idea of the diagram as a strict model of hierarchical rationality when he asserts that a 'City is Not a Tree' through his *Notes on the Synthesis of Form* (1964)⁶⁵, while using diagrams extensively to articulate inter-relationships.⁶⁶ Alexander's suggested approach to applying these patterns was initially popular in the 1970s, in the context of cybernetic logic and structuralist patterning, his work later fell out of favour with architects with the decline of structuralism. The latent theoretical potential of the 'rhizome' as a diagram of a city was not appreciated because of the vertical 'arboric' mathematical logic of Alexander's guide to what he calls "patterns" rather than diagrams. An interactive and organic way of using Alexander's theoretical diagrams and patterns was not developed in the way Cedric Price developed methods through first-hand practice. Alexander's diagrams became regarded as pictorial, perhaps rooted in the many readers' and users' positivist hierarchical thinking, they remained understood as *images* rather than *strategies*,⁶⁷ thus reducing the potential of the theory as a hermeneutic⁶⁸. The longer-established work of Price, Alexander and others can

⁶⁴ Cedric Price, *Works (Ii)* (1984). The sections of Cedric Price's monograph include "time and timing", "action and inaction" "uncertainty and delight in the unknown" and "beneficial change and inevitable ageing".

⁶⁵ Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge,.: Harvard University Press, 1964). See also the Pattern Language website; Online: <http://www.patternlanguage.com> [Accessed November 2002]

⁶⁶ Prof. Dirk Donath, 1998 (Bauhaus University Weimar) notes on Christopher Alexander (German) Online: <http://www.uni-weimar.de/~donath/c-alexander98/ca98-html.htm> [accessed 17.11.02]

⁶⁷ A similar fate seems to have befallen Aldo Van Eyck's student Piet Blom's planning scheme, presented at a meeting of CIAM (Congress Internationale Architecture Moderne) in 1962. The symbol of the snowflake was a poetic symbol of urban multiplicity for Van Eyck and Blom, but opponents at the meeting characterised the repetitive structure as 'fascist' (Dirk van den Heuvel 2000 "The Diagrams of Team 10" p.46-7 in *Daidalos* 74 2000)

⁶⁸ There has been sufficient interest in the debate about "Pattern languages" however, for the Löcker Verlag, Vienna to publish architect Hermann Czech's painstaking 1272 page German translation *Eine Mustersprache* in 1995. Christopher Alexander and Hermann Czech, *Eine Muster-Sprache*, trans. Christopher Alexander ... Hrsg. von Hermann Czech, vol. 1 (Wien: Löcker, 1995).

be compared with contemporary proponents of diagrams such as Kazuyo Sejima, Rem Koolhaas, and Van Berkel and Bos through a reinvestigation of the diagram as a tool for production and discourse. Robert Somol identifies diagrammatic practice as one which "...flow(s) around obstacles, as opposed to the tectonic vision of architecture as the legible sign of construction".⁶⁹ Here, diagramming is clearly a mode of active practice or performance, which can be contrasted with the solid and tectonic as an end product. Toyo Ito is said to have coined the term 'diagram architecture' in describing the work of Kazuyo Sejima. He describes a Sejima building; "...as essentially the equivalent of the kind of spatial diagram used to describe the daily activities for which the building is intended in abstract form"⁷⁰

However, Vidler notes the formal tendency of diagramming, which has clearly digressed from the functionalist origins of diagramming. He writes,

"Despite ... inquiries into what one might term the ratification of the diagram by its transformation into an instrument of materialist aesthetics, there remains the suspicion that the mere building of diagrams does not eliminate completely the utopian cast of the genre. Indeed there has emerged a second 'formal' current of diagramming that distinguishes itself from the more functional tendency.." (as in Eisenman's *Diagram Diaries*)⁷¹

Two currents of diagramming emerge; the functional and the formal.

In Deleuze and Guattari's work on the diagram, reference is made to the concept of the diagram in the semiotics of C.S. Pierce⁷². In linguistic terms, Pierce makes the "diagram" a special case of the icon, the icon of relation. The roles of indexes, icons and symbols are distinguishable as what are described as semiotically 'nomadic', territorialised / deterritorialised roles, rather than linear

⁶⁹ Antony Vidler, "Diagrams of Utopia," *Daidalos*, no. 74 (2000): 10-11.

⁷⁰ *Ibid.*: 10.

⁷¹ *Ibid.*

⁷² Charles Sanders Pierce is the 'true inventor of semiotics', according to Deleuze and Guattari. Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*, 531.

signifier / signified relations. The diagram is also distinct in its own role, irreducible to either icon or symbol.

Tim Adams has suggested that the diagram is Deleuze and Guattari's main legacy which has applications in architecture. Adams claims that the concepts of 'machinic'⁷³ desiring, deterritorialisation and interdisciplinary interference provide "bridges between the speed of philosophy and the slowness of our concrete habitat".⁷⁴ The role of bridging human movement, ephemerality and collaboration is expressed through diagrams, conveying what this thesis calls nomadology in architecture.

Rhizome

Spatial and philosophical dimensions of the rhizome are considered here, in order to introduce some tools related to nomadology in architecture. In this context, the rhizome refers to a lateral system of 'ordering' and networking root systems. Deleuze's radically horizontal thought has been applied to the key Western concepts of understanding settlement or city – especially the key ideas of the taproot, fascicular root and rhizome.⁷⁵ The rhizome is a valuable model in relation to the question of multiplicity. Deleuze's concepts of taproot and fascicular root may be used to describe traditional Western architecture and city planning – monumental and hierarchic. Western architects' work has often contributed to a decrease in multiplicity, yet multiplicity can be seen as critical to an environment's vitality. Thus with the concept of rhizome, a way to create and generate multiplicity can be revealed.

A significant discussion of the (non-)structure of the rhizome is found in Deleuze and Guattari's *A Thousand Plateaus*. The organic botanical structure of the rhizome can be contrasted with the structure of a tree, which is a hierarchical arrangement of larger members dividing symmetrically

⁷³ (sic.) See Ibid., 89.

⁷⁴ Tim Adams, "Diagrams of Interface: Deleuze and Guattari's Legacy to Architects".

into pairs of smaller members, which then divide again in a self-similar way. The arboreal system is vertical and influenced by gravity. The rhizome, on the other hand, distributes itself laterally, with a non-symmetrical arrangement of similar sized members.⁷⁶The horizontal movement of burrowing, caving and inflating pockets of space⁷⁷ incidentally into extant environments- is a spatial strategy that can be contrasted with the vertical strategy of domination by episodic building of new space.

The rhizome, as described and discussed by Deleuze and Guattari, relates as a model structure to both the diagram as a system, and the horizontal as a performative *modus operandi*– the rhizome is effectively a 'diagram of horizontality'. As an illustration of the potential agency of the horizontal, fire will also be examined later in this chapter as an example of an architectural element, which can be understood and used in a horizontal way. The origins and the essence of architecture have been a preoccupation of thinkers and architects in the West since Vitruvius, however in the enlightenment, ideas developed around architecture having its origins in the hut. In many climates it was the attraction of the hut's shelter – its performance of this function which was the focus of understanding, while the hearth was crucial this performance and the relationship of architecture with humanity.

Epigenesis

In the eighteenth century, the architectural theorist and French enlightenment academician, Antoine Chrystosome Quatremere⁷⁸ de Quincy, developed an 'epigenetic' theory of architectural

⁷⁵ See for example Tõnis Kimmel 2002 *Anatomy of Intervention* (Master of Architecture Thesis in Estonian with English Summary) Online: <http://www.artun.ee/~tõnis/ANATOOMIA/> [Accessed 17 Nov 2002]

⁷⁶ Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*.

⁷⁷ Deleuze and Guattari identify the rhizome performatively, not only in the matted underground radicles of tubers and rhizome plants, but in the pack behaviour of rats and their burrows, in all their functions of “shelter, supply, movement, evasion and breakout”. Animalistic rhizome behaviour, conjures the architecture of chaotically interconnected horizontal burrows.

⁷⁸ Actually Quatremère, but spelt without accent and circumflex throughout this text.

origins; consisting of three different typologies or diagrams; the cave, the tent, and the hut.⁷⁹ Each was connected to a different primitive lifestyle: those of hunters, shepherds, and farmers. Of each of these archetypal diagrams, the tent is the most significantly rhizomatic in terms of the present argument. This section reflects upon Quatremere de Quincy's epigenetic theory in order to further develop an understanding of a horizontal rhizome strategy in architecture. Quatremere's model of the tent as a principle type of architecture for nomads, is developed in the study of specific examples to follow in chapter 3 on tents.

In the epigenetic model of Quatremere de Quincy, the tent is contrasted in architectural history with the archetypes of the cave and the hut in order to identify its difference. While the hut and the cave can be associated respectively with primordial phallic and vulvic types, the temporary tent breaks the dichotomy with its characteristics. The tent possesses qualities of both interior and exterior, hard and soft, erect and limp, dark and light.

The notion of architectural types in architectural theory has sustained continual reconsideration over the last few centuries since the enlightenment. The idea of types was already present to some degree much earlier in the opus of Vitruvius in antiquity and in the next work on architecture much later in the fifteenth century, Alberti's *On the Art of Building in Ten Books*. Different life patterns, even if the distinction was as simple as civilised and barbaric, led to corresponding approaches to dwelling and architecture.

Dormant through the Middle Ages, a highlight of the Western theoretical debate was that about the origins of architecture, as it emerged during the enlightenment. Accompanying discoveries of alternative world-views and architectures came the development of the theory of epigenesis of architectural types, led by Quatremere de Quincy. He regarded architecture as the most articulate artistic phenomenon, because, like language, it contributed to the definition, structure and maintenance of society. Sylvia Lavin suggests that Quatremere de Quincy was the first to invent

⁷⁹ Sylvia Lavin, *Quatremere De Quincy and the Invention of a Modern Language of Architecture* (Cambridge, Mass: MIT Press, 1992).

the notion of architectural types, as the fruition of his exploration of origin theory. Tent, Cave, and Hut were identified as the three principal architectural types as part of the background to what Lavin describes as Quatremere's invention of a "Modern Language of Architecture".⁸⁰

Each of these types identified by Quatremere was itself multivalent but involved distinct sorts of material, form and construction. Equally important to the physical conditions were the conditions of social organisation integral to the type of dwelling that would be appropriate to each society.

Quatremere wrote that

"Men were, depending on their various locations, either hunters, gatherers, or farmers...

Hunters or fishermen would have had no need to build any habitation for a long period of time... They would have found it simpler to dig dwellings out of the earth or to take advantage of excavations already prepared by nature... Gatherers, who moved constantly... would have been able to use these dwellings hollowed by the hand of nature. A fixed habitation would have been useless; they needed mobile dwellings that could follow them: from this fact came, in all times, the use of tents.

Agriculture, by contrast, demands a life both active and sedentary. Agriculture must have suggested to men that they build more solid and fixed shelters. The farmer, moreover, living on his field, and what it produces, has provisions to store. The farmer needs a sure, commodious and extensive dwelling. The wooden hut, with its roof, must have arisen quite soon."⁸¹

In *The Art of War*, the fourth century BC treatise on strategy, Sun Tzu noted that war is not a transitory aberration, but a recurrent conscious act and therefore susceptible to rational analysis.⁸²

Yet architecture and warfare – traditionally meaning essentially strategy rather than destruction –

⁸⁰ Ibid., 87.

⁸¹ Ibid., 87-88. (translated from Quatremere, "De l'architecture Egyptienne.." - pp.15-16 ellipses in original.)

⁸² Sun Tzu and Thomas Cleary, *The Art of War*, 1st ed. (Boston [New York]: Shambhala ;

have been separated from one another since architecture became a “pacific profession” by the middle of the seventeenth century, as Paul Hirst has observed.⁸³ The middle of the seventeenth century is also the time that the words architect and architecture were first adopted into the English and German Languages.⁸⁴

The Primitive Hut

In developing his theory of the origins of primitive architecture, Joseph Rykwert's interpretation of the Old Testament of the Bible forms the introduction to his book *Adam's House in Paradise* (1972). The introduction itself demonstrates sedentary bias, in its assumptions about the Garden of Eden.⁸⁵ In the story of Genesis, Adam and Eve were provided with a garden, planted with “every tree that is pleasant to the sight and good for food”. Rykwert notes that Eden was “no forest growing wild”, and because man was to “dress and keep” the garden, this presupposes for Rykwert “an ordered disposition of terraces and plants” whose produce would need to be stored in a house of some sort. Already in what Rykwert hopes to be an “unexceptionable inference”,⁸⁶ some exceptionable assumptions are made about the exclusively agricultural and sedentary origins of architecture, and which are challenged in the course of this thesis with the pastoral and nomadic. Rykwert's reading suggests that the ideal garden was not wild (‘bush’ as we say in Australia), that keeping of the garden inferred it was ordered (and did not include burning it), and

Distributed in the United States by Random House, 1988), 39.

⁸³ Paul Hirst, "The Defense of Places; Fortification as Architecture," *AA files : annals of the Architectural Association School of Architecture (Architectural Association (Great Britain). School of Architecture)* 34, no. Autumn 1997 (1997).

⁸⁴ In the English language, the term was first used by John Shute in his 1563 (Shute and Weaver 1912) according to the OED, and also in German at some time in the sixteenth century . Friedrich Kluge, *Etymologisches Wörterbuch Der Deutschen Sprache* (Berlin: Walter de Gruyter, 1963), 38, J. A. Simpson, E. S. C. Weiner, and Oxford University Press, *The Oxford English Dictionary*, 2nd / ed. (Oxford

Oxford University Press,; Clarendon Press ;

New York ;, 1989), 613.

⁸⁵ Rene Guénon also notes that the biblical account of Adam in the garden of Eden has him “cultivating the garden” as a sedentary activity, rather than a pastoral one. Guénon and Northbourne, *The Reign of Quantity and the Signs of the Times*, 347.

that excess fruit would necessarily be stored. This reading is based on some clearly culturally biased assumptions about climate in the Garden of Eden.

Fire as diagrammatic architectural agent and tool

Fire can be considered as the basis of civilisation, a point for social congregation, which is conducive to the formation of language.⁸⁷ Thus, fire is important as part of any discussion of the core or essence of architecture. Fire can be seen as a diagrammatic element of architectural space, involving a rhizome-like set of relations with an immediate context, and sometimes with an extensive environment. On a small scale, fire uses relations between pyrotechnical elements such as twigs and logs, when kept 'alight' by feeding itself, or being fed.

Fire is a significant example of an active architectural agent, which is central to nomadic cultures, but also to Western settled cultures. For Western architecture, however, it is problematic as an element that is not entirely controllable. Fire is often used as a dynamic focus for dwelling, and often remains contained. Yet fire is sometimes used horizontally in manipulating the environment, as the significant example of firestick farming by Aboriginal Australians demonstrates. It is highly portable today, carried by urban and rural peoples alike, and can be considered as one of few 'commodities' which can be exchanged by strangers without any dilemma over the exchange of monetary value.⁸⁸

Fire is widely recognisable as an element of 'primordial' or 'essential' architecture. It is a horizontal and diagrammatic element that is employed as agent, playing an important role in making or claiming space for human interaction. The essence of social space is clearly conveyed by the example of the campfire. This is a primordial architectural space without permanent

⁸⁶ Joseph Rykwert, *On Adam's House in Paradise : The Idea of the Primitive Hut in Architectural History*, ed. Art Museum of Modern, *The Museum of Modern Art Papers on Architecture* ; 2 (New York: Museum of Modern Art; distributed by New York Graphic Society Greenwich Conn, 1972), 13.

⁸⁷ Johan Goudsblom, *Fire and Civilization* (London: Penguin Books, 1994).

⁸⁸ Goudsblom notes that to ask for fire i.e., "do you have a light" is a legitimate money-free transaction in most societies, as a most basic interaction, even between strangers. This context however assumes a cultural homogeneity unlike the context of transactions between the members of the Captain Cook's First Fleet and the Australian Indigenous.

hierarchy. The consensual space between the gathering of people, and their centre of attention in the animate fire make this a primordial manifestation of civilisation as Johan Goudsblom would have it, and constitutes a primordial form of architectural space. The space of the campfire radiates, whereas shelters and monuments often demarcate boundaries.

The antithetical concept to that of a city as a fortified construction which defines its society physically with an enclosing/protecting boundary wall, is the society defined by its central fire or hearth, a source from whence heat and illumination emanate, radiating with decaying intensity. This smoothness of polar decay from the solitary centre can be distinguished from a striated 'hierarchy' of heat with fixed rooms.

Goudsblom suggests that the domestication of fire was a gradual process, but that “we have no ethnographic description of any society lacking the active use of fire”. Fire in its domestic state has no permanence without human nurturing.⁸⁹ Beyond static, ‘settled’ domestic use in creating a central hearth for dwelling, controlled fire can also be used “dynamically”. For example, large scale bush burning is sometimes employed as a form of ‘farming’ for clearing vegetation, chasing out animals to hunt for food. Nomadic Australian desert aborigines used fire ritually until quite recently to ‘inhabit’ large land areas in central Western Australia. Inhabitation of this vast desert and the awareness of the presence of ‘neighbours’ or cohabitants of the country were manifested by burning practices such as firestick farming.⁹⁰

As a means of grooming the territory, burning the country was a horizontal dwelling or housekeeping - also a sign of occupation for neighbours and acquaintances, a way of chasing and

⁸⁹ Goudsblom, *Fire and Civilization*, 171.

⁹⁰ Peasley 1983 SBS 1997 “The Last of the Nomads”: the documentary shows what is thought to be the last completely traditionally nomadic desert couple in Australia travelling on foot in the central desert, burning off as they travel. They remark on the lack of maintenance of the landscape due to the length of the spinifex grass, which signals to them the decline of the local population.

hunting animals, an effective means of promoting natural regeneration of the Australian bush and for clearing travel routes and killing snakes.⁹¹

In 1829-1830, the first year of 'white settlement' in the more densely vegetated metropolitan area of Perth, however, "fire-stick farming" practiced by the local Nyungar people was regarded as a threat to the property of newly arrived colonial settlers in that area. This traditional form of landscape maintenance and 'nomadic farming' for food animals was perceived as invasive and hence warlike by the settlers.⁹²

People are not primitive, only their technology is primitive, as the anthropologist Marshall Sahlins has argued in *Stone Age Economics*.⁹³ Primordial diagrams of dwelling can be fruitfully studied across many human cultures. Enrico Guidoni's *Primitive Architecture* gives a scholarly evaluation of the architecture of primitive peoples. He suggests primitive peoples, like Aborigines of Australia before colonisation, inhabit the landscape by interpreting rather than manipulating it.⁹⁴ Extending this idea in an article called "The Sustaining Ritual" in *The Architectural Review*, Peter Blundell-Jones puts the view that architecture is present in subtle spatial manipulation and ritual in an aboriginal circumcision ceremony. Blundell-Jones' close spatial reading of Meggitt's 1962 description of a Walbiri circumcision ritual, prominently features fires as spatial references. One of the fires documents the initiate's child life and is extinguished as he completes initiation, reaching adulthood. Clearly the use of fire cannot be seen as primitive, but a tacit form of performative culture, and a ritual with complex meanings.

Of course fire can also be destructive, physically and ritually. Unfriendly fire is used in warfare to mark territory, to debilitate and destroy property, to fragment and to penetrate fortifications. Fire

⁹¹ Josephine Flood, *Archaeology of the Dreamtime : The Story of Prehistoric Australia and Its People*, Rev. ed. (Pymble, N.S.W.: Angus & Robertson, 1995), 250.

⁹² David Lowe, *Forgotten Rebels : Black Australians Who Fought Back*, 1st ed. (Melbourne: Permanent Press, 1995), 17.

⁹³ Marshall Sahlins, *Stone Age Economics* ([London]: Tavistock Pub., 1974). This principle is parodied in the TV cartoon series *The Flintstones* in which most of the familiar American suburban rituals are in place, only with different technologies.

⁹⁴ Enrico Guidoni, *Primitive Architecture, History of World Architecture* (New York: H.N. Abrams, 1978), 21-28.

is a mobile tool, an instrument of the interaction between peoples in war, particularly effective between sedentary and nomadic peoples. War in both eastern and western traditions is a grave concern especially of the sedentary state, as the power structures of cities may be threatened.

Diagramming Performance

Because of the ways they are involved in appropriating, borrowing and giving space ephemeral meaning, dancers and skateboarders can be seen as nomadic users of architectural space, creating space by defining it from within. Jonathan Hill describes these itinerant users of space as illegal architects. These people operate horizontally and opportunistically with a landscape / urbanscape which is provided.

The democratic and participatory design movements in the nineteen sixties precipitated collaborative work such as that of the landscape architect Lawrence Halprin who developed public spaces in a set of complex social processes for engendering and channelling creativity in Urban design. Halprin collaborated with his wife Anna Halprin in human movement workshops in the nineteen sixties and seventies, developing an architecture of participation they describe as RSVP cycles and 'Take Part Processes',⁹⁵ which are also discussed in chapter 6. In the nineteen seventies, Gordon Matta Clarke, with his expositions of domestic space through film, movement and sculpture has inspired a reading of architecture as transient and nomadic.⁹⁶

Diagrams and the horizontal element in architecture provide significant insights into the ways architecture can be interpreted and generated. It is suggested that architecture can be conceived of in a way that is integral to environments, rather than being imposed on them by will. Fire is an effective analogy for understanding this organic view of architecture as a horizontal and diagrammatic agent. One of the important origins of architecture, in virtually all cultures, is the campfire and the camp, with the pitching of tentative constructions like tents; which are

⁹⁵ Lawrence Halprin and Jim Burns, *Taking Part: A Workshop Approach to Collective Creativity* (Cambridge, MIT Press, 1974).

collaboratively produced, portable and impermanent spaces focussed on interior space rather than exterior-focussed permanent monuments, towers, and fortifications. "The tent is a campground made into a semi-permanent object" according to Aaron Betsky.⁹⁷ Controversially, he places the tent at the beginning of culture, a diagram which combines the sense of enclosure and movability. The sense of enclosure is that part of human culture which divorces itself from nature, and in doing so defines itself. The movability is the round, inclusive work of building and re-building, assembling pieces into a flexible order.

The examples of tents, mobile dwellings and other forms of camping and mobile nomadic architecture examined in later chapters of this thesis demonstrate the performative nature and importance of the horizontal, and how it is addressed via the diagrammatic understanding of architecture.

⁹⁶ Charlotte Pöchlhacker, ed., *Film+Arc Graz 2* (Graz: 1995), 151.

⁹⁷ Aaron Betsky, *Building Sex; Men, Women, Architecture and the Construction of Sexuality* (New York: Morrow, 1995), 14.

CHAPTER 2

MOVEMENT AND ARCHITECTURE

Sedentary bias in Western architectural theory leads to the emphasis of architectural criticism upon fixed monuments as architecture, and often obscures the importance of movement as a key constituent part of a humanised approach to architecture. Human movement – motion and emotion – is part of an approach that emphasises the social and sociological elements of architectural 'constructs' as compared to the physical and physiological elements.

Nomadic understandings and practices of architecture provide examples of movement used in architectural strategies of dwelling, from the choreography of cultural rituals of movement to moveable physical constructions that enable nomadic life patterns. Such examples suggest that by learning from nomads, Western practice can be liberated from limitations associated with the narrow view of architecture as static artefact. The Western sedentary bias has meant that, although the moving elements of architecture such as hydraulics, timepieces, construction devices and siege machines were all once considered integral to (Western) architectural practice in the time of Vitruvius⁹⁸, but they have been increasingly de-emphasised or overlooked in the last three centuries. This chapter considers movement and the loss of movement and responses to it.

This thesis previously argued that it is important to challenge the objectification of architecture from a static view: of architecture as 'matter' rather than humanised process and animated perception. Movement has always played an important part in processes and outcomes of architecture, but a renewed interest in the nomadic and the diagrammatic machine has drawn

⁹⁸ Vitruvius and Morgan, *Vitruvius: The Ten Books on Architecture*.

attention of late to the commonplace suppression of, or insensitivity to movement in Western architectural practice.

Nomadic architectural machines such as the tent provide important exceptions to the vertical and static model of reading architecture. The tent works horizontally rather than vertically, as the previous chapter has argued. As the name suggests, its construction is tensile and it is usually significantly horizontal and mobile. Similarly, while they are not treated in depth here, nomadic vehicular architecture – caravans, rolling stock, machines of war, appropriated railway carriages (in their nomadic role as homes⁹⁹) and other nomadic forms – constitute further mobile conceptions of architecture, use forces of horizontal movement strategically. In this thesis, horizontality refers to lateral systems of ordering and networking root systems. Movement provides the potential for human distancing, for flight, and escape.

Chora and Genius Locomotionis

The 'chora' described by the ancient Greeks is a space, often transient, and not necessarily described by walls. Choric space has clearly always been portable, as evident from the description of the space between horse and chariot described as '*Chora*'¹⁰⁰ in Homer's *Iliad*. Even in the confinement of a prison cell, the pacing of the cell by a prisoner critically defines the interior space from its exterior.

Like choreography, architecture is significantly concerned with the movement of people through space. The Western origins of the space of 'Chora' or *Khora*¹⁰¹ in Plato's *Timaeus* – is as something animate and moving – not detached and abstract. It has been noted that architecture is not only comprised of built matter, but is constituted of experience of space by human ritual and

⁹⁹ James Spradley identifies 'sleeper tramps' (railway-car dwellers) as one group among many groups of urban nomads – see page 39. Spradley, "Adaptive Strategies of Urban Nomads: The Ethnoscience of Tramp Culture."

¹⁰⁰ Passage 17.394 of Homer, Indra Kagis McEwen, *Socrates' Ancestor: An Essay on Architectural Beginnings* (Cambridge, Mass.: MIT Press, 1993).

¹⁰¹ The term *Khora* has been revived since Jacques Derrida's discussion of *Khora* in the final essay in Jacques Derrida and Thomas Dutoit, *On the Name, Meridian: Crossing Aesthetics*. (Stanford, Calif.: Stanford University Press, 1995).

interpretation. This idea is extended in David Farrell Krell's philosophical work *Archeticture: Ecstasies of Space Time and the Human Body*.¹⁰² Krell argues for an alternative etymology of the root *tec* in architecture, proposing instead the earlier *tic*. He relates *tec* with *tekton* and technical ordering, the earlier *tic* with *tiktein* and weaving, fathering and engendering through love.¹⁰³

Pastoral life-patterns are called nomadic because of the physical movement of inhabitants through the landscape, and this must also be seen strategically as a manifestation of architecture¹⁰⁴.

Nomad spatial occupations form plateaus or uprisings, 'building' a sense of space through movement. Such inscrutable nomadic understandings of spatial occupation might be approached through the notion of 'genius locomotionis'¹⁰⁵, as developed in the architectural theory studio at Vienna University of Technology and explored in Kari Jormakka's *Flying Dutchmen: Motion in Architecture*.¹⁰⁶ In the concept of *Genius Locomotionis*, Jormakka articulates the relation of observer and observed through relation.

'Genius locomotionis' can be understood as a critique of Christian Norberg-Schultz' definition of Genius Loci, which is in turn based on Martin Heidegger's ideas of belonging. Christian Norberg-Schultz used the term in his book *Genius Loci – Towards a Phenomenology of Architecture*, explaining its meaning as “a place is a space which has a distinct character.”¹⁰⁷

Norberg-Schultz wrote that architecture “means to visualize the genius loci, and the task of the architect is to create meaningful places, whereby he helps man to dwell.”¹⁰⁸ While the

¹⁰² David Farrell Krell, *Archeticture : Ecstasies of Space, Time, and the Human Body* (Albany, NY: State University of New York Press, 1997), 6.

¹⁰³ Jonathan Hill refers to this topic in *Occupying Architecture; between the architect and the user*, Hill, ed., *Occupying Architecture : Between the Architect and the User*. and *The Illegal Architect* Jonathon Hill, *The Illegal Architect* (London: Black Dog Publishing, 1998).

¹⁰⁴ Moving in the landscape and caring for it in the aboriginal Australian tradition may further be understood as what David Farrell Krell calls *archeticture*(sic) – describing a process of making / engendering with love. (Krell 1997)

¹⁰⁵ Architectural Theorist Kari Jormakka's Design Studio “Genius Locomotionis” at Vienna University of Technology Online: <http://www.a-theory.tuwien.ac.at/CONTENTS/ARCHIVE/ArchiveContents/DATGL.html> [accessed 17 November 2002]

¹⁰⁶ Kari Jormakka, *Flying Dutchmen: Motion in Architecture* (Basel: Birkhauser, 2002).

¹⁰⁷ Christian Norberg-Schulz, *Meaning in Western Architecture*, Rev. ed. (London [England]: Studio Vista, 1980), 5.

¹⁰⁸ Ibid.

Heideggerian idea of belonging to place claims to be absolute and objective, 'genius locomotionis' is relativistic and subjective. Genius Lomotionis, it appears, has the potential to appear in any architectural space, but has become more apparent with the present renewed global interest in dwelling in movement.

Static versus Moving

Greg Lynn's book *Animate Form* identifies an "ethics of statics" which, he argues, architects have always maintained in their discipline. Because of a dedication to permanence, architecture has remained one of the last modes of thought based on the idea of the inert. "The desire for timelessness is intimately linked with interests in formal purity and autonomy."¹⁰⁹ Lynn proposes that challenging these inert models of organisation will not threaten the discipline of architecture, but advance it. Animated human movement within spaces, landscapes, territories or environments all increase the intimacy inhabitants experience with an environment. This intimacy may not be considered desirable, depending upon climate, yet the intimacy and the need for protection, as it is frequently noted in architectural research, is clearly not a wholly biological relationship.

Climate mediation and cultural expectations about this mediation are an important part of the architecture-user feedback loop. For users, architecture becomes more tangible through the haptic, by means of movement through architecture. The potential of architecture generated from a dynamic perspective is to produce a fundamentally different architecture. In place of the privileged or arcane architectural views of plan as the generator and the clinical section, the haptic experience of the user is a generator of designs. Taking this idea further into the realm of cybernetic extensions of design process into computer software, there are ways actual design process may be humanised and anthropomorphised. In Greg Lynn's architectural work, design process is aided by hitherto unavailable computational software, generating what he calls 'animate

¹⁰⁹ See also Greg Lynn, *Animate Form* (Princeton Architectural Press, 1999), 9.

form'¹¹⁰. Animated and dynamic architectures, it may be suggested, are more poignant expressions of dwelling styles and life-patterns today, as far as they relate to urban elites.

'Animate' architecture as proposed by Greg Lynn may be contrasted with the static and timeless concepts of inhabitation promoted through the literature and visual representation of architecture in the last few centuries. Mobile elements of architecture indicate an interest in detachment from physical materiality, and attention instead given to the relationships of things and their timely adaptation to situations.¹¹¹ Motion is transformed into architectural meaning by ritual, whether sacred, secular, domestic or civic.¹¹² Human ritual is meaningful cultural / social activity which interacts with form in the built environment as architecture. In the agency of constructed environments, by framing or catalysing aspects of human life patterns, rituals produce an added cultural value of difference of architecture over building.

'Being in the world', at first suggests an existential fixation to physical place, as may be interpreted from Heidegger's essay *Building Dwelling Thinking*¹¹³. 'Becoming', however, is a living interpretive and performative process. Deleuze and Guattari describe the formation of identities as "becomings" such as *becoming-woman* and *becoming-animal*, rather than as monolithic states.¹¹⁴ Dwelling or *wohnen* in Heidegger's oeuvre seems to be subordinated to the sedentary occupation of a *belonging* which is place-based. Critically different to the foregoing sedentary belonging is the understanding of *belonging* as *becoming* where a state of *being* is *contingent*. In the latter case, longing or desire is active.

Movement is often employed in the performance of rituals of belonging. Performatives of nomadic tent dwelling – making, inhabiting, separating, and collecting people – provide the

¹¹⁰ Ibid., 1-43.

¹¹¹ See also Tan, Prof. Milton et. al *Rapid Deployment Architecture* (research and studio teaching project at the National University of Singapore) Online: http://www.arch.nus.edu.sg/SOA/design_studio/rda/ [accessed 17 Nov 02]

¹¹² The observation draws on a discussion with Prof. Kari Jormakka of his 1999 unpublished research paper *Unique Forms of Continuity in Space* (personal communication)

¹¹³ Martin Heidegger, "2. Was Heißt Denken?, Bauen, Wohnen, Denken, Das Ding, "... Dichterisch Wohnet Der Mensch ..."" in *Vorträge Und Aufsätze* (Pfullingen: Neske, 1967).

consistency for maintaining these human cultures and civilisations. The associations Heidegger draws between being and peoples' attachment to physical place resonated with the territorialised notion of '*Blut und Boden*' (Blood and Soil) of National Socialism. *Blut und Boden* inferred that people's 'blood through race' and 'soil of place' conveyed the essence of belonging to place. In the current situation of the world, in processes of architectural globalisation, the defence of territories based on blood and soil appears devoid of the ideas of cultivation and culture. The ostensible lack of cultivation and culture are the reasons for which minorities have often been disadvantaged, and as this thesis argues, power based territoriality – sedentary over nomadic – seems ultimately unsustainable.

As this thesis has begun to suggest, the tent is a structure which is reassuringly familiar for dwelling, yet remains ecologically modest and impermanent. Regardless of geographic place, the tent has a structure that is familiar to the people using it. The familiarity of structures as an indicator of 'home' have been described in many ways besides fixed buildings. For example, Roland Barthes described his work spaces in the city and the country in a similar way, indicating the meaning of structuralism.

"Another Argo; I have two work spaces, one in Paris, one in the country. Between them there is no common object, for nothing is ever carried back and forth.. Yet these sites are identical. Why? Because the arrangement of tools (paper, pens, desks, clocks, calendars) is the same; it is the structure of the space that constitutes its identity. This private phenomenon would suffice to shed some light on structuralism; the system prevails over the very being of objects."¹¹⁵

Likewise, it may be considered that the familiarity of arranged objects in the tent provides its homeliness. In this sense, homeliness is made more complex than physical shelter. Rather, it is related to the idea of the psychologically familiar. The situation of things in a diagram – a

¹¹⁴ Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*, 250.

¹¹⁵ Roland Barthes, *Roland Barthes* (London: Macmillan, 1977).

constellation of relations of objects – provides the familiarity that constitutes home, independently of the changing location of site.

Nomads and their moving ways of dwelling are addressed in this thesis in order to enable a balanced view, moving and non-moving, of the potential usefulness of architecture in the contemporary world. In the history of movement and architecture, Vitruvius recognised the construction of timepieces as one of his 'departments of architecture'. He also placed a strong emphasis on movement, through hydraulic and construction and destruction machines, as part of his treatise on architecture.

Vitruvius' Book 10 expands upon many of the contemporary practices of the architect in making strategic machines. The descriptions of architecture in terms of vehicles and machines seems markedly different to today's capitalist idea of Western architecture's cultural aims being static and pacific, as captured in the view that architecture is necessarily settled. Many of the moving machines of Vitruvius are for carrying water and assisting with construction on the building site, but some, such as the "Tortoise" are for the purpose of destroying buildings — that is, for deconstruction. Here, the rôle and the work of the architect shifts from that of fort-builder to that of strategist, initiating demolition as well as new construction.

Military architecture

Vitruvius' tenth and final book of his opus *De Architectura Libri Decem* is often regarded as having very modest aspirations, compared with the other nine, and its significance seems to have

been understated.¹¹⁶ However, Book 10 might be re-thought as the crowning conclusion of the ten books, expounding the essentially strategic nature of architectural thought.¹¹⁷

Book 10 is dedicated to machines: construction machines, hoisting machines, climbing machines, water raising machines and siege machines. The last of the ten books, probably for the reason that it was tenth in sequence, was the last to be translated into English. The English translation was only prepared some time after the death of Vitruvius' major twentieth century interpreter Morris Hickey Morgan, who is known for the remaining translation. In Stuerzenacker's 1938 "Public Building Service edition", the tenth book is regarded as of minor importance and summarised to a minimum length.¹¹⁸ The tenth book is exceptional in its content as well as its fate.

Vitruvius clearly saw fit to include machines as an integral part of his treatise on architecture. His concern appears to be that the architect should be concerned with a responsibility for all stages of procurement and indeed demolition of buildings. Military and engineering concerns appear to have been integral to the society of Vitruvius' time and to architects' work. Here, machines are expressions of human ingenuity as well as devices for assisting construction, are an integral part of architecture, which involves consideration of many kinds of accommodation used for various purposes.

It is intriguing that the tenth book treats explicitly the elements of motion in relation to architecture, while the preceding nine chapters are generally characterised by an assumed stasis. In her analysis of Vitruvius' Book Ten, Catherine Ingraham argues that an architecture-of-stasis

¹¹⁶ The popularly known translation of Vitruvius' by Morris Hickey Morgan was missing the last four chapters of the tenth book at the time of the translator's death. Stuerzenacker's 1938 German-language translation edition, with its illustrations of fascist architecture, has been considered to have inspired Nazi architects, and as Chapter 10 curiously is all but omitted from this version, it suggests that it was considered of little contemporary relevance. Marcus Pollio Vitruv and Erich Stürzenacker, *Ueber Die Baukunst*, 1 vols., vol. Bauwerksdienst-ausgabe (Essen: Bildgut-Verlag, 1938), Vitruvius and Morgan, *Vitruvius: The Ten Books on Architecture*.

¹¹⁷ This argument is mounted in Catherine Ingraham's 1992 essay "Architecture, Lament and Power" Catherine Ingraham, "Architecture, Lament and Power," *Journal of Philosophy and the Visual Arts: Architecture, Space, Painting* (1992).

¹¹⁸ Vitruv and Stürzenacker, *Ueber Die Baukunst*. (Bauwerksdienstausgabe)

harbours a “lament” for an architecture-of-motion. In the context, the lament appears to represent an unrequited or unachievable desire for movement.

Contemporary concern with movement is driven by the increasing use of, and dependency upon, travel and movement, despite the technologies being developed in the Western world to communicate 'virtually'. Business in the globalised economy of the West is dependent upon travel and movement over distances, which involve the use of energy and resources. In places which are distant from other cities, like Perth Western Australia, this means difference is created by a great potential for movement over distance.

In Deleuze and Guattari's scheme of the contemporary world, everything is moving. While life is traditionally viewed by architects within a frame of the Cartesian scheme of phenomena, composed of distinct objects arranged in space, Deleuze and Guattari propose instead a dynamic view of life that emphasises 'becomings', and the fluxes and flows of which all things are made. Everything that exists is involved in the dynamic flow of life, which is always in movement.

The mythical notion that architecture acts only in the role of benign defence, acting to 'settle' but not to 'incarcerate', is attributable to a paternalistic or Oedipal myth¹¹⁹. The myth holds that permanently imposed architecture is innocent of any violent intent. Paul Hirst's 1997 essay on the *Defence of Places*¹²⁰ suggests architects are concerned primarily with sedentary fixedness in (Cartesian) space. They are generally interested in the static rather than a continuing dynamic of movement and renegotiation of boundaries which is the 'reality' of political and cyber-space today. The thought and action of architecture as part of the new world of the cauldron of *becoming*, rather than a repository of *being* is effectively expressed through the Gabra women's' architecture of the Sahara, in the collaborative making of both structure and shelter, in Prussin's

¹¹⁹ Deleuze and Guattari's *Anti-Oedipus* (1972) offers a critique of school-building tendencies - the critique of the patriarchal institutional sedentary family structure, where (after the Oedipus myth) the son usurps the father, unwittingly to dominate the matriarch.

¹²⁰ Hirst, "The Defense of Places; Fortification as Architecture," 6.

analysis in African Nomadic Architecture.¹²¹ Equally, this *becoming* is reflected in the itinerant architecture of the circus, as a collapsible architecture for a mobile society, and in the Bedouin tent which is discussed at length in chapter 4.

Movement in architecture challenges the ways architecture can be interpreted and generated in a way which is integral to environments. Movement is a natural tendency that may be fostered in order to operate – and be an agent of – architectural becoming.

¹²¹ Prussin, *African Nomadic Architecture : Space, Place, and Gender*.

CHAPTER 3

TENTS AND COLLAPSIBLE ARCHITECTURE

This chapter considers in outline the influence of tents in history and their significance for nomadology, conscious of the bias of the literature and the Western perspective of much of the documentation. Of particular interest in the context of this thesis are the texts on nomadic architecture available in Australia, where this thesis is written, because some point of difference might be established between Australia and the northern hemisphere, from whence many of the relevant works originate. Many of the works have been published since the 1960s, identifying something of a renaissance of interest. Together, these texts establish a significant impression of the late twentieth century significance of tents as a form of nomadic dwelling architecture.

A number of important concerns arise from this literature survey. The Western industrial cultures' emphasis on physical structure sometimes obscures the architectural-cultural significance of the inhabitation and continuing reconstruction of the tent,¹²² in particular its importance as nomadic architecture which is based on impermanence, mobility, sexuality /gender and ritual. Another concern which arises is the centralist and sedentary tendency in the German-language literature of tents as nomadic dwellings. This bias follows a tradition of architectural science, which rationally classifies subtle variations of form. Investigative scholarship of such primitive building forms may be studied as part of a University architectural education, but the topic is apparently too academic for any but the established European universities.

¹²² The word 'tent' as a rule is not capitalised in this thesis, so as not to compromise its 'minor' status, as marginal or of the "other".

In the process of conducting this literature review, the following historical developments in the literature of tents were identified.

Tent Literature prior to the 1990's

This section is concerned with the main features of the stock of literature available. Before the nineteen sixties, Western literature about tents as architecture was limited. Some of the key historic works on tents from earlier periods include Godfrey Rhodes' *Tents and Tent Life from the Earliest Ages to the Present Time* (1858)¹²³, the ethnographic work of Alois Musil¹²⁴ and M.F. von Oppenheim¹²⁵ in the early twentieth century, and Gustav Feilberg's important work *Le Tente Noire* of 1944¹²⁶. Labelle Prussin has examined the field as part of her work on nomadic architecture, identifying many of the works of significance in the western world.¹²⁷ The key mid-century scholarly text on the indigenous tent is C.G. Feilberg's 1944 ethnographic study *La Tente Noire*, which surpasses other sources in scope and depth. Although ostensibly focussed upon the Black Tent of the Middle East, the work places this type or set of types in a broad context. Frei Otto followed this ethnographic work with his more explicitly architectural German language doctoral dissertation *Das Hängende Dach*, of 1954. Frei Otto's work has a constructional emphasis in a Germanic sense of material tectonics (which is compared with alternatives below),

¹²³ Godfrey Rhodes 1858 *Tents and Tent Life from the Earliest Ages to the Present Time* (London: Smith, Elder and Company) Unfortunately I have not yet been able to view this work, which is available on microfilm at the Australian National Library in Canberra.

¹²⁴ Alois Musil 1928 *The Manners and Customs of the Rwala Bedouins* (New York) cited in Faegre 1979

¹²⁵ M.F. von Oppenheim 1938 *Die Beduinen* in E. Braunlicht and W. Caskel *Die Beduinen Stämme in Mesopotamien Und Syrien* (Leipzig) cited in Drew 1979

¹²⁶ Tente Noire (The Black Tent) Feilberg, *La Tente Noire: Contribution Ethnographique a L'histoire Culturelle Des Nomades* (1944).

¹²⁷ Labelle Prussin's survey of tent literature notes Jacques Bidault and Pierre Giraud 1946 *l'Homme et la Tente* (Paris: J. Susse) as one of the major works on the subject. Also Drew's *Tensile Architecture* (Philip Drew, *Tensile Architecture* (Boulder, Colo: Westview Press, 1979).) is regarded by Prussin as one of the major historical survey works. Prussin, *African Nomadic Architecture : Space, Place, and Gender*, 1.

and in the following decades, a stream of publications ensued from his Institute of Lightweight Structures at the University of Stuttgart¹²⁸.

The literature of tents has gradually developed with global culture, resulting in the empowerment of this form of architectural strategy. Between the nineteen-sixties and the present, numerous comprehensive literary resources on tents have become available, many of which now specifically address tents as an architectural subject. Since the nineteen sixties, there have been global changes of great architectural significance, and with the proliferation of free, textual media like the world wide web, a wide range of information has become increasingly available in the Western world. Simultaneous with the globalisation of capitalism in developing countries, wars and emergencies have led to increasing incidences of people expelled from, or avoiding permanent settlement, leading to the erection, instead, of temporary and unplanned settlements. Late-twentieth-century wars, diasporas and invasions have increased the need for tents for victims rather than for perpetrators of military aggression as discussed in the following.¹²⁹

Literature from this period has made closer study of tents and camping more approachable than fieldwork-based research in a field that is globally dispersed. First hand research of nomadic architecture is problematic because of the elusive timing and movement of tents, and the politics of difference between the researcher and observed tent cultures. Additionally, the broad traditional knowledge of tents outside the West has often been passed on directly, through practice, supplemented only with oral instruction.

Experimental and activist architectural constructions can be seen in the context of an increasingly widespread awareness of the benefits of movement, ephemerality and collaboration in the construction of democratic architecture. The increasingly global Western cultural condition of the

¹²⁸ The IL (*Institut für Leichte Flächentragwerke, Universität Stuttgart*, Institute for Lightweight Structures, Stuttgart Germany) originated in the 1960s, and was developed by Frei Otto, Ewald Bubner, Berthold Burkhardt and others.

¹²⁹ The Rapid Deployment Architecture unit at the National University of Singapore has developed this idea through its research and conferences.

nineteen sixties, the culmination of social changes of the twentieth century, represent an effective starting point for considering tents in literature.

The Viennese emigré architect Bernard Rudofsky, after a failed initial attempt to mount an exhibition of vernacular architecture as part of the *Berliner Bauausstellung* of 1931¹³⁰, championed vernacular architecture in a successful 1964 exhibition *Architecture without Architects* at the Museum of Modern Art in New York. Indeed, the term ‘nomadic architecture’ gained some of its earliest Western institutional currency in this provocative exhibition. Rudofsky included an entry specifically called nomadic architecture in the catalogue (see fig.4), in which the emphasis is on an image of a Bedouin encampment, showing the Black Tent of Arabia in an impressive horizontal desert landscape, and a few details of its structure and materials. The entry is supplemented with a painting of a Chinese Pavilion. Rudofsky extended the idea in his 1977 book *The Prodigious Builders*.

¹³⁰ Bernard Rudofsky, *The Prodigious Builders : Notes toward a Natural History of Architecture with Special Regard to Those Species That Are Traditionally Neglected or Downright Ignored* (London: Secker and Warburg, 1977), 366-67. Rudofsky’s claim is cited by Felicity Scott (1998) in a review of “Architecture Without Architects” in *Harvard Design Magazine* Autumn 1998 p. 70. Scott however has found no evidence to substantiate the theory that his pictures may have been included in this exhibition.



Fig. 4. The modest two-page spread devoted to Nomadic Architecture in Bernard Rudofsky's exhibition catalogue for *Architecture Without Architects*.¹³¹

Within the space constraints of Bernard Rudofsky's exhibition in 1964, "Architecture without Architects", the category Nomadic Architecture does not extend beyond tents and pavilions. The catalogue shows the best known types: the black tent and a yurt with tent pavilion. The impressive spectacle of a Bedouin encampment stretched across the landscape is, however included. In the circumstances, for this exhibition, unspectacular, unphotogenic examples like the Yunta, a Warlpiri wind break, a subject recently considered worthy of doctoral study,¹³² is excluded. Bark shelters, which may be occupied by nomads, appear to have been classed as (sedentary) huts, and are not included in Rudofsky's survey as nomadic. However in the subsequent book, *The Prodigious Builders*, there is a significant section on Mobile architecture, which, although populist in style, provides a well-considered context for the contemporary

¹³¹ Bernard Rudofsky, *Architecture without Architects : A Short Introduction to Non-Pedigreed Architecture* (New York: Doubleday, 1964), figs 46, 47.

¹³² This is a reference to doctoral research on single women's windbreaks of the Warlpiri by Catherine Keys at the University of Queensland. Keys, "Unearthing Ethno-Architectural Types."

variations of nomadic architecture.¹³³ Rudofsky's notion of nomadic architecture will be addressed in greater detail below.

Another work of primary significance in the area of unselfconscious and vernacular nomadic architecture and tents from this period is Faegre's 1979 book *Tents: Architecture of the Nomads*, an illustrated, detailed description of eight main tent types. Philip Drew's *Tensile Architecture*, also published in 1979, judging by Drew's dedication of the final chapter to Otto is inspired by Frei Otto's expanded opus of built work of the 1960s and 1970s..This earlier exploratory literature on tents and tensile structures has been of scholarly and ethnographic importance, but appears not to have not been widely applied in practice Architectural research, also, seems to have been restricted by the limitation of available historic information in Antipodean libraries.¹³⁴ Arguably, it has had little influence on architectural theory and practice in Australia.¹³⁵ It is argued later in this thesis, however, that a greater understanding of indigenous environments as diagrammatic architectural strategies may lead to more widespread nomadological approaches to architecture.

Contemporary literature about Tents

Since 1995, a series of publications and exhibitions from the *Institute for Portable Architecture* in Liverpool have investigated the potential contemporary applications of the tent among other forms of portable architecture¹³⁶. A research unit at the National University of Singapore Architecture Faculty has investigated the use of tent principles in designing "Rapid Deployment

¹³³ Rudofsky, *Architecture without Architects : A Short Introduction to Non-Pedigreed Architecture*, 128-57.

¹³⁴ Of all these major authors, I could find only the Austrian Orientalist Alois Musil's work available in Western Australia, at Murdoch University. While the National Library has a microfilm copy of Rhodes' book, these texts appear to be rarely used in Australian University Libraries.

¹³⁵ Drew, *Tensile Architecture*. deals with tents internationally, but without any reference to Australian indigenous cultures.

¹³⁶ The researcher Dr Robert Kronenburg at the University of Liverpool has produced a number of important works in this area. Robert Kronenburg, *Ephemeral/Portable Architecture, Architectural Design Profile ; No. 135* (London: Academy Editions, 1998), Kronenburg, *Portable Architecture*, Robert Kronenburg, *Transportable Environments : Theory, Context, Design and Technology -- Papers from the International Conference on Portable Architecture, London, 1997* (London: E & F N Spon, 1998).

Architecture"¹³⁷. Karin Harather has focussed on tents in the context of a cladding / clothing theme of architecture in Vienna¹³⁸. Tents today form a core part of an architecture course on *Traditioneller Bauformen Außereuropäischer Kulturen* (Traditional Built forms of 'Extra-European' cultures) at Vienna University of Technology. Such courses have not long existed in the Antipodes, although ethno-architecture is increasingly the focus of new research, especially at the University of Queensland¹³⁹.

In the recent literature, a number of divergent though interrelated intentions can be found in the framing of the tent as nomadic architecture. Of these, three stand out in relation to this thesis: spectacle, symbol and structure. For example, a large component of architecture's visual literature is concerned with architecture as a photogenic object, and hence treats the tent as an exotic and photogenic formal object, rather than the more challenging idea of the inhabited subject-dwelling as an extension of people and clothing¹⁴⁰. The historian Arthur Upham Pope, cited in Rudofsky's "Architecture without Architects" catalogue, describes tents and pavilions as "the magnificent structures that have been the pride of the monarchs of Western Asia for thousands of years, fabrications huge in size, very costly, and even if not permanent, often of extraordinary beauty." While Pope notes that these have never been considered as serious architecture, he himself evaluates them according to size and cost as much as beauty, and laments their impermanence. Hillenbrand also illustrates the diversity of ways architects may refer to the tent as a purely visual and formal model.

While the emphasis on (ephemeral) spectacle is worth noting, the interrelated framing of tents in the literature in terms of symbol (of life-way) and structure (spatial and cultural) are most

¹³⁷ RDA Online: <http://www.arch.nus.edu.sg/casa/projects/rda/> [accessed 17 Nov 02]

¹³⁸ Karin Harather, *Haus-Kleider: Zum Phänomen Der Bekleidung in Der Architektur* (Vienna, Cologne Weimar: Böhlau Verlag ges.m.b.H und Co. K.G., 1995).

¹³⁹ Notable centres are the Centre for Asian and Middle Eastern Architecture at The University of Adelaide, and the University of Queensland's Aboriginal Environment Research Centre. Online: <http://www.aboriginalenvironments.com/> [accessed 17 Nov 02]

¹⁴⁰ The photograph (Figure 22) in chapter 6 of refugees in front of their temporary homes reverse this convention.

important in the context of this thesis. The permeability of the tent's horizontal relationship with the environmental context, the absence of solid walls, and conventional sealed doors and windows, makes its architectural and social composition a very distinct symbol and practice, whether the tent is made as a dwelling of choice or exigency. The poignancy of the architectural metaphor of the tent is emphasised in much of the literature related to tents.¹⁴¹ On the other hand, many architectural books focus on the 'tensile structure' idea of the tent as an innovation of modern structural engineering. At the same time, tents express both physical and cultural tension, by enabling and enacting temporary dwelling in an environment. Using minimal physical material, they are intended to be 'insubstantial', ephemeral and temporally based.

Tent as symbol

The second main group of the literature deals with understanding tents as symbolic forms, as expressions of dwelling as part of an environmentally related life-way. The Tent was an important symbol for early modern architects in Europe, with the nomad representing the ideal democratic figure – autonomous and independent. This high regard is recognisable in the European study and theorisation of the (idealised) Black Tent and the Yurt, for example, as significant 'alternative' models of architecture of dwelling. The importance of the nomadic ideal in early modernism is described in a 1984 ethnological exhibition in Vienna of a "completely furnished, typical nomad tent from Central Asia".¹⁴² Architectural critic Otto Kapfinger wrote in relation to the Yurt:

“As primitive hut and flexible nomadic dwelling, the Yurt is an elegantly simple ideal type which reflects certain desires and theories which played a role in the beginning of Modern Architecture. Frank Lloyd Wright and Le Corbusier saw in the nomad the prototype of the new democratic man, one who represents freedom, spirituality and decentralisation in principle, in contrast to the city

¹⁴¹ This is true, for example, in political strategy, discussed in Fuad I. Khuri, *Tents and Pyramids : Games and Ideology in Arab Culture, from Backgammon to Autocratic Rule* (London: Saqi, 1990). and examined in chapter 6 below "Bedouin Nomadology in architecture". It is also in a visual form in Marcia Langton's book *After the Tent Embassy: Images of Aboriginal History in Black and White Photographs*, which is discussed in Chapter 5, "Nomadic Resistance".

dweller's site-fixation and social hierarchy. The expressed anti-urban projections of the Modern were based on the age-old conflicts between different forms of civilisation, as is drawn out in the mythological image of the conflict between Cain and Abel.”¹⁴³

The conflict between the sedentary and nomadic interests of cultural groups, as alluded to in the introduction, have been examined by many thinkers in history, in particular Ibn Khaldun, the renowned 14th century Arab historian, and early 20th century philosopher Rene Guenon¹⁴⁴. Both agree on the inevitable tension and importance for reconciliation of these two opposing interests. Although in the biblical story, Cain the farmer had triumphed over and killed his brother Abel the herdsman, Guénon argues that that nomadism and sedentarism are opposed but complementary, and these are perpetual human tendencies.¹⁴⁵ Nomads direct their activity to the animal kingdom, mobile like themselves, he notes, while sedentary people direct their activities to the vegetable kingdom and the mineral kingdom.¹⁴⁶

In the studies of vernacular African architecture found in Prussin's *African Nomadic Architecture*,¹⁴⁷ the life-way is enacted in the architecture of the tent through mobility, ritual practices and gender identity. The case studies are clearly regionally focussed, but Prussin's work nevertheless has wide-ranging consequences for ways of thinking about dwelling architecture as something more than physical or structural space.

'Nomadic architecture' is generally associated with vernacular architecture as nomadism is taken to be a primitive rather than advanced or "sophisticated" life style. Torvald Faegre's major work

¹⁴² "Ein völlig ausgestattetes typisches Nomadenzelt aus Zentralasien" Otto Kapfinger, "Das Haus Als Futteral," *Die Presse (Newspaper, Vienna)*, no. 18-19 February 1984 (1984). transl. the author

¹⁴³ Kapfinger 1984 (translated by the author). This comment appeared in the Viennese newspaper *Die Presse* in February 1984 in relation to the exhibition of a Yurt in the Museum für Angewandte Kunst (Vienna) in 1984 Ibid.

¹⁴⁴ Rene Guenon 1886 – 1951 Born and educated in France, at age 26 he was initiated in to Sufism and became a Muslim, Abd al-Wahid Yahya. See Ibrahim Kalin 2001 Online: <http://www.cis-ca.org/voices/g/guenon-mn.htm> [accessed 17 Nov 2002]

¹⁴⁵ Guénon and Northbourne, *The Reign of Quantity and the Signs of the Times*, 177-83.

¹⁴⁶ Ibid., 181.

¹⁴⁷ Prussin, *African Nomadic Architecture : Space, Place, and Gender*.

can be seen in this context¹⁴⁸. The nomadic tent is treated as a vehicle symbolic of life-ways of various cultures, through his comparative treatment of the regional variation of tent types.

Nomadic architecture, in the specific form of Tents, is the focus of this important 1979 text on the subject, which has become a reference for all major subsequent works in this area.

Faegre puts the idea of the designs of each variation in the context of other vernacular architecture, emphasising the distinctly marginal and mobile nature of cultures using the eight main tent types he discusses in detail. It is understandable, given the traditional anthropological approach of this book, that the Australian indigenous structures like the Mia Mia and Wurley have been overlooked. There is a difficulty in ascribing architectural types to aboriginal dwellings, as Robert Dixon, et. al. explain.¹⁴⁹ Although perhaps little known internationally in 1978, the Mia Mia and the Wurley would seem to qualify for inclusion under the chapter on “Mat-skin tents”.

Faegre effectively describes the cultural programme and physical construction of each of the eight types and their many sub-variations. They range from the historically important Black Tent of the Middle East to Mongolian Yurts, formed like an upturned basket and in some ways, more reminiscent of a hut than of a tent. The peoples of the polar regions, including the Lapps, Siberians, Inuit and Taiga each have tent variations. The popularly known Tipi of the North American plains is dealt with separately as a semi-nomadic tent, being a dwelling for peoples who spend a “most of the year in communal earth lodges”, and used the Tipi only while on Summer and Autumn hunting safaris.

Karin Harather’s book *Haus-kleider: zum Phänomen der Bekleidung in der Architektur*¹⁵⁰ considers tents in a context of the wider field of fabric architecture: drapes or linings (*vorhang-behang*) and the canopy (*baldachin*). Following a cultural-historical overview, Harather looks

¹⁴⁸ Faegre, *Tents : Architecture of the Nomads*.

¹⁴⁹ Robert M. W. Dixon, W. S. Ramson, and Mandy Thomas, *Australian Aboriginal Words in English : Their Origin and Meaning* (Melbourne: Oxford University Press, 1990), 187.

into the ideals of the Tent. Harather goes on to discuss the influence of textiles in tents and their limitations transferred into mass building from Ptolemaeus II (285-247BC) to Otto Wagner to Frei Otto. A later section of the book draws a series of parallels between architectural cladding/clothing and human cladding/clothing through case examples.¹⁵¹

Harather's book is based on the simple architectural metaphor of "house-clothes", applied to phenomena of clothing/cladding in architecture¹⁵². The book addresses the broader thematic of textile and architecture, and is divided into analyses of the principles of architectural clothing/cladding and human clothing/cladding, with a comprehensive visual section providing sixteen exemplary types of architecture-clothing. Extending some of Gottfried Semper's "Clothing Theory", in particular, Harather includes a thorough investigation of the formal etymology of tents of both permanent and temporary types. Harather's book *Haus Kleider* suggests a renewed interest in the importance of tents as ritual architecture related to post-structural theory and as an application of nomadic thought.

The metaphorical importance of the tent as an alternative to Western architecture or as an alternative to architecture *per se* is culturally pervasive, reaching well beyond the traditional boundaries of the discipline of architecture. The tent represents both a metaphorical architecture in terms of structure, and also a 'progressive' and nomadic approach to the practice of architecture as an environmental art of making space.

In Denis Hollier's analysis of the writing of Georges Bataille, the origin of architecture is the prison. Bataille denounces 'architecture the prison-warden' as a system complicit with authoritarian hierarchies. While this metaphor of the prison of Bataille derives from a spectacular

¹⁵⁰ The title can be translated in English as "Houseclothes; on the Phenomenon of Cladding in Architecture" The word *Hauskleider* plays on the idea of Corporate dress or Uniform - Harather, *Haus-Kleider: Zum Phänomen Der Bekleidung in Der Architektur*.

¹⁵¹ *Ibid.*

¹⁵² This title works better in German, where *Haus* is used more generically, like the older usage in English, to mean 'building', 'family', 'dynasty', or 'firm' rather than domestic 'house'. Langenscheidt, *Taschenwörterbuch Englisch* (c.1990).

and ostentatious architecture, it is external and confronting. This Bataillean idea of the prison as a fortification is in contrast to the Foucaultian architectural metaphor of the prison from his *Surveiller et Punir*, a panoptic prison which is omniscient and confining.¹⁵³ The tent as a nomadic architecture provides an alternative metaphor to these prisons, having no power to repress or position inhabitants, but rather being a transient expression (within the constraints of a cultural milieu) of a present occupation.

The social, ecological and gender significance of tents Prussin highlights, in relation to specific societies, can be taken further as a major framework for a paradigmatic shift in thinking about architecture. The tents made by the African nomads are an expression of social values of architecture and of a weaving and making process shared by family and friendship groups.

In Hillenbrand's discussion of architecture of the Islamic world, references to the traditional nomadic architecture are commonplace in sedentary architecture. For example the patterns of weaving from tents is reproduced as a texture on wall surfaces of permanent structures.¹⁵⁴

The focus in Labelle's *African Nomadic Architecture* is on African vernacular architecture used by African nomads, tents being referred to as a secondary theme as the main formal or type description of their forms of dwelling. Prussin puts the tent in the context of African history specifically, making a case that the ongoing creative process of making is part of the culture, from the impermanence or built in obsolescence to the therapeutic gender-based rituals of making the dwellings in groups. The book deals specifically with cultural variations between three Hassaniya-speaking groups, Tuareg, Tubu, Mahria and Rendille. The handicrafts of Somali women such as weaving and hand crafted accessories are treated equally as part of the Nomadic architecture, rather than as an accessory.

¹⁵³ Bernard Tschumi's built architectural work *Parc de La Villette* (Paris 1985-6) is posited by Hollier as a storming of architecture by itself (like the storming of the Bastille) A "Donjuan-esque architecture would escape... enter into games... and begin to dance" Hollier, *Against Architecture: The Writings of Georges Bataille*, ix.

¹⁵⁴ Robert Hillenbrand, *Islamic Architecture : Form, Function and Meaning* (Edinburgh: Edinburgh University Press, 1994).

An equivalent publication about contemporary Australian nomadic architecture is not readily found. However, much has been written over the last few years in journals about architects doing work for Aboriginal people, while understandably little has been written about architectures developed in different areas by people themselves. There has been little need for visual and scholarly publications in an area where oral history and performance-based knowledge exchanges are paramount.

Jim Sinatra and his associates from Melbourne, however, constructed in collaboration with a community of Pintupi people in Kintore, central Australia, a kind of shade tent called the Big Wilytja in the suburban 'back yards' of these people in a remote community. Independently of the success or failure of these structures, which were finally used primarily as a toy, such collaboratively developed and built temporary structures are significant. They come from a viewpoint of providing enhanced landscaping as a useful sheltered environment, rather than the more frequent pretext for aboriginal architecture – one of 'hygiene' – health and plumbing improvement programmes for seminomadic communities.

As part of a doctoral study at the University of Queensland's Aboriginal Environments Research Centre, Catherine Keys has produced a study and interpretation of the architecture of Yunta of the Warlpiri-speaking people of central Australia. The Yunta documented by Keys are not immediately recognisable as Western tents, however these structures raise important issues about orientation, height and composition of the constructed wind breaks, but equally of the inhabitants themselves. Amos Rapoport's report on "Australian Aborigines and the Definition of Place"¹⁵⁵ is dismissed in a paper by John Archer because of his underestimation of Tasmanian Aboriginal architecture. Rapoport has cynically admitted that "aboriginal dwellings may not be devoid of

¹⁵⁵ cited in Rapoport, "Australian Aborigines and the Definition of Place," in *Shelter Sign and Symbol*, ed. W. Mitchell (Barrie and Jenkins, 1972), 4.

symbolic meaning... but circumstantial evidence may be the only evidence we shall ever have on the subject".¹⁵⁶

A more lateral approach to the significance of tents is found in the cultural theory / feminist approach of Aaron Betsky. His chapter "Tents and Penises" proposes that the tent rather than the primitive hut is recognisable as the origin of architecture and culture. Betsky thus challenges the significance of language and anthropocentrism.¹⁵⁷ The philosophical text introduced in the section of chapter 2 on *Chora, Archeticture : ecstasies of space, time, and the human body* by David Farrell Krell¹⁵⁸ is concerned with architecture philosophically considered as a form of weaving. Suspending the authority of architecture as technical mastery and architectonic solidarity, Krell is proposing a kind of oblivion or ecstasy at the root of architectural making. The meaning of tent making, as emphasised by Prussin is also developed philosophically by a range of other writers. The statelessness of 'ecstasy' has a relevant interpretation in the analogy between making architecture and 'building sexuality', by engendering or desiring. A closely related theme of weaving architecture is extended in the chapter of McEwen's *Socrates' Ancestor*, dealing with weaving of things as *daidala* — 'cunningly crafted' or 'curiously wrought'.¹⁵⁹ Textile *daidala*, (associated with Daedalus the mythical first architect) described as *poikilon* are read by McEwen as having integral patterns which were 'brought to light' *hyphainein* in the process of deft work at the loom. Hence it is posited that even in the Ancient Greek times, an inherent architecture is to be found in the skilful weaving of fabrics just as in a larger three dimensional construction.

¹⁵⁶ John Archer, "Traditional Aboriginal Shelter (Photocopy)," *Earth Garden*, no. 63 (1988). See also Appendix 2

¹⁵⁷ Betsky, *Building Sex; Men, Women, Architecture and the Construction of Sexuality*.

¹⁵⁸ Krell, *Archeticture : Ecstasies of Space, Time, and the Human Body*.

¹⁵⁹ McEwen, *Socrates' Ancestor : An Essay on Architectural Beginnings*, 53.

The unpublished doctoral dissertation by an architect Diether Hoppe, reports on a detailed study of autonomously-supported textile membrane constructions.¹⁶⁰ In his section on nomad tents¹⁶¹, Hoppe has drawn heavily on Torvald Faegre's *Tents : architecture of the nomads*¹⁶² and in a subsequent chapter on "Small Tents", Hoppe makes an analysis of Military Tents, Travel Tents and Festive Tents. These are considered in a range of historical contexts, including the Tents used in the Turkish Sieges of the City of Vienna, which are mentioned in the context of chapter 5,¹⁶³ and also the campsites of the Roman Empire. Hoppe has updated some of the important material covered by Bubner, Baier and Burkhardt in their *IL 14(Adaptable Architecture)*.¹⁶⁴

Tents as structure

Frei Otto's 'Institute for Lightweight Structures' (the 'IL' - *Institut für leichte Flächentragwerk*) built a reputation not only through association with many executed buildings, but also by prolific publishing. Indeed, the Institute for Lightweight Structures in Stuttgart has been an important promoter associated with the applied technology of the tent in the second half of the twentieth century. Its academic research projects and publications have often penetrated effectively into the origins of tents in vernacular architecture. Modern tent structures were promoted from a structural point of view, as 'buildings' designed for covering large areas with minimal material and lightweight construction. In Frei Otto's practice, the tent's main principle of exploiting tension rather than compression was developed in mostly public and sporting projects, as opposed to

¹⁶⁰ Arch. Prof. Dipl.-Ing. Diether S. Hoppe, "Freigespannte Textile Membrankonstruktionen: Ein Beitrag Zu Geschichtlichen, Materialtechnischen, Konstruktiven Und Gegenwärtigen Entwicklungen," in *Doktor der technischen Wissenschaften*, ed. Ao. Univ. Prof. Arch. Dipl.-Ing. Dr.techn. Manfred Wehdorn and Em. O.Univ.Prof. Dipl.-Ing. Dr.techn. Georg Kattinger (Technische Universität Wien (Vienna University of Technology, Austria): 1998).

¹⁶¹ Translation note: the capitalisation of "Tent" in the German language follows the convention in that language of capitalising all nouns.

¹⁶² Faegre, *Tents : Architecture of the Nomads*.

¹⁶³ Peter; Hillbrand Broucek, Erich; Vesely, Fritz, *Historischer Atlas Zur Zweiten Tuerkenbelagerung Wien 1683* (Vienna: Deuticke, 1983), R Kreutel and Prokosch, *Im Reiche Des Goldenen Apfels* (1987).

¹⁶⁴ Universität Stuttgart U.Stuttgart IL 14 Institut für Leichte Flächentragwerke, Germany, *Anpassungsfähig Bauen = Adaptable Architecture*, ed. Bernd Baier, copy from Baukunst TUWien ed. ([Stuttgart]: Institut für leichte Flächentragwerke, 1974).

dwelling accommodation. There is nothing particularly impermanent or mobile about these tents. Yet it seems likely that Otto contributed acceptability to these structures, especially for Western architects building in the Arab world, helped to set the stage for more recent projects like the ‘tent’ at the Hajj Terminal at the King Abdul Aziz International Airport in Jeddah, by Skidmore, Owings and Merrill.

According to its programme, the Hajj terminal is a ritual point of ‘dwelling’, in the sense that it accommodates enormous numbers of pilgrims arriving seasonally at Jeddah airport on their lifetime journey to visit Mecca. These travellers arriving on their pilgrimage, the culmination of a lifetime spiritual journey combined with a physical journey, seem to be connected to the notion of Nomadic Architecture in this modern tent tradition. The architecture is institutional in the historical and religious sense, but is formed as a tent for more problematic reasons such as the impermanence of its use, the mobility of its occupants, strict codes of gender and above all the ritual significance of the Hajj in Islam. The tent provides a space of unity for the pilgrims as a more socially unified variation of a frequent-flyer lounge.

The book *IL 16: Tents / Zelte* is produced by the University of Stuttgart’s appointed Special Research Area 64: *Weitgespannte Flächentragwerke* “Wide¹⁶⁵-spanned Lightweight Structures”¹⁶⁶ published as number 16 in a series from the *Institut für leichte Flächentragwerke* “Institute for Lightweight Structures”. The German language is more explicit than English here about the research topic of *Flächentragwerke* – which more precisely means “surface-based load distribution systems”. As part of German Universities’ Research centres, a publication on tents could hardly be more institutionally framed. *IL 16: Tents 1* is a review of realised membrane structures, primarily as an *homage* to the tent-builder Peter Strohmeyer. Strohmeyer’s family firm of Tent ‘Builders’ is shown to have undergone a major transformation through his generation, especially in the industrious post-war period of the twentieth century. It was this transformation

¹⁶⁵ ‘Large Span’ would be the this author’s translation.

which made possible the application of the diagrammatic thinking of the temporary and portable Circus Tent to the large, lightweight structures for Frei Otto's projects, despite unsuccessful earlier attempts by other architects.¹⁶⁷

These interests of Western architecture have influenced the public profile of modern tents like the Munich Olympic Stadium¹⁶⁸, or the Hajj Terminal at Jeddah¹⁶⁹ as permanent public gathering places. Such tents have only been influenced to a limited extent by a connection with nomadic architecture, and the critical associations of nomadic dwelling with impermanent use, mobility, rituals of inhabitation and conscious connection with gender. Durability and permanence was clearly a concern for Otto. Many of the works are extremely heavy and permanent looking.

The nature of the Olympic Stadium roof at Munich, possibly Otto's most famous, was one of an 'event' architecture. This kind of work has been pursued in the last few decades in a more temporary and increasingly ritualistic way by Mark Fisher in his work for Stadium concerts of rock groups like Pink Floyd, The Rolling Stones and U2.¹⁷⁰ Nomadism is not specifically addressed in this theoretical context, although some of the structures featured were designed for seasonal or temporary use such as circuses and exhibitions.

In *Adaptives Bauen — Adaptable Architecture*¹⁷¹, a report of the 1974 colloquium of the same name, the nomadic is addressed and applied more laterally to architectural design, in particular,

¹⁶⁶ *Flächentragwerke* is composed of *flächen* = surface, and *Tragwerk* = literally a 'carrying system' or a load-transfer system which is critical to correctly translating this understanding of this principle of the tent.

¹⁶⁷ In 1929 the architects Heinz and Bodo Rasch had their futuristic proposal for a tensile structure stadium roof returned to them by Strohmeier & Company, apologising that Circus-tent technology was "not appropriate" and the firm lacked the experience or interest to develop the project.

¹⁶⁸ Frei Otto, Günther Behnisch and Partners, 1969, for the Munich Olympic Games, Olympic Park, 1972 (Teague 1985)

¹⁶⁹ a description of the role of the Hajj Terminal at the King Abdul Aziz International Air Terminal in Jeddah (architects: Skidmore Owings and Merrill 1981) in the pilgrimage Hajj is given at http://www.arab.net/saudi/culture/sa_hajj.html

¹⁷⁰ see Kronenburg *Portable Architecture* (Kronenburg 1996)

¹⁷¹ U.Stuttgart IL 14 Institut für Leichte Flächentragwerke, *Anpassungsfähig Bauen = Adaptable Architecture*.

for example, in a contribution by Ewald Bubner “Adaptive Architecture — an outline”¹⁷².

Bubner considers a range of adaptable building types, but of particular interest in the context of nomadism are vernacular tents, and the ancient Romans’ use of the “*Vela*”: a tent used over theatres, streets and city squares.

Stretched out, as an enclosing skin spread over a minimal supporting frame, the tent is an efficient expression of maximum spatial volume enclosed with the minimum amount of building material. The tent can be understood as a construction which consists mainly of the tension forces in the membrane and tension transferred to the ground, combined with strategic points of compressional rigidity in its supports. The tent results from the equilibrium of these forces which resolves the system of forces employed rather than from gravity alone.

In the same book, contributions by Bernd Baier, “Adaptation to Lifestyle — native building in North Africa”¹⁷³, and Berthold Burkhardt; “The Historic Tent — Aspects of Form, Construction and Application”¹⁷⁴ expand the research potential further with applications for contemporary architectural design. Baier’s contribution makes a case for the “less perfectly organised third world” as providing useful models for architecture in the “contemporary mobile society”¹⁷⁵. Burkhardt makes a summary of the uses of tents in the Orient, particularly Turkey, Persia and India, and argues the contemporary advantages of the mobility of tents. A historical survey reaches back 30 000 years through Egyptian, Greek and Roman eras to the middle ages and the last few centuries to the various vernacular tents as used in the nineteenth century, similar to those covered in Faegre’s *Tents, Architecture of the Nomads*¹⁷⁶.

Writing in 1976, the possibility was raised of ‘Building with Textiles’ as a University teaching subject. However, Ewald Bubner points out that even such an economical and efficient model of

¹⁷² Ibid.

¹⁷³ Ibid. A prelude to Prussin’s more recent book *African Nomadic Architecture* (Prussin 1995)

¹⁷⁴ Burkhardt in Ibid.

¹⁷⁵ Ibid.

space making, being in small demand, would be unlikely to be squeezed into the curriculum, nor would industry bring about such demand. Tents were viewed as peripheral to the curriculum because “the construction was comparatively minimal for the large volume created and the seldom usage justified consulting specialists.” He argued that “too few experts were available with practical experience as well as teaching ability” and furthermore that “membrane constructions are thought of as short term, emergency, or exotic special use structures, therefore peripheral to the main curriculum”¹⁷⁷ – which presumes that mainstream architecture is solid and permanent.

In the post-second-world-war period, literature in the German-speaking world appears to have focused largely on structure in terms of the functional and technical possibilities of tents. In the English-speaking world, and especially in the United States, the above notwithstanding, the literature tends only to a limited degree to be exploring the cultural significance of the tent.

Applications of Tents

Considering the origins of the traditional Western scholarship about the primitive origins of dwellings, the traditional perspective of architectural history of tents is understandably European-biased. A ‘blind spot’ seems to obscure the prehistoric ephemeral dwellings of Australia and the antipodes. For example, Banister Fletcher's encyclopedic (and still to this day canonic) text book *Sir Banister Fletcher's A History of Architecture*¹⁷⁸, categorises palaeolithic dwellings into huts, tents, lean-tos, and pit houses. The latter two are most specifically terrain-dependent, being attached to or dug out of a natural environment.

The tent may be understood as a 'tentative' architectural manipulation of spatial territory. It is thus clearly distinguishable from the primitive hut, an archetype which is developed in Joseph

¹⁷⁶ Faegre, *Tents : Architecture of the Nomads*.

¹⁷⁷ U.Stuttgart IL 14 Institut für Leichte Flächentragwerke, *Anpassungsfähig Bauen = Adaptable Architecture*, 146.

¹⁷⁸ Banister Fletcher and Dan Cruickshank, *Sir Banister Fletcher's a History of Architecture*, 20th / ed. (Oxford ; Boston: Architectural Press, 1996).

Rykwert's *On Adam's House in Paradise* as a store or cache in the Garden of Eden.¹⁷⁹ The primitive hut usually has distinct floor, vertical walls, and a separate, horizontal roof, thus complying with Western notions of the dwelling as a clearly-defined space which is defensible.

On the other hand the tent is environmentally located – attached by tensioned ropes¹⁸⁰, while the hut can be considered largely self-supported, and environmentally autonomous. The two types have often been blurred in the literature of primitive architecture, including that of Australia for example. There is an inferred hierarchy in Banister Fletcher's text between the tent and the hut; the hut is considered to be more civilised. The main distinction between hut and tent, according to Banister Fletcher's text, is that the tent is “tee-pee like”¹⁸¹ in shape and uses a skin material. The ancient dwelling Moldova I, consisting of a “wood framework covered with skins” is described in Fletcher's book as a “sophisticated hut”.¹⁸²

Thus, a primitive dwelling of central Europe, rather than a similar example in Asia, Australia, Africa or America, is regarded as an example of the earliest architecture in Banister Fletcher's book. Later research has a wider focus; for example, with entries emerging on Australian ethnoarchitecture in the *Encyclopedia of Vernacular Architecture of the World*¹⁸³, and with the work of The Aboriginal Environments Research Centre at the University of Queensland.¹⁸⁴

¹⁷⁹ Rykwert, *On Adam's House in Paradise : The Idea of the Primitive Hut in Architectural History*, 13. See also the note in Chapter 1 Diagramming, on Rykwert's ‘The Primitive Hut’.

¹⁸⁰ As Deleuze and Guattari note (after Anny Milovanoff), nomads regard the tent as tied not to a territory, but to an itinerary Gilles Deleuze and Felix Guattari, *Nomadology : The War Machine, Foreign Agents Series* (New York, NY, USA: Semiotext(e), 1986), 132. (footnote 47)

¹⁸¹ Banister Fletcher and John Musgrove, *Sir Banister Fletcher's a History of Architecture*, 19th / ed. (London ; Boston: Butterworths, 1987), 196.

¹⁸² *Ibid.*

¹⁸³ Paul Oliver, *Encyclopedia of Vernacular Architecture of the World* (Cambridge ; New York, NY, USA: Cambridge University Press, 1997).

¹⁸⁴ AERC (Aboriginal Environments Research Centre) at the University of Queensland see www.aboriginalenvironments.com

As discussed in Patrick Conner's *Oriental Architecture in the West*¹⁸⁵, 'Tent architecture' has had an indirect influence on modern western architecture through oriental architecture. Oriental tents were stylistically appropriated in English and continental European designs for picturesque landscape pavilions to emulate the perceived exotic freedom of the Orientals.

The mat-skin tent of the Middle East is used only in a small area since the Black Tent and Yurt have dominated amongst the populations and overtaken their usage. The Middle Eastern Mat-skin tent emerges as part of a loose category of mat-skin tent shelters using wooden frames which may or may not be portable depending upon availability of wood, and the materials of covers which may vary widely according to the available vegetable and animal resources available. Some of the mat-skin tents appear very similar to some Australian peoples' illustrated in Geoffrey Blainey's *Triumph of the Nomads*¹⁸⁶ and the illustrations in C.P. Mountford's book *Nomads of the Australian desert*.¹⁸⁷

Nineteenth century military use of tents

In the Western world, military use of the tent has been widespread, especially in establishing and expanding colonies in the 'new world'. Historically, battlefield use appears as a primary application for early works on tents. The British Captain Godfrey Rhodes' 1858 work, *Tents and Tent Life from the Earliest Ages to the Present Time*¹⁸⁸ is identified by Prussin as a work motivated by the pressing military concern of developing a more serviceable tent for battlefield use.¹⁸⁹

¹⁸⁵ Patrick Conner, *Oriental Architecture in the West* (London: Thames and Hudson, 1979).

¹⁸⁶ Geoffrey Blainey, *Triumph of the Nomads : A History of Ancient Australia*, Rev. ed. (South Melbourne: Macmillan, 1982).

¹⁸⁷ Charles P. Mountford, *Nomads of the Australian Desert* (Adelaide: Rigby, 1976).

¹⁸⁸ Prussin, *African Nomadic Architecture : Space, Place, and Gender*.

¹⁸⁹ Reportedly the earliest English language history of Tents *Ibid.*, 1.

In 1859, only a year later, in the United States, Captain Randolph Barnes Marcy published *The Prairie Traveler*¹⁹⁰ as a guide book for colonial emigrants going West. Marcy's text acknowledges Rhodes' analysis of "most of the tents used in the different armies in Europe" but claims, for suitability in America, that none of these models surpasses the Sibley tent for convenience, comfort, and economy. Marcy notes that the indigenous peoples of various countries have improvised temporary shelters for use while travelling¹⁹¹;

“Almost all people in different parts of the world have their own peculiar methods of bivouacking. In the severe climate of Thibet, Dr. Hooker informs us that they encamp near large rocks, which absorb the heat during the day, and give it out slowly during the night. They form, as it were, reservoirs of caloric, the influence of which is exceedingly grateful during a cold night. In the polar regions the *Esquimaux* live and make themselves comfortable in huts of ice or snow, and with no other combustible but oil.”

He even notes the exotic method of bivouacking of indigenous Australians, with no mention of huts or tents –

The natives of Australia bury their bodies in the sand, keeping their heads only above the surface, and thus sleep warm during the chilly nights of that climate.¹⁹²

Marcy notes the importance of the *Tente Abris* as a mode of shelter during the French war in the Crimea up to 1855¹⁹³. The system employed by this 'shelter tent' is detailed in a French-language

¹⁹⁰ Randolph Barnes Marcy, *The Prairie Traveler : A Hand-Book for Overland Expeditions. With Maps, Illustrations and Itineraries of the Principal Routes between the Mississippi and the Pacific* (New York: Harper & brothers, 1859). Chapter 5 cited Randolph B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

¹⁹¹ Marcy writes in his Chapter 5 that there are many climatically specific ways of camping or bivouacking. Randolph B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

¹⁹² Marcy, *The Prairie Traveler : A Hand-Book for Overland Expeditions. With Maps, Illustrations and Itineraries of the Principal Routes between the Mississippi and the Pacific*, Ch.5. cited from Randolph B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

¹⁹³ [Marcy, 1859 #202@Ch.5] cited from Randolph B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

booklet of 1869 “*Le Nouveau Systeme de Tente Abris du Lieutenant Waldejo*”. The booklet is primarily pragmatic, providing instructions about the practical applications of military tents. Intended for use in war in Africa in particular, Waldejo's guide shows how size can be calculated and an appropriate tent made for any number of soldiers. The soldier is the focus of this tent, and after all, Colonel Waldejo claims, the tent is the invention of soldiers: “*Le Tente Abris est une invention du Soldat.*”¹⁹⁴

Marcy details the construction of the native American Commanche Lodge (see fig. 5), which is described as the “the usual tenement of the prairie tribes, and of the traders, trappers, and hunters who live among them”. This summer hunting lodge was the tent used by the Plains tribes for camping while seasonally hunting for Buffalo. The poles for these lodges were originally drawn by dogs, but after the introduction of the horse, the poles became longer and the *Tipis* larger. With the ready availability of buffalo hides, and the horse, the use of the *Tipi* also spread widely.

There were many tribal variations of designs for conical lodges or *Tipis*, but their bases are traditionally circular. Tent rings, consisting of circles of stones left rolled back from the perimeters of *Tipis*, when camps move on, remained over centuries as a record of nomadic settlements of American, Inuit, Siberian and Lapp countries.

Faegre cites the Sioux Oglala Holy Man Black Elk¹⁹⁵ on the cosmic significance of the circular plan;

“Everything the Power of the World does is in a circle. The sky is round, and I have heard that the Earth is round like a ball, and so are all the stars... Our teepees were round like the nests of birds, and these were always set in a circle, the nation's hoop, a nest of many nests, where the

¹⁹⁴ This booklet was inspected by the author at the Military-historical library at the State Archive of the City of Vienna. Lieutenant Waldéjo, “Nouveau Systme De Tente-Abris Du Lieutenant Waldéjo,” (1869).

¹⁹⁵ According to Josephy's *500 Nations*, Black Elk witnessed, at age thirteen, the Battle of Little Bighorn (1876) Alvin M. Josephy, *500 Nations : An Illustrated History of North American Indians*, 2nd ed. (London: Hutchinson Pimlico, 1995), 401. and after the tragic starvation of 'settled' native Americans at Pine Ridge, remained as a spokesperson of their despair. Josephy, *500 Nations : An Illustrated History of North American Indians*, 441-42.

Great Spirit meant for us to hatch our children. But the Waischus have put us in these square boxes. Our power is gone and we are dying, for the power is not in us any more.”¹⁹⁶



Fig. 5. Comanche Lodge, as illustrated in Randolph B. Marcy's *The Prairie Traveler*¹⁹⁷

Marcy praises the Sibley tent invented by Major H. H. Sibley (see fig. 6), as an innovative adaptation of the conical tent principle. It incorporated one upright post in the centre rather than a conical framework of poles. For the soldier, this makes it portable and easily packed.

"This tent constituted the entire shelter of the army in Utah during the winter of 1857-8, and, notwithstanding the severity of the climate in the elevated locality of Camp Scott, the troops were quite comfortable, and pleased with the tent."¹⁹⁸

The use of the tent for creating a draft with the cooking fire is clearly appropriated from the Tipi, and Marcy notes this feature as well as the tent's mobility and quick deployability.

¹⁹⁶ Faegre, *Tents : Architecture of the Nomads*, 152.

¹⁹⁷ [Marcy, 1859 #202@Ch.5] cited in Randolph B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

¹⁹⁸ Marcy, *The Prairie Traveler : A Hand-Book for Overland Expeditions. With Maps, Illustrations and Itineraries of the Principal Routes between the Mississippi and the Pacific*, Ch.5. cited from Randolph B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

"One of its most important features, that of admitting of a fire within it and of causing a draught by the disposition of the wings, is not, that I am aware, possessed by any other tent. Moreover, it is exempt from the objections that are urged against some other tents on account of insalubrity from want of top ventilation to carry off the impure air during the night."¹⁹⁹

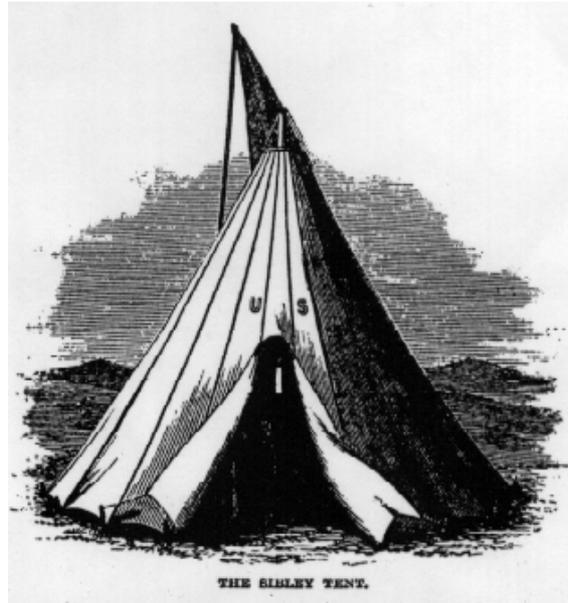


Fig. 6. The Sibley Tent.²⁰⁰

The similarities between the Sibley tent and the Plains Tipi are referred to only in passing in Marcy's 1859 work. It is ironic, however, that the adaptation of the tent by the U.S. Army can be regarded as a military act of subversion. As Torvald Faegre notes, the U.S. settler troops were sent out to conquer the 'pagan' peoples of the Plains and to force them to give up their *Tipis*, while they themselves lived successfully in Sibley's conical tent.²⁰¹

Tents as a 'nomadic' dwelling form, associated with 'primitive' societies are today positioned in the margins of what may legitimately be called 'architecture'. Yet variations of tents are of course extensively used in 'advanced' societies: for recreation, leisure, military, emergencies, commerce

¹⁹⁹ [Marcy, 1859 #202@Ch.5] cited from Randolphe B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

²⁰⁰ [Marcy, 1859 #202@Ch.5] cited from Randolphe B. Marcy, 1859 Online: <http://www.kancoll.org/books/marcy/machap05.htm> [accessed 17 Nov 2002]

²⁰¹ Faegre, *Tents : Architecture of the Nomads*, 153.

and exploration, to name just a few applications. The significantly temporary aspect of the architecture of tents means that architects need to look beyond their physical and material qualities. Tents are remarkable for producing architectural space with a minimum of building material, while the economies of their production often involves a maximum of cultural investment, as in the example of the Tuareg Nomads and the strong congruency between tent and marriage. As Prussin notes, the term for marriage is synonymous with the term for tent, *ében*.²⁰² In relation to tents as cultural spaces, their makers and ‘designers’ need to consider for example their flexible placement, their groupings and arrangements in a camp, their inhabitation patterns and the strategic reasons for their deployment — all of these architectural factors worthy of careful evaluation vis-a-vis a (relative) moving cultural context.

New Developments in Tent Literature

The recent publication of Peter Alford Andrews' 1442 page scholarly work *Felt Tents and Pavilions*²⁰³ indicates that extensive and detailed research has been made on tents, it can be suggested that an extensive literature is available today on some of the historically well documented vernacular tent types. In the field of ethnoarchitecture, a literature of tents is growing, although in Australia and the antipodes, the literature is thinner. Understandably, the ethno-architectural approach of the Aboriginal Environments Research Centre at the University of Queensland considers environment broadly, rather than addressing tents as a type, which derives from a Eurocentric concept. Many contemporary indigenous uses of tents are not regarded as architecturally noteworthy because of the material of their construction, rather than the ways in which they are inhabited.

The literature of tents has developed markedly in the last century, and the architectural philosophy behind the tent could be of great significance for new approaches to architecture especially in the

²⁰² Prussin, *African Nomadic Architecture : Space, Place, and Gender*, 91.

antipodean world, where the issues of ephemerality, movement and collaboration are particularly topical in architecture. This chapter has set out some of the military and ethnographic origins found in the literature, and identified three main ways in which tents portray nomadic architecture: as spectacle, as a symbol of nomadic life pattern, and as a critically important metaphor of the structuring of space.

In the 'new world', however, and certainly today in a post-colony such as Australia, the practices of tenting and camping are often played down as pragmatic exigencies or 'primitive' improvisations. For example, the 'incidental architecture' of the Aboriginal Tent Embassy, an important political protest structure at the Australian Capital, has been dismissed by its political opponents. It is branded as a 'ramshackle monument'²⁰⁴, but as discussed in chapter 5 it is precisely this oxymoron that makes it architecturally significant. The theorisation of tent and camping practices as manifestations of nomadology emphasises their holistic importance as architectural strategies. This strategic and holistic significance will be illustrated below by the example of the black tent, the ancient and continually regenerated architecture of the Bedouins in the Arab world. It is argued here that tents and camping will be of increasing importance to Western theory and practice of contemporary architecture in the context of a global economy.

²⁰³ Peter Alford Andrews, *Felt Tents and Pavilions: The Nomadic Tradition and Its Interaction with Princely Tentage*, 2 vols. (London: Meisende, 1999).

²⁰⁴ See chapter 5 Nomadic Resistance on the Aboriginal Tent Embassy. Senator Ian MacDonald called the Embassy a "Ramshackle Monument" Canberra Times. 10 April 1995 and The Age 14 April 1995 cited in Coral Dow, *Aboriginal Tent Embassy: Icon or Eyesore?* (Parliament of Australia, Parliamentary Library, 2000 [cited 21.11.2001 2001]); available from <http://www.aph.gov.au/library/pubs/chron/1999-2000/2000chr03.htm>.

CHAPTER 4

BEDOUIN NOMADODOLOGY AND ARCHITECTURE

Western understanding of and interest in the Arab world of the Middle East has developed dramatically since the Greek historian Pliny described Arabs as foreign Barbarians living beyond the frontiers of civilisation in Northern Africa.²⁰⁵ Even so, Western understandings are today still grounded in concepts of otherness. It is argued here that this Western perception of the 'otherness' of Arabs and their view of architecture obscures the many nuanced benefits of mobile, temporal and collaborative architecture. This chapter shows that Arabs' understanding of nomadism and sedentarism is one of complementary and perennial co-existence.

Arabs, the archetypal nomads

Arab cultures have long been closely studied in the West, and this is understandable historically given the importance of migrations and colonial conflicts in Northern Africa and the Middle East in the proximity of Europe in the early twentieth Century.²⁰⁶ Yet an Arabic text of major significance, such as the above-mentioned *Muqaddimah*, has only been available in English since 1957. The notion of the Arab world as the 'cradle of civilisation' to rival Greece has been increasingly developed in the Christian Western world in the last centuries. The locus of the archetypal Nomad in the Arab world can be traced through Herodotus' writing about the history of

²⁰⁵ Pliny in *Natural History* describes those beyond the frontiers of civilisation as foreigners or barbarians, and barbarian languages as unintelligible i.e. 'bar bar' Pliny, John Alday, and I.A., *The Secrets And Wonders of the Worlde a Booke Ryght Rare and Straunge, Contayning Many Excellent Properties, Giuen to Man, Beastes, Foules, Fishes, and Serpents, Trees and Plants. Abstracted out of That Excellent Naturall Historiographer Plinie. Translated out of French into English* (At London: Printed [by J. Wolfe] for T. Hackett & are to be sold at his shop in Lumberd streete vnder the Popes head, 1587).

²⁰⁶ Halim Barakat, *The Arab World : Society, Culture, and State* (Berkeley: University of California Press, 1993).

Europe. The histories of the ancient Egyptian and Greek Societies make the Arab identity especially interesting in relation to the development of nomadic architecture.

Arabs are often identified geographically as the inhabitants of the region of the Arabian Peninsula in South-West Asia, however the Arabs as a people are more difficult to identify than this territory. Arabs are broadly regarded from a distance as the inhabitants of the desert, but of course they do not represent a monolithic cultural identity. A pre-eminent historian of the Arab world in the fourteenth century, Ibn Khaldun, uses the sociological term Arab synonymously with Bedouin and nomad to describe an identity independent of race, nationality or language.²⁰⁷ This perspective makes the study of Arabs particularly important because of its applicability to the life patterns, values and practices of nomads everywhere.

C.G. Feilberg's scholarly ethnographic thesis *La Tente Noire*²⁰⁸ (The Black Tent) is helpful in regard to the origins of this identity. Feilberg notes – after the Austrian Orientalist Alois Musil – that the Rwala Bedouins divide mankind into *Hazar* – those who live in houses, and *Arab* – those who live in black tents. The *Hazar* are further divided into *Qarawne* – who stay settled in their houses, and *Ra'w*, who travel seasonally with their flocks. Arabs are divided into *Swaya*, who raise goats and sheep, and *Bedouin* proper, who herd camels.²⁰⁹ The Arabs' contemporary nomadic - sedentary division can be connected with the ancient Persians and the Scythians of Asia minor, who were described in Herodotus' Histories.²¹⁰ However, Arabs seem to have always been divided traditionally into nomadic and sedentary societies.

²⁰⁷ *The Muqaddimah* transl. Franz Rosenthal Ibn and Rosenthal, *The Muqaddimah: An Introduction to History*, 250. (footnote 6)

²⁰⁸ Carl Gustav Feilberg *Tente Noire* Feilberg, *La Tente Noire: Contribution Ethnographique a L'histoire Culturelle Des Nomades*.

²⁰⁹ Feilberg cites observations by Musil which are corroborated in the work of von Oppenheim. *Ibid.*, 44-45.

²¹⁰ Herodotus *The Histories* Herodotus, Aubrey De Selincourt, and John Marincola, *The Histories*, Revised, with an introduction and notes by John Marincola ed., *The Penguin Classics* ([London, New York, Ringwood; Victoria; Toronto, Auckland]: Penguin Books, 1996).

The first to interpret Arab history in terms of *badu-hadar* (bedouin-sedentary) divisions in Arab society and culture is reportedly Ibn Khaldun²¹¹. Ibn Khaldun's approach, written in the early centuries of Turkish rule in Arabia after the Moslem conquest, appears to be objective, presenting the advantages and disadvantages of nomadic existence as part of a cycle of sedentary and nomadic. As it is found with many other nomadic cultures, Arabs and Bedouins practice varying degrees of nomadism, varying in their tendencies towards sedentarism or nomadism. There are many stages in between, and the short-term, often spontaneous, change from one degree of nomadism to another is dependent on a variety of factors related to environmental and economic situations. Ibn Khaldun explains that the Bedouins, the inhabitants of the desert, "adopt the natural manner of making a living, namely, agriculture and animal husbandry" and restrict themselves to the "necessary in food, clothing, and mode of dwelling." Importantly, he argues that "Bedouins are prior to sedentary people."²¹² Moreover, for him, "sedentary life constitutes the last stage of civilisation and the point where it begins to decay."²¹³

In Barakat's book *The Arab World*, the division in Arab society between the *badu* (Bedouin) and *hadar* (sedentary) is described as a perennial one. This intrinsic conflict of interests in the means of livelihood between the communities accounts for the conflicts and struggles for power, and a continually confrontational relationship. Ibn Khaldun identifies Bedouins as characteristically suspicious of cities, while constantly aspiring towards urban civilisation. With the strength and courage the Bedouin possess as 'rugged warriors', it becomes "inevitable that one day they will attack the city people, whom they consider weak, cowardly and affluent."²¹⁴

²¹¹ Barakat describes Ibn Khaldun (1332-1406) as sociologist-historian of renown Barakat, *The Arab World : Society, Culture, and State*, 48.,

N.J. Dagwood, editor of the abridged Routledge English edition, describes him as Abd-ar-Rahmun Abû Zayd ibn Muhammad ibn Muhammad ibn Khaldûn, statesman, jurist, historian and scholar (born Tunis 27.5.1332, died 17.3.1406, buried Cairo) Ibn and Rosenthal, *The Muqaddimah: An Introduction to History*, vii.

²¹² Ibn and Rosenthal, *The Muqaddimah: An Introduction to History*, 93.

²¹³ Ibid., 94.

²¹⁴ Ibid., 48.

However, once they have settled down to enjoy wealth and power, they lose their courage and solidarity, themselves reaching a state of 'weakness' which invites attacks from other Bedouin, who in turn establish their own rule. It becomes apparent that these ways of life are interrelated and represent various stages of each different society in flux over time. Indeed, a degree of interdependence always exists between nomads or tent-dwellers and city dwellers, Even though both are natural groups as Ibn Khaldun writes in "*The Muqaddimah*" an *Introduction to History*, the latter dominate and the former, according to Ibn Khaldun, are virtuous.

According to Ibn Khaldun , if the Bedouin need stones for their cooking pots, for example, they take them from buildings that they tear down for that purpose. If they need wood for props and tent poles for their tent dwellings, they tear down roofs to get the wood for that purpose. "The very nature of their existence," he maintains, "is the negation of building."²¹⁵ The Bedouin have emerged as a people cultivating anti-architecture, pillaging what they need for their nomadic existence. Because of the short-term strategies associated with camping, the material usage is minimal and far more modest on the scale of resource efficiency than is the case with much sedentary architecture.

In light of this context, the Arabs' model of the tent and its influence on subsequent Islamic architecture provides access to a set of valuable architectural principles. Bedouin nomadology represents a critical case study in relation to architecture. The Black Tent of the Bedouin may be regarded as the symbolic antithesis of the kind of "massive, white, Western architecture", described in the previous chapter.²¹⁶ The Black Tent is incidental, portable, temporary. It is engendered, erected and maintained by a tribe, while the bureaucratically sanctioned 'White

²¹⁵ Ibid., 118.

²¹⁶ For further information see the fact sheet on Australia's Provisional Parliament House in Canberra (Murdoch, 1927) (see http://www.naa.gov.au/publications/fact_sheets/FS109.html)

House' type of Western architecture may be characterised as episodic, solidly permanent, and symbolically erected 'in perpetuity' by a hierarchy of specialists.²¹⁷

Western constructions of 'Arab' and 'Nomad'

One of the major early twentieth century British references to the Arab world is in the fiction of T.E. Lawrence. Lawrence notes that Arabs of the 'Middle East' and 'Near East' are not easily identifiable as a single culture or race. Known to the British as "Lawrence of Arabia", he lived a large part of his life among Arabs, becoming sufficiently integrated to provide an interesting if culturally biased account of 'Arab life'.

When clans born in the highlands of Yemen were "thrust into the desert by stronger clans", Lawrence claims they "unwillingly became nomads to survive". After wandering the "well-roads of the wilderness" they returned equally unwillingly to agriculture. Thus in every northern Semite was to be found "the mark of nomadism, that most deep and biting social discipline".²¹⁸ Rather than being identified by self-consciously cultivated formal characteristics found in its architecture or artefacts, nomadism in this context is being read as a social phenomenon that is perennially precipitated by cycles of greed and exile. Lawrence's account presents the Bedouin as victims, unwillingly wandering to find subsistence.

The black tent of the middle East appears prominently in Philip Drew's account of *Tensile Architecture* because he claims it is "closest to modern prestressed tensile surface structures". Drew however, assumes a determinist position in declaring that tents emerged functionally because of lack of materials and a need for mobility, this occurring in regions where "inadequate resources dictated a nomadic form of economy."²¹⁹

²¹⁷ Ironically, Provisional Parliament House was meant to be "a modest building intended to provide facilities for the legislative work of the federal government until a permanent, monumental structure could be built" (see http://www.naa.gov.au/publications/fact_sheets/FS109.html para 1.)

²¹⁸ T. E. Lawrence, *Seven Pillars of Wisdom : A Triumph*, Penguin Modern Classics ; 1696 (Harmondsworth, Middlesex ; New York: Penguin Books, 1962), 31-43.

²¹⁹ Drew, *Tensile Architecture*, xvii.

This view is in contrast to the earlier history of Ibn Khaldun, which became available in the 1950s in English, and to the view of Khazanov in *Nomads and the Outside World* who alludes to the mutually beneficial dialogue between nomadic and sedentary society.²²⁰ Caught in a personal conflict of interests between his affliction with the British Empire, and his sympathies with the 1916 Arab rebellion against the Turks, Lawrence's work cannot be regarded as unbiased. However, the life lived by Lawrence in 'Arabia', from his accounts of travelling thousands of miles across the Sahara on camel back qualify him as an English-speaking nomad himself.²²¹ While the image of Arabs in the Western world has changed significantly in the last century, Arabs remain 'foreign' to Europeans or Westerners in respect of their practices of animal husbandry, responses to landscape, family, rituals and perceptions of architecture. Architecture is part of a 'way of life' or 'mode of dwelling' in a minimalist ecosystem called 'Desert' which seems 'uninhabited' in a variation of the way Australia was once thought to be an uninhabited continent²²². Of the nomadic tribes or cultures, which share values of nomadic life and architecture, the Bedouin Arabs are well known scientifically and mythically in Western literature. The Black Tent of the Arabs is the same tent that is familiar to the Western world from the Old Testament of the Bible. Feilberg's *La Tente Noire* 1944 is still considered by scholars in the field to be the most "erudite, ambitious and remarkably documented work on nomadic architecture."²²³ As a result of this book, the Black Tent of the Middle East is possibly the best-recognised form of nomadic architecture to this day.

²²⁰ A. M. Khazanov and Julia Crookenden, *Nomads and the Outside World*, *Cambridge Studies in Social Anthropology* ; 44 (Cambridge ; New York: Cambridge University Press, 1984), 212.

²²¹ As suggested in Robin Chew's review of *Seven Pillars of Wisdom* R. Chew 2002 Online: <http://www2.lucidcafe.com/lucidcafe/library/currentread/currentread02.html> [accessed 17 Nov 02]

and the Lawrence of Arabia Fact File Jeremy Wilson (ed) 2002 Online: <http://www.lawrenceofarabia.info/> [accessed 17 Nov 02]

²²² Terra Nullius was overturned with the Land Rights Movement following the 1967 referendum; see also chapter 5.

²²³ Prussin, *African Nomadic Architecture : Space, Place, and Gender*, 1.

Moreover, Feilberg regards the Bedouin tent as the culmination of black tent evolution.²²⁴ The book shows that a wide range of nomadic and semi-nomadic peoples use the black tent. Feilberg is able to identify twenty-two different principal types of Black Tent, and provides an analysis of each according to awning and its reinforcement, fastenings, poles and stakes, awning tension, tent walls, interior arrangement of tent, erection and dismantling of tent.

Feilberg's theory is that the black tent is the same Indo-European nomadic tent, which came to Western Asia after the 2nd millennium BC, with the migration of Indo-European peoples. This theory complements Dostal's theory of Bedouinisation of Western Asia.²²⁵ The academic benefit of making these extensive intercontinental connections, beyond establishing their equivalence with the value of influences in sedentary architecture however remain to be shown.

Compared to other traditional nomadic cultures, these Bedouin represent a special case. Known to the Western world as one of the most determined militantly nomadic cultures, the desert Arabs warrant study as a special case among the worldwide groups of nomads and their uses of architecture. They have a very developed culture, which is comparatively well documented, dating back to the fourteenth century history work of Ibn Khaldun for example²²⁶. The 'black tent' is known in Western Architecture as a distinctive and definitive architectural 'type', as the most ubiquitous and archetypal example of what is called nomadic architecture in Western literature, especially in Europe.

The Black Tent

As noted above, the Black Tent is arguably most widely-documented of the vernacular types of traditional nomadic tents. It is the home of Arabs and many other African and Asian peoples up to the present day, and therefore represents an entire culture of nomadic dwelling rather than a mere

²²⁴ Feilberg, *La Tente Noire: Contribution Ethnographique a L'histoire Culturelle Des Nomades*, 18.

²²⁵ Drew, *Tensile Architecture*, 58.

²²⁶ *The Muqaddimah* c. 1377 Ibn and Rosenthal, *The Muqaddimah: An Introduction to History*..

provisional form of shelter. The ‘black tent’ in isolation does not represent a dwelling or ‘home’, but rather, must be seen as one element of a complete system of life — a mode of weaving a life pattern and dwelling ‘horizontally’ in the landscape — a mode employed by hundreds of tent-dwelling tribes of Asia and Africa. To Western architects the black tent appears symbolically significant as the ‘original’ means of architecturally inhabiting or dwelling in the hostile deserts of Arabia.

The Arabian Black Tent of the Bedouin is strongly symbolic for the people using it, to the extent that it completely embodies their identity and culture. These Bedouins consider themselves the only true ‘Arabs’ because they remain nomadic. They call their home the “*bey’t es sh’aar*” which can literally be translated as the “ House of Hair” , the name given by the people to their architecture and mode of dwelling. Arab means “people of the tent”, and this to the Arabs themselves, denotes a life pattern and set of values elaborated further in the work of Ibn Khaldun elsewhere in this thesis.

The Black Tent is thought to have originated in Mesopotamia around 3000 - 4000 BC²²⁷ which makes it one of the most ancient and timeless architectural types still in use. The main criteria for describing tents, based on Feilberg’s schema for describing the principle types of black tents, would be:

- The nature of the skin or awning and the means of its reinforcement.
- The ties or fastenings used in the tent.
- The Poles and stakes used in the tent
- The tensioning of the awning
- The tent walls
- Interior arrangement of the tent

- The erection and dismantling of the tent

These characteristics provide a set of criteria which make comparisons possible between the diverse types of tents. The section to follow outlines briefly some of the features of black tents relevant to this study in the context of Feilberg's study of Black tents.

As the vernacular form of the tent most similar in its structural principles to twentieth-century tensile structures²²⁸, the Black Tent is thought of as a clearly-defined type. Actually, the Black Tent type comprises a diverse range of ethnic variants. Variants of the Black Tent are geographically divisible into Eastern and Western major types. The Eastern types, the Oriental or Persian, are simpler, constructed of parallel cloth strips, and are considered as the earlier type. The Western types, also known as Occidental, or Arab types, make up a complex study. These are the types the Bedouin call the *beyt es shaar*, the "House of Hair".²²⁹

The Black Tent can be considered as an archetype of subversive anti-architecture: its blackness is menacing to Westerners, like the blackness of barbarians or 'foreigners'²³⁰. The specified 'blackness' of the 'black tent' of the Middle East serves to underline the 'otherness' of this nomadic tent in Western literature which apparently assumes, at least in twentieth century modernist attitudes to architecture, that 'whiteness' is superior and progressive²³¹. (Architecture with a capital A is considered as sedentary, permanent, 'white', and institutional). The generalisation of blackness is symbolic of the detachment of Western interest in the Black Tent.

The Black Tent of the Middle East, though diverse in colour, is generally considered black, because it consists predominantly of an awning of woven, black goats' hair, which lightens after

²²⁷ Hoppe, "Freigespannte Textile Membrankonstruktionen: Ein Beitrag Zu Geschichtlichen, Materialtechnischen, Konstruktiven Und Gegenwärtigen Entwicklungen," 274.

²²⁸ Drew, *Tensile Architecture*, 41.

²²⁹ Faegre, *Tents : Architecture of the Nomads*, 18.

²³⁰ See Richard Dyer's discussion of the opposition of "white=good" and "black=bad" Dyer, *White*, 58-59.

bleaching in the sun, and because of its strikingly dark appearance from a distance away, especially in desert contexts. Every surface - roof, floor and wall - as well as furnishings, carpet bags, spindle bags and so on, are made from black goats' hair. The strong hair, shorn from herded goats, is spun on simple portable spindles and woven on handlooms into strips of about four cubits wide (up to 1.8m), which are later stitched together for tent construction. Modern equivalents are sometimes made of plastics or other new fabrics, equally appropriate materials for these temporal structures. Symbolically, the relationship of the black tent vellum or 'skin' to the users who are the tents inhabitants is very intimate, its production being a family-based ritual. The activity of weaving in the tent by the inhabitants is part of its recurring maintenance.

The tent awning is stretched over a minimal frame of wooden poles, tensioned with ropes. The materials relate to efficient use of available resources which are part of the nomads' life patterns: domesticated animals carry the packed tent, as well as providing milk, meat, leather, and dung for the fire. Timber is used sparingly for poles, timber availability being heavily dependent upon the nature of the regions the nomads travel.

Mobility

Black Tents move seasonally, dependent upon the herding and hunting activities of the tribes.

While goat herding tribes move seasonally and are considered semi-nomadic, camel herders who traditionally lived as pirates by raiding are less seasonally predictable. Frequency of movement is dependent upon the size of the herd and resultant grazing area required, which in turn is related to the rate at which a pasture is exhausted. The grazing is often negotiated with sedentary farmers so that fallow fields are manured by the herds. The adaptable and seasonal natures of the nomadic occupation of space are only made possible by possible by tent components and animals which assist in moving the dismantled tents. Traditionally, the dromedary and occasionally the yak are the major pack animals for the transportation of tents, although increasingly, nomadic groups use

²³¹ These suggestions are elaborated in Mark Wigley, *White Walls, Designer Dresses : The Fashioning of Modern*

cars and trucks for the transport of the tents and belongings. Geographically, the distribution of usage of the Black Tent is roughly the same as the distribution of the dromedary.

Thus, the composition, physical weight, and resulting level of mobility of tents is closely connected to the capacity and number of pack animals and personnel in the social unit, and this is in turn related to the number of wives and tents each man may provide for. A carefully worked out economy of scale makes the nomad tribe of the caravan (from Persian *karwan*²³²) a feasibly efficient community. The specific Black Tent type in use would fit the particular movement pattern.

Constructionally, the 'Eastern' Black Tent spans longitudinally, simply using the woven bands of fabric tensioned along their length between supporting poles. Tent awnings are made of long strips of fabric woven in hand looms from black goats hair. The 'Western' Black Tent is considered a further development, using reinforcing bands stitched across the width of the awning so that the tent can be spanned cross-sectionally. The transverse bands across the structure of the long primary strips appears to be a later invention, as the description of the Altar tent in the Bible's book of Exodus appears to be of the other 'eastern' type.²³³

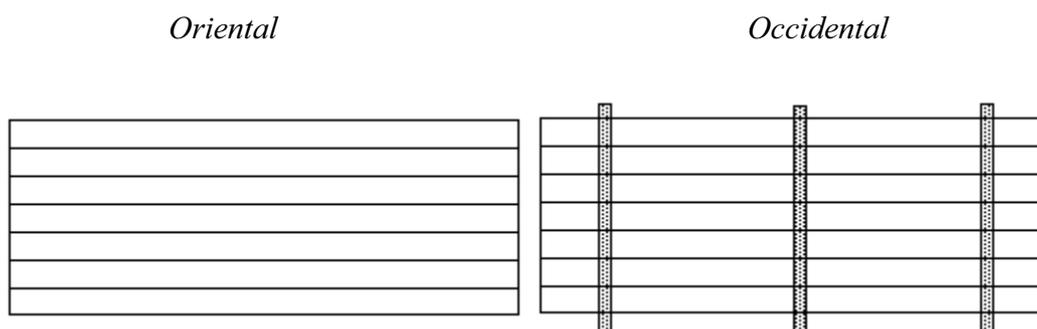


Fig. 7. Construction of the 'oriental' Black Tent type, left – without cross band; and occidental type, right – with cross band. (plan view of fabric strips of tent awning)

Architecture (Cambridge, Mass.: MIT Press, 1995).

²³² Wilkes and Krebs, *Collins English Dictionary*, 242.

²³³ Drew, *Tensile Architecture*, 70. and Hoppe, "Freigespannte Textile Membrankonstruktionen: Ein Beitrag Zu Geschichtlichen, Materialtechnischen, Konstruktiven Und Gegenwärtigen Entwicklungen," 275.

Maintenance would be undertaken constantly as a matter of course and could be regarded as 'housekeeping' rather than as crisis or emergency. New strips of tent fabric for example, would be completed on the loom in the camp, then added to the centremost of rows in the tent awning. The pattern of movement allows the camp to be cleaned up without permanent floors or walls being made. The Black Tent is also variable in its configuration, so that flaps can be raised for ventilation in summer or lowered for protection in winter.

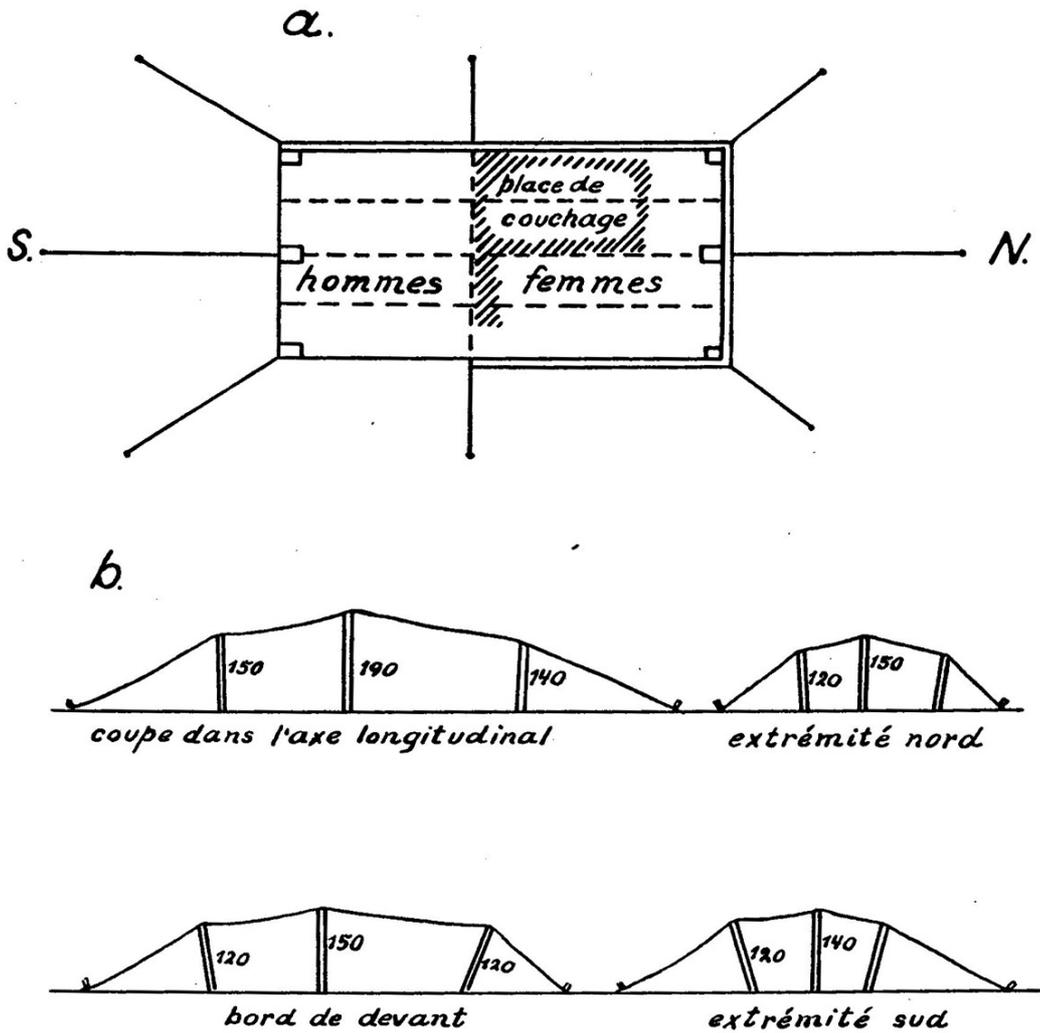
Gender

The women, children, servants, slaves of these tribes do the physical work of pitching the tents, cooking, carrying water, spinning and weaving and looking after the flocks. The men are responsible for protecting the safety and security of the social units, for raiding, for protecting herds, for providing hunted meat, and directing the movement of the camps. Increasingly, sedentary governments have suppressed these military tactics, pacifying men's role to a one of negotiating camel trading deals over coffee, or getting 'real jobs' in the sedentary society.

The black tent's spatial configuration invariably incorporates a *Qata* or 'divide' curtain between male and female domains, as shown in Feilberg's plan (see fig. 10), which makes a clear division in a space which appears rudimentary.

66 82 b

Types de tentes noires



Toutes les mesures sont indiquées en centimètres.

Fig. 6. Tente des Bédouins Saouahire, a: Plan. b: Coupes.

Fig. 8. Drawing of plan and section of a Bedouin Tent.²³⁴

Drawings of the interior layouts of Black tent types in the literature show the placement of many important household implements associated with (house)work, cooking and eating, and sleeping, indicating the gender allocation of the most essential daily activities and rituals. Primary activities would be weaving, preparing food and coffee, eating and sleeping on bedding which has

²³⁴ Drawing figure 6a reproduced from *Tente des Bédouins Saouahire* Feilberg, *La Tente Noire: Contribution Ethnographique a L'histoire Culturelle Des Nomades*, 66.

been stowed during the day. The men folk, who are generally afforded less privacy than the others, mainly direct and organise, especially while travelling, while women do the majority of physical work associated with maintaining the camp. Some of the women’s work would consist of making tent fabric, of pitching tents and arranging the interiors, of cooking, of minding the infants and presumably other family including husbands.

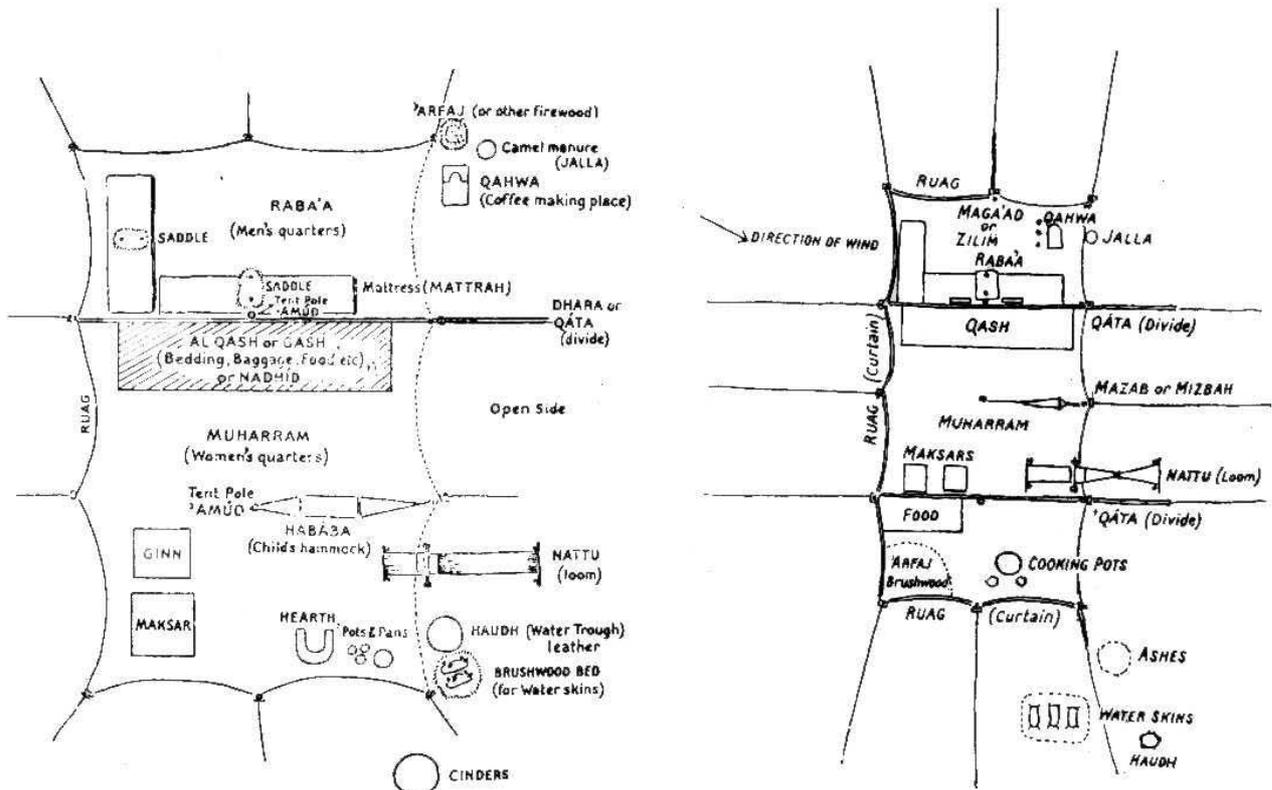


Fig. 9. Floor Plans, Two Pole and Three Pole Mutair Bedouin tents.²³⁵

As in most of the tent plan layouts in this chapter (see figs. 11, 12, 13 and 15), those of typical Mutair Bedouin tents (see fig. 9) show clearly the gender-based separation of inhabitants: men, women and children. The women's quarters "Mu'harram" are much larger, and are separated from the men's quarters "Raba'a" by the internal screen wall the "Qata". The women's domain is forbidden territory to all others, while the women may watch the men through a small viewing hole in the Qata.²³⁶ Additional substantial furnishings, like the *Qach* (storage perhaps not

²³⁵ Drew, *Tensile Architecture*, 65. (Figure 104)

²³⁶ Ibid.

unrelated to a computer ‘cache’) reinforce the divide, not to mention the placement of various artefacts or accessories associated with each group's activities.

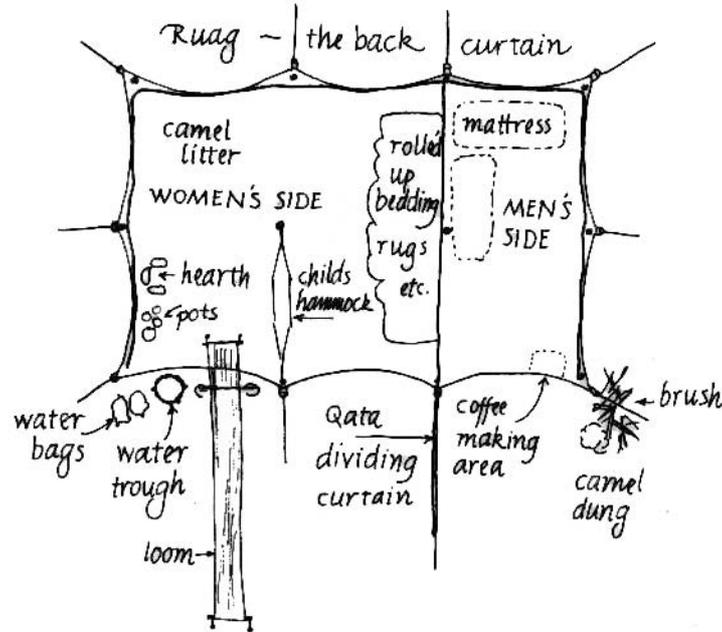


Fig. 10. Bedouin Tent Layout.²³⁷

The plan shows an interesting spatial relationship between the sexes in the social unit. Rather than accommodating men and women in separate tents, which would be feasible, they are together under one “roof”, but separated by the Qata, the dividing curtain, a spatial sub-division equally as clear as the distinction of interior and exterior.

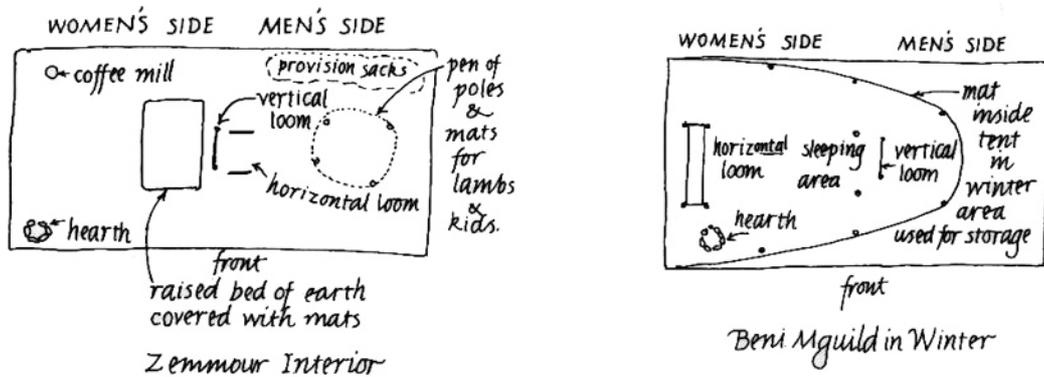


Fig. 11. Zemmour Tent Layout.²³⁸

²³⁷ Faegre, *Tents : Architecture of the Nomads*, 24.

The internal arrangement of the Zemmour tent shows a more equivalent relation between the men's area and the women's area, however, as in the Beni Mguild tent below, the hearth is placed on the women's side.

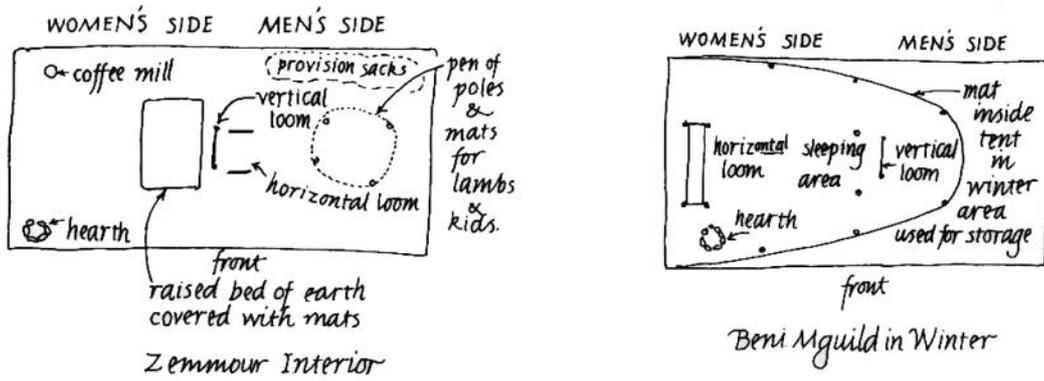


Fig. 12 Beni Mguild Tent Layout.²³⁹

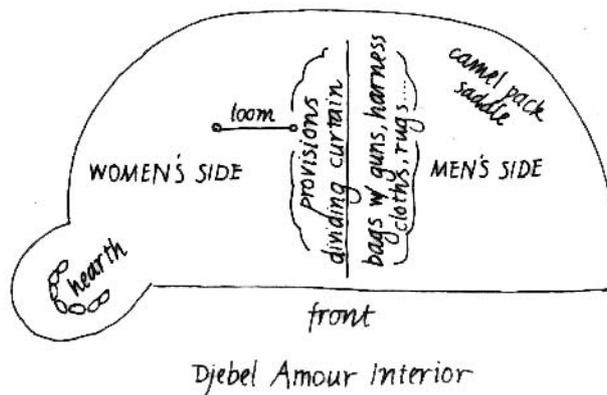


Fig. 13. Djebel Amour Tent Layout.²⁴⁰

The Djebel Amour has an asymmetrical plan shape because of the annexed kitchen on the women's side of the tent. Most Black Tent dwellers cook outside the tent and there is no need for a smoke hole, but in this design, old pieces of tent cloth are added to form a kitchen, and a there is a hole provided between the awning pieces, and the smoke hole is held open by poles.

²³⁸ Ibid., 34.

²³⁹ Ibid.

²⁴⁰ Ibid., 38.

Variations of the Bedouin Tent

Specialised types of Bedouin tents include the Ouled Ali, those of the Kabaabish and the Moroccan Berber and the Algerian. The Ouled Ali tents have an extra cross sectional strip at each end of the awning, and represent a transitional form to the North African Black Tent type.

The tents of the Kabaabish of southern Sudan are made with multiple textile tensional cross bands, forming a transitional form to the Mat and Skin Tent type. The Moroccan Berber tent is the home of some of the earliest inhabitants of north Africa, and is traditionally strengthened by multiple stitched on tension belts, which strengthen the tent against heavy rainfall. The sides are drawn up in summer to allow cross ventilation, and in winter insulated additionally with woven reed mats.

The Algerian Black tent of the mountains, found in a geographically smaller area than the Moroccan above, is larger than that of the desert because of the sizes of flocks. Load distribution devices at the ends of the tension bands differ for each tent type and culture.

Moors have very flat desert tents (see fig. 14) with low wind resistance, and the interiors are comparatively small. The tent is very simple, without many poles or extra wall cloths, and to a degree more than most Black Tents, the tent is simply the roof. The main tension of the tent runs longitudinally, avoiding the need for transverse tensioning bands, so that the tent of the Moors might be mistaken for an Eastern or oriental type, despite being on the westernmost edge of Black Tent territory.

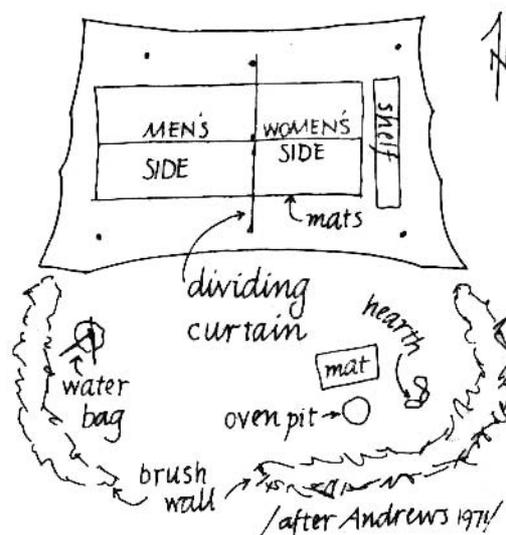


Fig. 14. Moor Tent Layout.²⁴¹

Of the various Iranian types of tent, the Kurd tent (see fig.16) generally looks different, because a straight line of straight centre poles is often used, while others use T-shaped poles and create a wavy ridge line. There are exceptions, and the use of T-shaped poles varies and is not definitive of tribal identification. The shape of the Kurd tent and variations (Lur, Qashqai, Baktiari and Baaseri, also vary however, according to the time of year. During the process of migrations, the nomads use the tent cloth as a windbreak, while during the summer, the tent is high with a flat roof, in the winter, the roof has a steep pitch for the heavy rainfall.

The plan of the Kurd tent shows the men's side on the left, the women, screened from the entry, on the right, with the food storage pantry and twin hearths. Both sides have areas for rolled rugs and bedding.

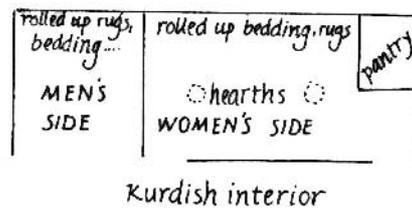


Fig. 15. Kurd Tent Layout.²⁴²

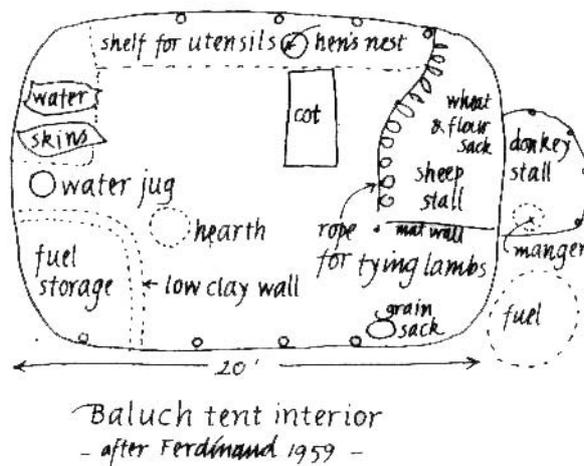


Fig. 16. Baluchi Tent Layout.²⁴³

²⁴¹ Ibid., 40.

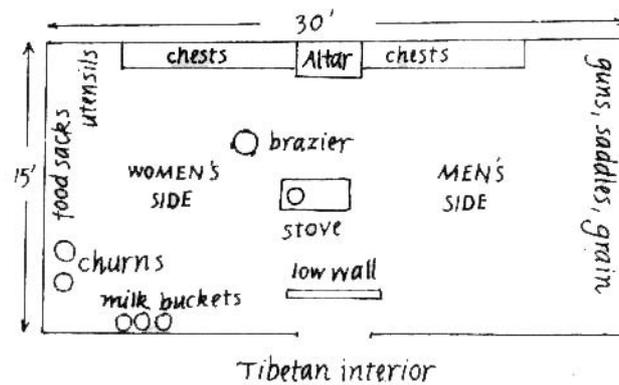


Fig. 17. Tibetan Tent Layout.²⁴⁴

The Middle Eastern Mat-Skin tent still uses the principles used by the Hamites of Africa- the people led by Ham, the son of Noah of biblical fame.²⁴⁵ The mat-skin tent is believed to pre-date the Black Tent. Unlike the northern Hamites, who converted to using the Black Tent with the arrival of the Arabs, the eastern Hamites, the desert Berbers continued to use mostly skins and mats. The tent awnings are often composed of Goat skin, or woven mats of leaves or reeds, and goat hair is used for rope only and not for the awning fabric. These mat-skin tents are the tents of the desert Berbers, the Tuareg people and the Teda, who all lived north of the Sahara until the Bedouin invasion of the eleventh century, when the Tuareg and Teda retreated south.²⁴⁶ Feilberg notes also that the "culture represents an older state than that of the Bedouin Arabs which predominates".²⁴⁷ Women of the Tuareg are leather workers who do are not weavers by occupation like the Bedouin women. They are powerful with their complete ownership of Tents and contents and the right to divorce men at will. The women are renowned as fighters, carrying knives strapped handle down to their arms, ready to draw.²⁴⁸

²⁴² Ibid., 46.

²⁴³ Ibid., 51.

²⁴⁴ Ibid., 59.

²⁴⁵ Ibid., 64.

²⁴⁶ Ibid.

²⁴⁷ Feilberg, *La Tente Noire: Contribution Ethnographique a L'histoire Culturelle Des Nomades*, 143.

²⁴⁸ Faegre, *Tents : Architecture of the Nomads*.

Stick frame dwellings, however, are found among particularly hunting and gathering peoples all over the world. Skins are often plentiful in hunting communities, and these are accordingly used for clothing and shelter. Because skins do not stretch out as well as woven material, the frames used are more complex than the poles used in the black tent. Depending upon the materials available in the environment and the frequency of migration, stick frames may be left in each location and erected anew, or transported, in which case, the weight is pared down to an efficient minimum.

Tuareg Mat tents, for example, use a framework of sticks, which are first lashed together in parallel arches by joining pairs of curved poles set in the ground. Importantly, the bed and storage rack, the only furniture, are placed on a cleared piece of ground and the tent built over them. The dome is surrounded by a square horizontal perimeter frame, and palm mats are placed over the entire framework and tied down. The construction work is all done by women, with the ridgepole and ridgepiece the only exceptions, and the interior is decorated with elaborate hangings and leatherwork made also by women. The tent is synonymous with the marriage in Tuareg culture: To marry is to 'set up a tent' and the tent represents linguistically both the womb and the family unit in this matrilineal society.

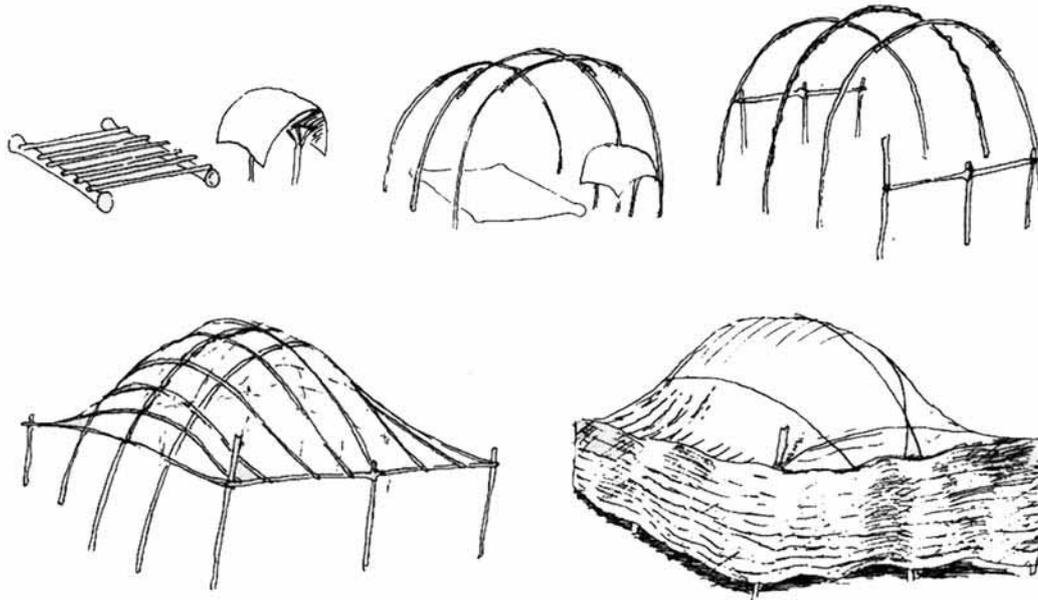
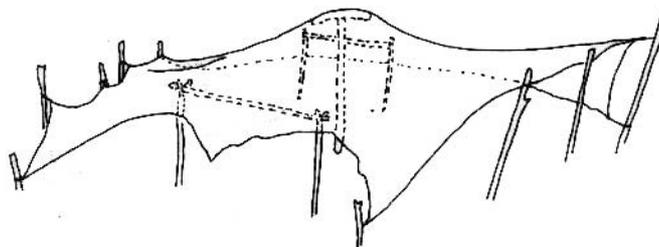


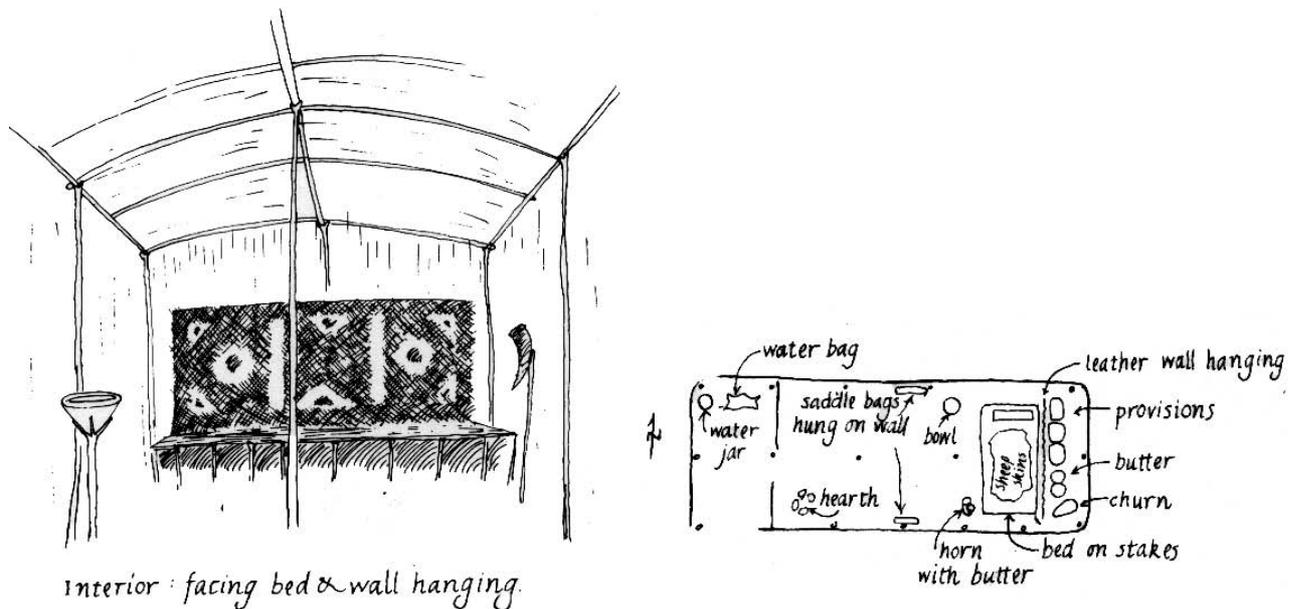
Fig. 18. Construction of a Tuareg Mat Tent.²⁴⁹

As a dwelling which can be described as something between a hut and a tent, the construction process of the Tuareg mat tent (see fig. 18) shows the developed ritual of erecting a non-place-specific accommodation in a territory with familiar conditions and resources. A space is cleared and the bed and storage rack are placed in position. Three parallel arches are set up, using two curved poles lashed together to form each arch, the ends of which are buried slightly in the ground. Poles are set at the front and rear and a cord wound around the middle arch. Horizontal sticks are put through loops in the cord on the central arch and tied down at each end. Finally, palm mats are placed over the framework and tied down.²⁵⁰



²⁴⁹ Ibid., 69.

²⁵⁰ Ibid.

Fig. 19. T-ridgepole frame Tuareg Skin Tent.²⁵¹Fig. 20. Teda Tent Layout.²⁵²

The layout of the Teda Mat skin tent (see fig. 20) is slightly more box-like than the Tuareg Mat tent (see fig. 18). It is semi-portable because the frame is usually left behind. The region where these tents are used stretches from the Western Sahara to Baluchistan and Kenya to the south. The southern border constitutes a gradual transformation to permanent tents which look similar, or semi-nomadic life patterns. Mat Tents are used by semi-nomadic tribes of the savannah who only move a few times per year, as well as nomads who move as often as weekly. Skin tents of the Tuareg however are used in the desert where they are effective in withstanding sandstorms.

The focus of the tent interior, behind a bed of framed construction similar to that of the tent, is a wall hanging of intricate coloured designs made by the mother and female relatives of the bride who inhabits the tent. There is a series of special procedures for the erection and occupation of a

²⁵¹ Ibid., 71.

²⁵² Ibid., 74.

wedding tent which are described in detail by Prussin.²⁵³ The erection of the tent is synonymous and integral with the wedding ritual, which Prussin argues, serves to empower of women in these nomadic societies.²⁵⁴ Additionally, female children learn to ‘play house’ by helping building tents and miniature camel loads,²⁵⁵ so that educational play is part of preparation for adulthood.

Politics of Space in Arab culture

In his book about Arab politics, *Tents and Pyramids*.²⁵⁶, Fuad I. Khuri gives an account of how “Arabs see and deal with reality.” Reality is perceived as a series of non-pyramidal structures, a matrix of discrete units inherently equal in value. The mental design of this reality is like a Bedouin encampment, Khuri suggests, composed of tents scattered haphazardly on a flat desert surface with no visible hierarchy. In pointing out the difference between arboreal and rhizomatic structures, Khuri notes that the Bedouin tent is “shaped like a cube or prism and does not resemble a pyramid”. Tents and pyramids are held to be metaphorically opposed mental images, the tent signifying the absence of hierarchy and graded authority, while the second signifies the presence of both. In non-pyramidal structures, authority is derived from sheer physical power, with one person dominating over others, rather than a graded system where roles are subordinated in a hierarchical structure. In this context, strategy, manoeuvrability and tactics take precedence over office and structure.²⁵⁷

Khuri proposes four principles of action and organisation, as ideological constants, which are held to be true by Arabs and need no validation. These principles are:

- A non-pyramidal image of reality,
- the vulnerability of isolation,

²⁵³ Prussin, *African Nomadic Architecture : Space, Place, and Gender*, 104.

²⁵⁴ Ibid., 60.

²⁵⁵ Ibid., 63.

²⁵⁶ Khuri, *Tents and Pyramids : Games and Ideology in Arab Culture, from Backgammon to Autocratic Rule*.

- seeking protection in groups, and
- tactics are more important for action than the status of office.

These four principles are to be found at work “not only in backgammon, but also in sports, in card games, in architecture and design, in poetry and prose, in charting genealogies and in laws of inheritance.”²⁵⁸ Thus, a broad cross-disciplinary approach is taken toward the application of these principles of thought. This seems to make it clear, as mentioned above, that a ‘lateral’ or horizontal approach pervades the approach to life, which is not segregated into separate domains of the domestic, the dwelling-house, the office, work and leisure. This helps to account also for the absence of physical articulations of private and public realms with which Western architecture is frequently preoccupied, through the manipulation of permanent walls, doors, and windows.

The absence of formal hierarchical structures reflects a generalised image of reality — “the Arab mind seems to see reality as composed of discrete, atomised units inherently identical in value.”²⁵⁹ Arranging the same unit or motif in different shapes creates designs and patterns. Hierarchy in Arab culture is “summarised by a single *Imam or Emir* with a set of followers each linked to him dyadically in the form of a rimless wheel. As soon as the *Imam or Emir* disappears, his following disperses. “The structure created by his presence swiftly collapses in his absence”. Fourteenth-century scholar Ibn Khaldun described the charismatic leader as the possessor of presence (*dhu hadra*).²⁶⁰ Group membership is highly valued and ostracism, excommunication, or banishment are “thought to be the severest form of punishment a group can inflict on its members.”²⁶¹

Tents provide a horizontal way of thinking about dwelling, because they are by nature provisional and non-monumental. Unlike other forms of architecture, they are to be understood as a kind of ‘accessory’ to dwelling for many nomads, who would seem to dwell spiritually and pastorally

²⁵⁷ Ibid., 11.

²⁵⁸ Ibid., 12.

²⁵⁹ Ibid., 21.

²⁶⁰ Ibid., 13.

throughout a 'country' or landscape. The use of the shelter or windbreak as an essential architectural tool or accessory for the temporal protection of the weak, the young or the sleeping can be regarded as a non-institutionalised extension to the need for protection of clothing.

The nomad encampments of the Bedouins are temporal constructions which not only have a physical resemblance to the earliest dwelling places referred to biblically in the book of Exodus, but their usage in terms of ephemerality, mobility, ritual and gender add to the significance of their architecture as a transferable model of nomadic architecture. The relationship of the black tent vellum to its inhabitants is very intimate, its production being a family-based ritual of weaving in the tent by the inhabitants. Mobility by camel or other large animal is part of an ecological coexistence and subsistence of a collaborative family grouping.²⁶² The continually re-established gender domains in the spatial layout of the tent and the distribution of work clearly reflect a lived practice of the division of labour and responsibility between male and female, young and old. The constant recomposition of the camp and the cyclical maintenance of its elements make for a refined balance of life. Given the often very austere environmental conditions and closeness to nature required of this mode of dwelling, the architectural schema displays a set of principles worthy of attention.

²⁶¹ Ibid., 14.

²⁶² The culture of travelling in caravans is still evident in many ways. The Afghan tradition of decorating camels for traders' journeys is upheld in the tradition of decorating Afghan trucks: see Jean-Charles Blanc, *Afghan Trucks* (New York: Stonehill, 1976).

CHAPTER 5

NOMADIC RESISTANCE

Tents, through their association with the 'primitive' and 'unselfconscious' architectural traditions, have an established position in architecture outside the West. The tent has often been used as a means of besieging, invading, colonising and celebrating new and experimental space. In central Europe, there is a tradition of elaborate and princely tents, such as those deployed by the Ottoman Empire during their sieges on the frontier of the Western countries, and also the use of tents in the sieges of 1529 and 1683 at Vienna, for example.²⁶³ These could clearly be regarded as Tent Embassies of the Ottoman type, but will not be addressed in this chapter, which is concerned primarily with the Australian Aboriginal Tent Embassy as an established phenomenon. Grand Tents appear also in the widely-used, princely tent apparatus used by travelling nobility in European history, inspired and arguably emulating the tents of Kublai Khan and other Oriental models.

In the Western world of the late twentieth century, tents and collapsible architectures have also become familiar features in the context of protests and demonstrations, increasing with the global activism of the 1960s. European avant-garde architects contributed to peace and protest movements in Europe with collapsible and mobile architecture. The Austrian group *Haus Rucker Co.*²⁶⁴, the French *Utopie* group and others promoted temporal and portable architecture through inflatable designs. In Australia, the architectural revolution appeared in a politically important but apparently architecturally unpedigreed domain, the protest camp. This chapter suggests that the

²⁶³ Broucek, *Historischer Atlas Zur Zweiten Tuerkenbelagerung Wien 1683.*, Kreutel and Prokosch, *Im Reiche Des Goldenen Apfels.*

connection between these ways of employing tents in the Western world, and the vernacular uses of tents by nomads, is not a coincidence, but rather that each relates to architecturally significant features of the tent.

There is an important parallel between the temporal, mobile, and social 'architecture' of structures for activism and the social deployment of these structures in temporal and mobile ways. The world wide web of communications in the internet has provided a tool for activism since the 1990s. This activism has also provided a demand for indeterminate, mobile, temporary and rapidly deployable architecture, which has been found in the form of tents. The tent is a choice of architectural strategy which is not merely pragmatic. Ideological reasons also underpin the uses of these kinds of structure, contributing to their significance as architecture.

In the exhibition catalogue for the Architectural League of New York's *The Inflatable Moment*, which is about the architecture of activism in the turbulent period of the late nineteen sixties, Marc Dessauce describes the resonances between ideology and activist architecture. At this time, monumental modern architecture appeared to have come to its logical conclusion, and modernity was captured in Karl Marx's statement "All that is solid melts into air"²⁶⁵. Dessauce makes light of the ephemeral work of activists as "a lot of hot air", describing the inflatables that formed a prominent part of the revolutions of the 1960s. The unsettled social conditions surrounding the global student protests of 1968 were reflected in the architectures of protest; temporary, mobile and collaboratively deployed.

²⁶⁴ 'Haus Rucker' were an Austrian group of radical architects in the tradition of the "68'ers" whose name I would translate loosely as 'Building rockers'.

²⁶⁵ Marshall Berman, *All That Is Solid Melts into Air : The Experience of Modernity* (London: Verso, 1983), 15.

Strategies of Occupying Contested Space

This thesis identifies the Aboriginal Tent Embassy (named as such by the protestors who constructed it) as a prime example of collapsible architecture.²⁶⁶ The Aboriginal Tent Embassy is symbolically juxtaposed with the White Invasion/Settlement of Australia, and to form its case, uses tents as part of expressing the process of ownership. The Aboriginal Tent Embassy in particular is discussed in terms of ephemerality, portability, and social engenderment of activism it employs. The now prominent Aboriginal Tent Embassy in Australia draws attention to similarities between these two quite separate instances of the use of tents. It is further argued here that an uncanny similarity exists between two historical moments of illegal opportunistic camping in Australia.

The encampment of the first Europeans in Australia was eventually made redundant, with the establishment of permanent settlement. On the other hand, though the encampment of the Aboriginal Tent Embassy began somewhat spontaneously on 26 January 1972, it continues to the present day, in the grounds of Provisional Parliament House in Canberra.²⁶⁷ It has stood in protest intermittently since 1972 and permanently since 1992.²⁶⁸ It recently appeared at Victoria Park, Sydney during the 2000 Olympic Games, as part of a delegation to the World Court at the Hague, and most recently in Wollongong²⁶⁹.

²⁶⁶ The name was coined by the group of activists in a meeting called to protest the denial of aboriginal land rights. Only a handful of scholarly work exists to date on the Aboriginal Tent Embassy: Scott Robinson's work (1993, 1994) cited in Heather Goodall, *Invasion to Embassy: Land in Aboriginal Politics in New South Wales, 1770-1972* (St. Leonards, N.S.W.: Allen & Unwin in association with Black Books, 1996). chapter 24, The AIATSIS *Encyclopedia of Aboriginal Australia* David Horton ed. (1994) has a small entry and refers to Stewart Harris 1972 'This is Our Land' (ANU press).

²⁶⁷ The Tent Embassy was assembled in Sydney's Victoria Park during the September 2001 Olympic Games, as I have documented at <http://www.gregory.cowan.com/tentembassy/>. The international 'embassy' in the form of a delegation to United Nations World Court at the Hague was reported in The Paper edn.19, 7-20 Sep 2001 page 3 (<http://www.thepaper.org.au>)

²⁶⁸ Erected in summer on 26 January 1972, the Tent Embassy was demolished in winter amid demonstrations on 20 July and 23 July 1972, and subsequently resurrected. On 30 July 1972 its removal was prevented by a demonstration of 1500 people. On 13 September 1972 the Embassy was again removed and reinstated, when it remained until February 1975. The Embassy was returned in 1992, was entered on the National Heritage Register in 1995 and remains to the present day.

²⁶⁹ The embassy has significantly developed and multiplied. The Embassy is presently in the Hague to make an appeal for Australian Sovereignty to the World Court. The original embassy remains in Canberra. Late in July 2000,

On the 26th of January 1972, four young men from Sydney erected a beach umbrella in front of Provisional Parliament House, in the Australian capital.(see fig. 21) Their protest occurred on the annual national holiday known alternatively as Invasion Day or Australia Day, and which marks the original claim on the Australian continent by the British Crown. Later the same day, the land rights protest evolved into the form of a tent encampment. The camp comprised a group of shelters made of a bricolage of materials, including canvas tarpaulins and plastic sheets, which could be regarded as festive.



FIG. 1. The umbrella in lieu of a tent. The start of the Tent Embassy. Old Parliament House, Canberra, 1972. *Ningla A-na—"Hungry for Our Land"* 1972. Loaned by the Australian Film Institute. (Copyright, Carolyn Strachan.)

a larger Aboriginal Tent Embassy was erected at Victoria Park, South Sydney, for the occasion of the imminent Sydney 2000 Olympic Games. See reports in *The Age* 25 July 2000, 26 July 2000 and *Sydney Morning Herald* 26 July 2000.

This most recent appearance in Wollongong was mentioned by visiting activist, Ivan Ring, in a personal telephone communication 23 October 2001

Fig. 21. The beginnings of the Aboriginal Tent Embassy at Provisional Parliament House, Canberra, 1972 as an umbrella, four activists and some placards. (Film still from “Ningla A-na - Hungry for our Land” 1972.)²⁷⁰

While the protesters called it the Aboriginal Tent Embassy,²⁷¹ the authorities clearly regarded the form and the name of the Embassy as disturbing.²⁷² The protesters maintained their non-violent intentions, although inspired by contemporary international politics.²⁷³ International debate in the media focussed on the idea of an Aboriginal Tent Embassy and its political context of Land Rights. Part of the context of both the encampment and the case study conducted here is the striking misinterpretation of the pre-European state of occupation and inhabitation of Australia, as reflected in the legal status of *Terra Nullius*. For European legal purposes, it had been considered that Australia before European settlement was “practically unoccupied, without settled occupants or settled law”.²⁷⁴ The principle of *Terra Nullius* was legally overturned only as recently as 1992, as a result of the Mabo land claim case in the High Court, which found that native title was recognised at common law.

Since that decision, Australian law concedes that Australia was previously inhabited — indeed, ‘practically’ occupied. The Mabo decision, in principle, is profoundly significant for Australia’s cultural identity and for the ongoing process of reconciling present day Australia with the ‘ghosts’ of its past.²⁷⁵ Although ‘practical’ occupation before European settlement is now legally part of

²⁷⁰ Film still of the Embassy, reproduced from *White Australia has a Black Past* Rosaleen Smyth, " 'White Australia Has a Black Past': Promoting Aboriginal and Torres Strait Islander Land Rights on Television and Video.," *Historical Journal of Film, Radio and Television* 15, no. 1 (1995): 107.

²⁷¹ The name was coined by the group of activists in the meeting. Only a handful of scholarly work exists to date on the Aboriginal Tent Embassy to date includes Scott Robinson's work (1993, 1994) Heather Goodall's *Invasion to Embassy* (1996) chapter 24. The AIATSIS *Encyclopedia of Aboriginal Australia* David Horton ed. (1994) has a small entry and refers to Stewart Harris 1972 'This is Our Land' (ANU press).

²⁷² Peter Howson, minister for the Environment, Aborigines and the Arts, Canberra News, 31 January 1972 cited Dow, *Aboriginal Tent Embassy: Icon or Eyesore?* ([cited]).

²⁷³ They occasionally lapsed into the violent rhetoric of the Australian ‘Black Panther Movement’ Goodall, *Invasion to Embassy: Land in Aboriginal Politics in New South Wales, 1770-1972*, 335-40.

²⁷⁴ *Ibid.*, 106.

²⁷⁵ A theme taken up in Kenneth Gelder and J. M. Jacobs, *Uncanny Australia: Sacredness and Identity in a Postcolonial Nation* (Carlton, Vic.: Melbourne University Press, 1998).

the history of dwelling in Australia, equally, the ‘impractical’ or ‘extra-practical’ — the theory of architecture — requires to be reconciled. The Aboriginal Tent Embassy provides a rich case study of activism in the Australia, playing an important role in advancing the cause of Aboriginal land rights activism since its inception in 1972. Its erection in the centre of Canberra has been described as “brilliant, audacious, imaginative, and strategic.”²⁷⁶ It was always more than simply a demonstration, and was newsworthy on both Australian and international scales²⁷⁷.

The idea of an Aboriginal Tent Embassy was conceived spontaneously by the activists²⁷⁸ in response to statements about land rights planned for then Prime Minister McMahon's 'state of the nation' Australia Day speech, as details became known on the previous day, the 25th of January. According to Chicka Dixon, one of the original ‘architects’ of the Tent Embassy, the protest was intended to "put our plight into the eyes of the world"²⁷⁹. Indeed, the Embassy came about with the loan of a car and a \$70 grant from the Communist Party, enabling four activists to make the trip from Sydney to Canberra. Initially, a beach umbrella was erected, soon to be followed by a "sprinkling"²⁸⁰ of tents. Regularity was not introduced and confusion did not give place to system, as it had in 1788 when Western settlers’/invaders’ tents gave way to permanent, ordered structures as discussed below.

²⁷⁶ Vivienne; Cowlshaw Kondos, Gillian, "Introduction: Conditions of Possibility.," *The Australian Journal of Anthropology* 6, no. 1-2 (1995): 2.

²⁷⁷ The New York Times, The London Times, TASS Soviet Newsagency, Japanese Newspapers and the Peking Daily all ran stories, according to Aboriginal lawyer Paul Coe. Gilbert 1973 p.29-30 Smyth, " 'White Australia Has a Black Past': Promoting Aboriginal and Torres Strait Islander Land Rights on Television and Video.," 107. Further, according to Jack Waterford in the Canberra Times 26 Jan 1992, John Newfong wrote in May 1972 of the detailed stories about the Embassy and the issues it raised also in The Guardian, Le Monde, Figaro, Norway’s major publication, Time magazine, most African papers, and in Singapore and Philippines. Jack Waterford, "We're Already Home," *Canberra Times*, 26 Jan 1992 1992.

²⁷⁸ Chicka Dixon, Michael Anderson, Billy Craigie, Bertie Williams and Tony Coorey. In the sense of “planner or creator” as the designers of a political plot, they were the “architects” of the scheme. See definition no.3 of architect in Collins Australian English Dictionary. Wilkes and Krebs, *Collins English Dictionary*, 78.

²⁷⁹ Chicka Dixon in "First In Line" programme 22 August 1989, cited in Dow, *Aboriginal Tent Embassy: Icon or Eyesore?* ([cited).

²⁸⁰ Waterford, "We're Already Home," C1.

The inauguration of the Tent Embassy is a potent symbol of Australia's Post Colonial identity, and the image reflected symbolically in its architecture.²⁸¹ Pre-colonial Aboriginal architectural traditions were diverse. They varied by region in terms of building technology and socio-spatial behaviour. Tombs, hides, traps and landscape elements had greater significance as well as shelters.²⁸² Toward the end of the twentieth century, there was increasing interest internationally in the tectonics and spatial rituals of primitive Aboriginal architecture in Australia. Enrico Guidoni's *Primitive Architecture* in 1978 included a section on Aboriginal architecture. There is a reverence for the basic elements of space and simply constituted structures from local materials which are portrayed as elegant in their ecology and economy.²⁸³

In 1990 Peter Blundell Jones wrote in the British Journal *Architectural Review* about "Aboriginal attitude to landscape" and "the meaning it has in myth and ceremony"²⁸⁴. In 1987, Bruce Chatwin's internationally successful novel *The Songlines*, while it was controversial in Australia for its unauthoritative interpretations of Aboriginality, also attracted international attention to ideas of Australian nomadic reading of the 'country', as an alternative spatial definition of 'architecture'²⁸⁵. Australian architecture and landscape is a cultural interest which warrants close scholarly attention in regard to the processes of reconciliation of indigenous culture and race in Australia.

The Aboriginal Tent Embassy is remarkable for the ways in which it embodies a nomadological approach to architecture. The 'grounds' or philosophical foundations for this 'camp' include

²⁸¹ Goodall, *Invasion to Embassy : Land in Aboriginal Politics in New South Wales, 1770-1972*.

²⁸² Paul Memmot in Oliver, *Encyclopedia of Vernacular Architecture of the World*, 1070.

²⁸³ Guidoni, *Primitive Architecture*, 21.

²⁸⁴ In a journal article for *The Architectural Review* entitled *The Sustaining Ritual* the British architecture writer Peter Blundell Jones wrote of the spatial choreography that constitutes the architecture of an initiation ritual in Central Australia. Blundell-Jones, "The Sustaining Ritual," *The Architectural Review* 188, no. 1125 (1990). However, his enthusiasm did not extend to his contribution to the XXth edition of Banister Fletcher's *History of Architecture*, which makes no reference to indigenous architecture before European settlement. Fletcher and Cruickshank, *Sir Banister Fletcher's a History of Architecture*.

²⁸⁵ Nicholas Shakespeare's biography *Bruce Chatwin* describes the popularity of the novel *Songlines* in Europe, with backpackers and white middle-class Australians, and its mixed reception in Australia. Nicholas Shakespeare, *Bruce Chatwin* (London: Harvill, 1999), 485-92.

firstly, its inherent ephemerality, secondly, the movement rituals of its erection, re-erection, transformation and maintenance, and thirdly, the activism which it effectively embodies for the cause of Aboriginal land rights and other rights for indigenous peoples.

The Tent Embassy took shape in 1972, at a point in Australian history when the National Parliament House, a symbolically 'White' British-style formal 'House', was losing public acceptability as the symbol of the central seat of government in Australia.²⁸⁶ The building was massive and labyrinthine, symbolically impenetrable, and its public functions were not readily legible. In contrast, the first tent embassy was a spontaneous and yet revolutionary construction, and as a result of this contrast was not only highly photogenic for the contemporary media of 1972 but was and is also a highly effective symbol.

With the capacity to appear and disappear suddenly, the Aboriginal Tent Embassy is ephemeral. Its constituent parts are also collapsible, organically facilitating compromise and resurrection. This Embassy is also portable, its parts, importantly, are transportable in the boot of a car. The Tent Embassy became an international focus during violent clashes surrounding its removal by police in 1972. Similarly, its resurrection was the dramatic centre of the battle between the 'state' interests in 'government property' and the protesters' interests, in challenging the legitimacy of ownership of this land *per se*. The *Canberra Times* referred to an incident in which a passing driver called out to the Tent Embassy staff "Go home niggers, you've had your fun" whereupon someone replied "We're home baby — you go home."²⁸⁷ Its collapsible and ephemeral qualities made possible its dramatic removal by the Police, and also its subsequent re-erection.

Ephemerality is a quality generally associated with the 'minutiae' of existence rather than the 'big picture'. In the Aboriginal Tent Embassy, the reverse is true — the ephemerality of the architecture is of 'fundamental' importance. The Tent Embassy's appearance of ephemerality

²⁸⁶ Jennifer Taylor and Royal Australian Institute of Architects. Education Division, *Australian Architecture since 1960*, 2nd ed. (Red Hill, ACT: National Education Division Royal Australian Institute of Architects, 1990), 100.

²⁸⁷ Waterford, "We're Already Home," C2.

allowed its 28 year tradition to be initiated by stealth. Whereas a permanent building might have been illegal under Building By-Laws, camping on the site in ACT in 1972 was not technically illegal. The camp allowed the Embassy six months of publicity before an ordinance could be gazetted and invoked. Only then did Police demolish the Embassy in the "most violent demonstrations Canberra had ever seen"²⁸⁸.

Importantly, despite being dismantled this ephemeral architecture did not fade away, but subsequently came back into life. Indeed, precisely because of its ephemerality, the camp needs periodic renewal by activists who 'inhabit' the Embassy structure. Ephemeral architecture can be considered environmentally responsible development, erected 'just in time', lasting only as long as needed, and often designed to be salvaged for re-use or to biologically degrade into the bush once abandoned.

The ironic practicality of the Tent Embassy, evident from its earliest stage as a lone beach umbrella to its development into a complex collection of tents, tarpaulins and domestic effects, means it may be regarded philosophically as a pragmatic structure. The visibility of the domestic 'reality' made the Tent Embassy more powerful. The "cooking in the open and bed linen spread out to dry" was reported as "bringing the reality of Aboriginal Australia right to Australia's front door."²⁸⁹ The unintentional similarity of the tent embassy with settler camps draws attention to the double standard of indigenous and exotic modes of inhabitation.

Importantly, the 'weaving' of the Tent Embassy also has a collaborative aspect. As a moveable and ephemeral architectural statement it is erected and maintained collaboratively. The grouping of elements is organic, and does not follow a Western geometric pattern like a military camp. The Tent Embassy functions as an expression of its heterogeneous contributors and of the mixing of spaces and materials. As such it symbolises a great deal about place-making and ways of thinking about the built environment in Australia.

²⁸⁸ Ibid., C1.

Architecture, as a Western concept, has roots in material craft traditions developed in ancient European society. There is an enormous chasm between craft and dwelling practices of the ancient Western world on one hand, which are at the core of modern Western architecture, and the nomadic dwelling traditions of ancient Australia, on the other. This cultural divide is manifested graphically in the architecture of the Aboriginal Tent Embassy. The ‘informal’ dwellings of the Embassy are culturally significant for architectural thinking: they are expressions of human inhabitation, of social significance to be reckoned with on the level of sanctioned institutions. As suggested above, the Aboriginal Tent Embassy is a practical and potent ‘occupation’ of Australian space: physical, social and political.

Western notions of architectural planning and construction cannot be readily applied to this incidental form of architecture. Nevertheless, the colonial ‘settler’ culture, over the last two centuries, has applied Western theory with limited success to pragmatic traditions of ‘settling’ the Australian continent. Western theories of architectural hierarchies are not helpful in understanding the Aboriginal Tent Embassy because the theoretical roots of the Embassy are rhizomatic, rather than arboreal, as Western theories are structured.²⁹⁰ The Aboriginal Tent Embassy sprang from an impromptu idea, it “start(ed) as a joke”²⁹¹ conceived in collaboration between seven men discussing the content of the planned Australia Day speech of Prime Minister McMahon.

White Invasion of Australia

Western societies are often preoccupied with imposing hierarchical order and permanence through buildings and settlements, while nomadic societies do not generally share these concerns. Opportunism, ephemerality and collapsibility are qualities which, it can be argued, have fundamentally affected cultures of dwelling in Australia. These may be considered to be critical

²⁸⁹ Ibid.

²⁹⁰ Rhizome structures are a key feature of criticism of sedentary hierarchies in Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*.

to forming architectural theories which address the future of Australian culture. Dwelling on a moment of arrival in a new place is captured symbolically by the sudden erection of a collapsible architecture. The tent in this instance represents an opportunistic occupation of space.

The moment of the beginning of transformation from nomadic society, arguably of both the indigenous culture and that of the invading seafarer's culture, towards a settled (and oppressed) culture is highly significant. Such a transformation is still proceeding painstakingly in Australia and in other parts of the world, with important implications for understanding the nomadic and sedentary tendencies of the contemporary Australian society.

'Whitening' Australia, (or the first attempt in earnest to whiten) began in summer in January 1788 with the arrival of Captain Arthur Phillip's Fleet at Port Jackson. The initial camps erected there consisted primarily of tents. After months living in tents during the mild summer, and as the weather grew colder into winter, the desire for permanent buildings grew, like a longing for a familiar 'home'. The makeshift tents of the settlement were clearly considered inadequate by the settlers, if not disdained by the traditional landowners in their huts. Surgeon to the First Fleet, John White wrote of his reservations about the tents in June 1788:

“We have been here nearly six months and four officers only as yet got huts: when the rest will be provided with them seems uncertain, but this I well know, that living in tents, as the rainy season has commenced, is truly uncomfortable, and likely to give a severe trial to the strongest and most robust constitution...”²⁹²

After each of the settlements in Australia had grown into 'permanent' and European forms of settlement over the following century, a further stage in galvanising the European outposts was the federation of the Australian colonies in 1901. In the context of a growing desire for a sense of an Australian national identity, a national capital city was established at Canberra. Following a 1912

²⁹¹ Paul Coe cited in Waterford, "We're Already Home."

²⁹² Jack Egan, *Buried Alive : Sydney 1788-1792 : Eyewitness Accounts of the Making of a Nation* (St Leonards, N.S.W.: Allen & Unwin, 1999), 70.

international design competition, "Provisional Parliament House," as it was called, was eventually built in Canberra in 1927, and was occupied by federal Parliament until 1988.²⁹³

Provisional Parliament can be regarded as a piece of symbolic colonial architecture, aimed at establishing an imported European cultural tradition. The building is of a generic and derivative British colonial architectural style, significantly massive and white in form, and is set in an orderly, lawned and manicured landscaped setting. It has been described by architectural historian Jennifer Taylor as a "visually demanding white building of symmetrical design with an orderly, rhythmic distribution of its parts."²⁹⁴

By 1965, Australia's provisional Parliament House was becoming too crowded. As the perceived need for a "permanent" Parliament House grew, plans for a new Parliament began to emerge from within the sedentary hierarchy. This was also a period of increasing media awareness in Australia of the Civil Rights movements internationally and the Vietnam War at the end of the decade. Increasingly, it became more evident and publicly acknowledged that racism was a significant factor in Australian politics. At about this same time, the growing sense of a Pan-Aboriginal nation began to emerge from the amalgamation of state acts and the referendum of 1967 on the status of Aborigines. The referendum showed the Australian public's overwhelming desire to "include Aboriginal people in Australian Society and civil life"²⁹⁵, beginning by including their numbers in the Census of the Australian population.

Provisional Parliament House stood in 1972 as an ambiguous expression of occupation. Was it a provisional parliament or a provisional 'house'? Australia appeared not yet ready to occupy a permanent Parliament House. The early seventies were to be highly significant years for the besieged architectural expression of Australian national government. As the new 'permanent' Australian Parliament House began to be a focus of bureaucratic governmental interest,

²⁹³ Taylor and Royal Australian Institute of Architects. Education Division, *Australian Architecture since 1960*, 94-104.

²⁹⁴ *Ibid.*, 95.

indigenous inhabitants of Australia began to work towards forming a nation, which in the beginning of the 1970s was to be symbolised by their own flag and Embassy.

The Meaning of the Tent Embassy

Despite its ostensibly uncertain future, the Tent Embassy embodies and accommodates aboriginal activism by example, thus engendering and accommodating activism for rights of indigenous people. It is closely connected to the modern history of engendering pan-aboriginal identity in Australia, a history which led to the formation of an Aboriginal flag, and to the formation of an Aboriginal Nation from several hundred smaller territories or countries in Australia. Yet, like the fringe dweller camps of rural Australian towns with which its appearance has been compared²⁹⁶, the Aboriginal Tent Embassy is a makeshift camp. It is comprised of materially indeterminate architecture, which challenges the idea of architecture as an agency of civilisation and peaceful settlement in Australia²⁹⁷. The Aboriginal Tent Embassy buildings nevertheless represent a subversive architecture of protest which has a deep-rooted significance for architecture in Australia. Importantly, the camp is more than shelter: it embodies not only needs, but culturally significant desires. More than rudimentary primitive shelter, the Embassy is a collapsible symbolic monument.

International attention was drawn to the Australian government when it brutally mistreated the peaceful protesters at the Tent Embassy in July 1972. The police 'manhandled' and assaulted the structure of the camp and molested the protesters. The protesters had peacefully demonstrated at Australia's democratically appointed forum. One MP called this one of the oldest principles of British law: to respect as the democratic right of all Australians to peaceably assemble to

²⁹⁵ Goodall, *Invasion to Embassy: Land in Aboriginal Politics in New South Wales, 1770-1972*.

²⁹⁶ "It looked like any one of a number of fairly dirty Aboriginal reserves: cooking in the open, bed linen spread out to dry, rather inadequate means of keeping clean. It was bringing the reality of Aboriginal Australia right to Australia's front door." Waterford, "We're Already Home."

²⁹⁷ Justice Blackburn in rejecting the 1971 Yirrkala claim based the decision on Britain's 'settling' rather than 'conquering' Australia, and its right to declare Australia "waste and unoccupied" D. Hollinsworth, *Race & Racism in Australia*, 2nd ed. (Katoomba, N.S.W.: Social Science Press, 1998), 134.

demonstrate political points of view, in a manner of their own choice, and without limit of duration²⁹⁸. The principle of unlimited ephemeral occupation has become a critical feature of the encampment. The Grounds of Parliament, in the nation's Capital Territory, constituted a symbolically laden space on manicured lawn.

Since 1992, the Aboriginal Tent Embassy has been continuously occupied, although its exact location has varied. In 1995 the Aboriginal Tent Embassy was registered by the Australian Heritage Commission on the National Estate, as the first Australian Aboriginal Heritage Site. The Embassy was recorded as a 'heritage place' which is nationally recognised for the political struggle of the Aboriginal people. The Aboriginal Tent Embassy pitched camp in a gesture intended undoubtedly to confront provisional Parliament House in a media-savvy and graphic demonstration. At the same time, the 'Tent Embassy' affronted many people in the way that it appropriated the language of camping and the great Australian Outdoors. It was a radical use of 'ready-mades' such as the beach umbrella and after-market contemporary tents combined with improvised shelters of tarpaulins. Rather than presenting a romanticised impression of nomadic life 'out bush', the Embassy was actually an embarrassing reflection of the realistic contemporary dwelling conditions found in many fringe dweller camps in rural towns around the nation.

The Tent Embassy is particularly powerful because its architectural expression confronted the basic cultural assumptions of the imposed European culture and its expectations of proper architectural expression of that time. The Aboriginal Tent Embassy is a threatening nomadic 'institution' — which is architecturally challenging in four main ways:

Firstly, the Embassy is an impermanent structure juxtaposed against its context.

Secondly, the Tent Embassy implies, for some, the threat of militant invasion of the parliamentary circle (evidenced by the bringing of a newly gazetted 1932 trespass ordinance in 1972 to enable the police to remove the protesters legally)

²⁹⁸ MHR Kep Enderby called upon Parliament to observe these basic democratic rights, reported in Canberra News

Thirdly, the Tent Embassy's continual resurrection is a strategy for the maintenance of a culture — the Tent Embassy's (physical) architecture is short-lived, requiring movement.

Fourthly, the Tent Embassy is strategically placed. The careful urban planning order which distances each international embassy from the Federal Parliament is violated with the placement of the Tent on the 'front lawn'. The lawn at Provisional Parliament House is the equivalent to the 'front lawn' of the colonial suburban house type, a type which is at the heart of Australian suburbia.

As an ingenious architectural device of stealth, the Embassy, it seems, evades the oppression often acted by the establishment through parking violations, building by-Laws, town planning applications, or signage by-laws.

Architecture for Reconciliation

Symbolically or theoretically interpreting the twenty-eight-year tradition of the Aboriginal Tent Embassy and its historical resonances make possible an opportunity for working on the architectural reconciliation of nomadic and settled elements of society present in Australia today. The Tent Embassy's spontaneous and patchy physical architecture of lightweight, colourful, and impermanent materials and its mock-threatening location in front of 'Old Parliament' make the Embassy an ironically fitting pilgrimage destination. The architectural manifestation of land rights activism of the early 1970s is continuing in the twenty first century. Besides its role as a media focus for Land Rights and reconciliation processes, the site is legitimately part of Australia's national heritage, providing the setting for memorial services for activists in 1993²⁹⁹, and for a wedding in 1997³⁰⁰.

11 March 1972 Dow, *Aboriginal Tent Embassy: Icon or Eyesore?* ([cited]).

²⁹⁹ Ibid.([cited]).

³⁰⁰ Arthur and Rose Kirby were married there on 26 July 1997 Canberra Times 26 July 1997 Ibid.([cited]).

The unapologetic and assertively British-colonial architecture of the federal governments' Provisional Parliament House is effectively foiled by the strategically placed 'fringe-dwellers camp'. Although critics have called attention to its outward appearance as "ramshackle"³⁰¹ and an "eyesore"³⁰², the Tent Embassy offers more than a superficial aesthetic. The ephemeral and complex folds and spaces of the Aboriginal Tent Embassy provide a useful and critical aesthetic contrast with the massive and monolithic white architecture of a colonial society.³⁰³ A need has evolved in Australia for an engagement of indigenous race relations with cross-cultural thinking about architecture. The confusion of settlement with occupation is one which lies at the core of built environment 'ownership', and affects the limitations of what rôle architecture might perform in the future of Australia. The incidental construction of the Aboriginal Tent Embassy represents the positive nomadic qualities of a collapsible Australian architecture.

This challenge of occupying borrowed or stolen land is posed as a strategic issue for approaching issues of reconciliation of Australian people and of reconciliation of Australian people and their environment. The informal and nomadic, it is suggested, are critical to the process of discovering what architecture means for Australia today. Increasingly architects and designers of dwellings might become conscious of the ephemerality of occupation and respond in a conciliatory – rather than defensive – way to designing in this context.

³⁰¹ Senator Ian MacDonald in the Canberra Times 10 April 1995 and The Age 14 April 1995 Ibid.([cited]).

³⁰² Air Marshall David Evans, Canberra Times, 27 January 1999 Ibid.([cited]).

³⁰³ The permanency of the building may be regarded as symbolising an artificially hardened 'Viagra' architecture. (!)

CHAPTER 6

ARCHITECTURE AS PERIPATETIC PRACTICE

The thesis has considered examples of architecture practiced diagrammatically, considering the ephemeral, the mobile and the collaborative as strategies for making architecture, and as found in existing cultures and subcultures. On this basis of these applications of nomadology in architecture, the present chapter concludes the thesis with a discussion of how architecture might further be used peripatetically, as a form of agency. The qualities of diagram, ephemerality, movement and collaboration are now further consolidated here as strategies for practice by means of the peripatetic; in particular, this chapter considers the connection between peripatetic practice and nomadology. 'Peripatetic practice' can be seen as an important analogy and symbol of nomadic thinking about space and present notions of movement, ephemeral and collaborative architecture.

Walking as a peripatetic activity may be understood as an example of the agency of peripatetic approaches to urban life. Ideas of agency and of navigating a path are explored as a way of practicing, in the context of conflicting values, the clash between sedentary and nomadic systems at a grass roots social level. This thesis contends that nomadic practices present models for architectural criticism and critical thought about society.

The notion of the peripatetic in the modern Western capitalist world can be traced to Aristotle's philosophical educational technique. This needs to be contrasted with the oppression of unsettled peoples, not to mention their forced un-settlement, in the current global environment.

The taken-for-granted Western freedom to travel and to dwell in centres of conspicuous liberal capitalism has been radically highlighted in the last year, challenged by the terrorist attacks in

America of September 11, 2001 and the Bali Bombing of October 2002. Retaliatory attacks on Afghanistan in 2001, for harbouring terrorists associated with the September 11 events have been considered as symmetrically barbarous only in peripheral news media. This new attention to global political tension has also drawn attention to what has been characterised by many as a 'clash of civilisations'³⁰⁴, or even one between civilised and uncivilised worlds. The 'uncivilised world' is calculated to have a set of specific geographical locations, which became the foci of military attack.

Afghanistan, however, has a rich and complex history, and possesses complex traditions of nomadic and sedentary domestic architecture which have supported its culture. In his work on Afghan domestic architecture, for example, Albert Szabo and Thomas Barfield have outlined the range of non-sedentary dwellings used. It includes three main types of black tent (The Durrani, The Ghilzai and the Taimarin) also cotton tents (the Jugi and the Jat) as well as domical and conical yurts and four main forms of huts; rectangular, polygonal, circular and ovate. All of these nomadic and non-sedentary dwelling types serve the complementary sedentary architectural types, which include curved roof and flat roof dwellings as well as caves that could be justly described as cunningly wrought.³⁰⁵ However, in the search for terrorists in Afghanistan, Western political rhetoric has focussed attention on caves as a symbolic hiding place. The symbolic 'otherness' and inscrutability of the terrorist caves and the contrast of the 'primitive' civilisation with that of New York City are presented widely as a comical and caricatured superhero versus evil scenario. These diagrammatic strategies of architecture employ ephemerality, often necessarily, as well as movement and collaboration.

³⁰⁴ Huntington's thesis of the 'Clash of Civilisations' is challenged anew in Edward Said's Article "The Clash of Ignorance" in *The Nation* (Oct 22, 2001) Edward Said 2001 Online: <http://www.thenation.com/doc.mhtml?i=20011022&c=1&s=said> [accessed 17 Nov 02]

³⁰⁵ Albert; Barfield Szabo, Thomas J. & Sekler, Eduard F. (foreword by), *Afghanistan, an Atlas of Indigenous Domestic Architecture* (Austin: University of Texas Press, 1991).



Fig. 22. Afghan Refugee Camp³⁰⁶

In the year following September 2001, greater attention in Western and global news media was drawn to the vast numbers of refugees travelling and camped in Central Asia as stateless people, as these people, compelled to escape untenable living conditions at home, moved elsewhere - and are refused access to refuge elsewhere. This current form of diaspora in Central Asia, occasioned by both a totalitarian regime and Western military attacks, itself necessitates a form of ephemeral accommodation, which is being improvised in the most basic way. The dwellings are entirely constructed for survival and are part of a desperate strategy to survive starvation and to escape to safety.³⁰⁷

Movement and collaboration are critically important to the architecture for dislocated peoples and refugees. The Western focus on architecture as a system of settled material objects and places, rather than as a set of processes, limits the potential agency of architecture as an active political medium.

³⁰⁶ Photograph sourced from the Revolutionary Afghani Women's Association: Online: <http://www.rawa.org> [accessed 17 Nov 02]

³⁰⁷ According to the source of the News item, many people have been reduced to eating grass, and the menfolk have mostly deserted the camps. Source: www.rawa.org/new-ref.htm An eyewitness account by an aid worker Phil Sparrow (in a lecture at the University of Western Australia, Monday 5 November 2001) held that the staple food (Naan bread) was being made with a component of thornbushes, and in some cases, bulked up with sand.

Durability of architecture has been promoted as a materialistic way of maintaining architecture as a “phallogocentric phantasy” of a permanent monument, with less attention to the role of human usage and maintenance. Rather than suppressing life and dynamism, as architecture is often claimed to have done³⁰⁸, architecture may instead catalyse life and activism, as in nomadic cultures. Architectural practice can be a forum for resolving the political and the personal through strategies of reflection and ambulant practice, in the way that the work of Hannah Arendt attempted to do in the sphere of social activism³⁰⁹. The parallel is seen in Arendt’s ability to rise above the temptation to build systems. Her philosophical and activist work is peripatetic and does not settle on something in order to build an edifice.

Similarly, Gayatri Chakravorty Spivak employs agency through her social practice as a post-colonial intellectual. Spivak in her keynote address at a 1995 architectural conference *Theatres of Decolonisation; Architecture, Agency, Urbanism*,³¹⁰ addressed architecture and agency, saying:

“As I touch my main theme, the theme of Agency, I place architecture so named somewhere between the spatial practices of the garbage dump and the toxic waste dump. Walter Benjamin saw allegory as ruins.³¹¹ Paul de Man, in his mature redefinition of allegory as a permanent parabasis or interruption, put the agency of allegory, or speaking otherwise, in the space of the other. Let us put the two together. How can ruins interrupt the primary text of architectural practice? This is where the altogether timebound figure of the architect-reader comes into play.”³¹²

³⁰⁸ In, for example, Michel Foucault's *Discipline and Punish* Michel Foucault, *Discipline and Punish : The Birth of the Prison*, 2nd Vintage Books ed. (New York: Vintage Books, 1995)., Denis Hollier's *Against architecture – The Writings of Georges Bataille* Hollier, *Against Architecture: The Writings of Georges Bataille*.

³⁰⁹ See Hannah Arendt (author of works including *On Violence, On revolution, the Life of the Mind, The Origins of Totalitarianism*.) in *The Human Condition*, Hannah Arendt, *The Human Condition*, Charles R. Walgreen Foundation Lectures (Chicago, Ill: University of Chicago Press, 1958)., and Seyla Benhabib in *The Personal is not the Political* Seyla Benhabib, "The Personal Is Not the Political," *Boston Review* 24, no. 5 (1999).

³¹⁰ *Theatres of Decolonisation Architecture Agency Urbanism* (Chandigarh, India 1995). The writer participated.

³¹¹ Here Spivak refers to Walter Benjamin's *Origins of German Tragic Drama* Gayatri Chakravorty Spivak, "City, Country, Agency" (paper presented at the *Theatres of Decolonization: (Architecture) Agency (Urbanism)*, Chandigarh, India, 1995), 4.

³¹² *Ibid.*

Spivak defines agency as “the entitlement to action,” and the agent as “the person who acts with entitlement given and/or claimed *and* validated and/or recognised by institutional powers or collective resistance, political and/or contained within collective histories of *techné* or craft”³¹³. It is rare to experience a call to activism at an architecture conference, and the way of thinking called for implies peripatetic practice; employing diagrammatic strategy in architecture: movement, ephemerality, collaboration.

Peripatetic practices

A peripatetic way of thinking, it is suggested, resonates strongly with Taoism and what Wu Kuang Ming describes as 'Chinese Body Thinking'.³¹⁴ This peripatetic way, named after the Aristotelian philosophers moving about in the 'campus' of the Lyceum suggests a reflective ambulant process. The phrase *Solvitur Ambulando* (a medieval maxim³¹⁵) refers to solution of problems in motion: "the solution is through walking". Learning in a state of movement is an ancient and well-regarded mode of living, from which architecture can benefit. Focussing on the activity of urban walking enables an exploration of walking as a model form of peripatetic practice. Walking is clearly more primal – elemental to the body and ephemeral in the environment – than most architecture. Walking, collaborative or not – ephemeral movement provides a way of interpreting rather than purely exploiting the environment. Walking literally *incorporates* movement and ephemerality, and in its shared social form also incorporates collaborative engendering.

David Macauley, in an article titled "Walking the City," notes that:

³¹³ Ibid.

³¹⁴ Kuang Ming Wu, *Chinese Body Thinking: A Cultural Hermeneutic* (Leiden: Brill, 1997).

³¹⁵ Cited in Walking the City David Macauley, "Walking the City: An Essay on Peripatetic Practices and Politics," *Capitalism, Nature, Socialism* (Santa Cruz) 11, no. 4 (2000).

“By understanding the dynamic and democratic dimensions of walking, we can also begin to interrogate and critically contest the opaque and authoritarian features of urban architecture, private property and public space.³¹⁶”

Interpretive city-walking diagrams

There are many practical ways of walking which can be regarded as occupation of the city, activist architecture or architectural activism enacted by bodily mapping spaces, as tacit learning about 'owned' territorial (and deterritorialised) space. These are pro-active forms of walking, which walking tends to be by nature, but they are generated by perpetrators or 'civilian' users rather than states.

Macauley, in the tradition of the situationists, and others, have identified several forms of urban walking; such as the Ramble, the Walkabout, the Stroll, the Saunter, Wilding, the *Dérive* and *Flânerie*. All of these types or *diagrams* of walks present potentially architecturally rich material as means of interpreting nomadology through human activism in a set of environs. According to Macauley, urban walking is a "transformative process." Urban walking revives and maintains the 'inhabitation' of the city, through telling stories and keeping the places alive.³¹⁷

Symbolically, the body stitches into the landscape. The proposition of nomadology is that this relation can be mediated and loosened rather than tightened and stagnated by the architecture of dwelling in a place, of which this stitching is an important part.

“We are as it were like large knitting needles, stitching ourselves into the local fabric of the environs, grounding and rooting ourselves, even if only momentarily.”³¹⁸

³¹⁶ Ibid.: 4.

³¹⁷ The author participated in a 'Healing Walk' in Sydney during the 2000 Olympics, with members of the Sydney Aboriginal Tent Embassy community. The walk enabled experience of significant places, for example places elders may have frequented, sites of significant cultural events, or those commemorating significant cultural events such as Mum Shirl chair. (See photograph below)

³¹⁸ Macauley, "Walking the City: An Essay on Peripatetic Practices and Politics," 7.

While all forms of walking effectively and collaboratively produce a sense of place, and an understanding of architecture through mobile and ephemeral use, the Flânerie is most relevant here. The Flânerie is an aesthetically-informed walk through the city: the Flaneur is an important nomadic figure in early modernity, as described in Francesco Dal Co's chapter on Dwelling and the Places of Modernity.³¹⁹ The enlightened modern man is an intellectual nomad, emancipated from rootedness in civilisation. As Oswald Spengler observed in *Decline of Civilisation*, modern man is "again wholly microcosmic, wholly homeless, as free intellectually as the hunter and herdsman is free sensually"³²⁰

The peripatetic process of knitting or weaving a path is importantly connected to the symbolism of the path in Taoism. Tao means 'way' or 'path'. In Lao Tzu's *Tao Te Ching*, the ancient Chinese 'book of changes', he writes "The Tao that can be trodden is not the enduring and unchanging Tao. The name that can be named is not the enduring and unchanging name."³²¹

Wu Kuang Ming renders this as 'Tao can Tao, not always Tao,' and moreover, "The Tao that can be named is not the eternal Tao."³²² This can be applied also to 'temporary' architecture. The analogy suggested is that the architectural type that can be named is not an eternal type.

Nomadology does not prescribe an architectural type, because it focuses on performative peripatetic process. The thesis has been suggesting that the process is of primary significance in applying nomadology in architecture, and that it is the hermeneutic of intelligent response to ephemeral, moving and collaborative conditions, that architecture approaches nomadology.

As posited in the introduction, Western architectural culture has often tended to view architecture through artefacts rather than processes. To counter the limitations of this view, this thesis highlights methods for architecture operating with walking. These may in turn be translated into

³¹⁹ Dal Co, *Figures of Architecture and Thought : German Architecture Culture, 1880-1920*, 27.

³²⁰ Ibid.

³²¹ James Legge's translation from the Project Gutenberg e-text in the public domain at the Internet Encyclopedia of Philosophy J. Legge (transl.) 2002 [Online: http://www.taopage.org/laotzu/quotes.html](http://www.taopage.org/laotzu/quotes.html) [accessed 17 Nov 2002]

³²² Wu, *Chinese Body Thinking: A Cultural Hermeneutic*, 63-64.

architectural actions, but this needs to be done in specific contexts, temporary, moving and consensual.



Fig. 23. *Healing Walk* Redfern, Central Sydney 27 September.³²³

Agency is enacted through movement, ephemerality and collaboration. The urban walk suggests that the collaboration and shared experience in the walk, interpreting performatively rather than building concretely, provides ongoing interpretations of the environment or territory. Reaching beyond the conventional limitation of dwelling to the private realm, the walk extends into the public realm, producing what can be called agency.

Ephemerality

Architectural form, purpose and meaning can legitimately be transient and fleeting, contingent upon changing human life and inhabitation. It has been suggested in the thesis that architecture uninhabited is mere matter, just as a body which is not breathing is not a person, but a corpse. Adolf Loos claimed that the only architecture that has anything to do with art is the tomb and the

³²³ Photograph by the writer, 27 September 2002 during Sydney 2000 Olympic Games.

monument.³²⁴ The remaining forms of architecture function as prosaic human dwelling. These forms of architecture in society after modernism can potentially then, be regarded as ephemeral. The view of architecture as a still-life artwork or '*nature morte*' became significant in twentieth-century photography and representation of architecture. The common twentieth-century practice of understating or omitting human life in the architectural photograph has promoted a clinical scientific impression of spatial inhabitation as independent of time and motion,³²⁵ and produced without conscious attention to engenderment. Sedentary societies have become preoccupied with the notion that architecture is not temporal, but eternal, and as a high art, it should endure beyond human life and inhabitation, leaving humankind's mark on the world. Becoming increasingly ecologically indulgent, if not designing beyond resources and needs, has contributed to the distancing of architecture from the organic. The recognition of ephemerality humanises architecture, introducing natural daily and seasonal cycles, and debunking the 'phallogentric fantasy' of unconditional firmness, beyond utility. The Western architectural myth of the 'permanent erection' has been collapsed in the tent.

Adaptation to changing usage patterns and the use of movement increases users' intimacy with their environment as experienced through architecture. Nomadology can enrich the disciplines of thinking about and making architecture, for architects as well as the users of architecture. In Jonathan Hill's terminology, "users" constantly interacting with processes and spaces of architecture are "illegal architects".³²⁶ Hill's scheme imbricates the user of architecture in the construction of space. Quality of environment is experienced more fully with the active agency of architecture that is cognisant of occupant- related cycles — whether diurnal, lunar, times of day, seasons, years, and life stages.

³²⁴ Adolf Loos in *Architektur* (1910) cited in Johnson Johnson and Tigerman, *The Theory of Architecture : Concepts, Themes & Practices*, 179.

³²⁵ "Photograph" in *Privacy and Publicity* Beatriz Colomina, *Privacy and Publicity : Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994).

³²⁶ Hill, *The Illegal Architect*.

The tent, as it has been described in the preceding chapters, is an instrument of tension, which as Betsky suggests like weaving and dancing reflect the tension at the core of human civilisation. The tent is ephemeral, reflecting the requirement for human inhabitation to maintain its erect form, and for maintenance of its components in the process of adaptation and movement, in order to sustain its longevity as a home. Thus the ephemeral architecture of the tent shares with walking a peripatetic approach to making and defining territories and spaces with the body.

Movement

The capacity for human movement, as it has been argued above, is central to architecture in two ways; the movement of users, and the movement of the architectural space relative to the existing environment. The potential for movement, or the latent desire for movement, is critical to the agency of contemporary architecture.

Animated human movement within spaces, landscapes, territories or environments increase the intimacy experienced with an environment, and the architecture-user feedback loop. For the user, architecture becomes more haptically tangible, by means of movement through architecture. The potential of architecture generated from a dynamic perspective is to produce a fundamentally different architecture. In place of the privileged or arcane architectural views of plan as the generator and the clinical section, the haptic experience of the user is a generator. (In Greg Lynn's architectural work, design process is aided by hitherto unavailable computational software, generating 'animate form'³²⁷). It could be suggested that an animated and dynamic architecture is a more poignant expression of many dwelling styles or life-patterns today than the static and timeless concepts of inhabitation promoted through the literature and visual representation of architecture in the last few centuries. Mobile elements allow detachment from physical materiality to the relationships of things and their timely adaptation to situations. Motion is

³²⁷ See Lynn, *Animate Form*, 1-43.

transformed into architectural meaning by ritual, whether sacred or secular, domestic or civic.³²⁸

Human ritual is meaningful cultural- social activity that interacts with form in the built environment as architecture. In the agency of constructed environments, by framing or catalysing aspects of human life patterns, rituals produce an added cultural value of difference of architecture over building.

'Being in the world', then, does not necessarily require fixation to place, as Heidegger implied in his influential essay "Building Dwelling Thinking". Ritual and the performatives of the tent dwelling provide sufficient consistency for human civilisation. Heidegger's association of peoples' attachment to physical place resonated with the ultimately unsustainable notion of '*Blut und Boden*' (Blood and Soil) of National Socialism, which inferred that people's 'blood through race' and 'soil of place' were somehow the essence of belonging to place. As noted in the previous section, the tent is a structure that is reassuringly familiar for dwelling. Regardless of geographic place, the tent is a structure familiar to the people using it. The tent frames its location: it is the structure of the tent that constitutes identity.

Possibilities for Peripatetic Practice

As signalled in the opening, this chapter will now elaborate the possibilities encoded in nomadic practices for architectural criticism and critical thought about society. Architectural criticism and active production, it is suggested here, must be applied to the moment. As demonstrated by the work of activist architects such as the Utopie group of the nineteen sixties, architecture may be deployed ephemerally in motion to engender social consensus.

Architectural criticism is a process of social commentary which cannot be confined to building, as Hermann Czech's work shows, in the tradition of Adolf Loos. Loos was an ardent commentator on Art and Fashion and the modern society in Vienna at the beginning of the twentieth century,

³²⁸ Prof. Kari Jormakka 1999 Unique Forms of Continuity in Space (Unpublished research paper)

promoting the thinking of globalisation by advocating American and English design and challenging the Austrian and German design traditions.

In his collection of writings about architecture in Vienna, Hermann Czech addresses a wide range of topics, from literature, to transport, to chairs.³²⁹ Czech's work can be understood in the context of a Viennese tradition of the public intellectual and independent thinker. For example, Czech's 1984 critique of Christopher Alexander's *A Pattern Language...*³³⁰ (which he also later translated into German) and of Josef Frank's work in 1986³³¹ through Venturi's *Complexity and Contradiction* constitute significant exercises in the extensive use of nomadic thinking, as investigations of ideas in Western culture.

Activism and Agency

On a pragmatic level of urbanism, 'Take back the night' feminist walks are politically responsive to the previous centuries of male domination of public spaces in cities. This oppression of women in the past has extended to restriction on intellectual and spiritual freedom of women such as the events described in Hans Peter Duerr's book, *Dreamtime*. 'Women who travel by night' were identified as witches when accused with departing from polite societal convention, and often burned at the stake.³³²

“The ordinary practitioners of the city live "down below", below the thresholds at which visibility begins. They walk – an elementary form of this experience of the city: they are walkers, *Wandersmänner*, whose bodies follows the thicks and thins of an urban "text" they write without being able to read it. These practitioners make use of spaces that cannot be seen; their knowledge of them is as blind as lovers in each others' arms. The paths that

³²⁹ Czech, *Zur Abwechslung: Ausgewählte Schriften Zur Architektur, Wien* (Wien: Löcker & Wögenstein, 1978).

³³⁰ *Ibid.*, 95.

³³¹ *Ibid.*, 111.

³³² Hans Peter Duerr, *Dreamtime : Concerning the Boundary between Wilderness and Civilization* (Oxford Oxfordshire: B. Blackwell, 1985).

correspond in this intertwining, unrecognised poems in which each body is an element signed by many others, elude legibility. It is as though the practices organising a bustling city were characterised by their blindness. The networks of these moving, intersecting writings compose a manifold story that has neither author nor spectator, shaped out of fragments of trajectories and alterations of spaces: in relation to representations, it remains daily and indefinitely other.”³³³

De Certeau writes about the city and its architecture as practice and performance. As this thesis comes to a conclusion in late 2002, there has been a “fire” at the Aboriginal Tent Embassy in Canberra and the threat that electricity will be switched off there, permanently³³⁴. An activist was later arrested for trying to prevent the demolition of a “monumental” (12 metre high) sculpture presented to the Tent Embassy³³⁵. If the Embassy is removed, or its electricity cut off, will that really be its demise? One thinks not. "Beneath the Cobblestones, the beach" was the famous Situationist reprise, suggesting the virtual connectedness of a world beyond the streets.³³⁶

In one of the most ironic cross cultural misappropriations of the tent, outlined in chapter 3, for the American ‘Sibley Tent’, Col. Sibley appropriated the design of the Tipi in his design for the colonising army, used ironically in a plot to defeat the ‘pagans’. In the military, the tent has often been adapted with a ‘functionalist’ architectural justification, although there is a long history of military tents as festive and aesthetically and architecturally designed for psychological impact and effect. In military applications, connections to the Arab and Jewish tent have been played down. A conservative Western military architectural establishment has not readily absorbed the

³³³ Michel De Certeau *The Practice of Everyday Life* 1984 p. 93 cited in Macauley's *Walking the City* Macauley, "Walking the City: An Essay on Peripatetic Practices and Politics," 27.

³³⁴ Sydney Morning Herald, 14 August 2002 Online: <http://www.smh.com.au/articles/2002/08/13/1029113929592.html> [Accessed 17 Nov 02] A Rusty Kilpatrick subsequently reported on Indymedia that Greenpeace had installed a solar power system. R. Kilpatrick 21 August 2002 Online: http://sydney.indymedia.org/front.php3?article_id=19205 [accessed 17 Nov 02]

³³⁵ ABC News Online, 11 October 2002 Online: <http://www.abc.net.au/news/newsitems/s699531.htm> [Accessed 17 Nov 02]

³³⁶ The Situationist International movement, cited in Macauley, "Walking the City: An Essay on Peripatetic Practices and Politics," 23.

fact that, in African and other nomadic communities, women design, construct, furnish and maintain tents.

The 'soft' physical elements of architecture, from tents to canopies, bed-tents, drapes, clothing and other forms of fabric architecture and colourful cladding have in the Western world often been stripped from functionalist architecture, or been increasingly assigned to the world of women through the realm of interior design and interior architecture. As has been considered closely in the preceding chapters, Karin Harather's project Haus Kleider³³⁷ connects these elements with domesticity. A 'Housewife', Harather suggests with some irony, is conceivable as an important constituent of house as its primary inhabitant, 'House clothes' are an intermediate to the clothing function of dwelling architecture, as the house is itself a cladding for the inhabitants. The theoretical devices of ephemerality, movement and collaboration are employed as a framework for the potential architectural practices that may be derived from nomadology.

Machines and latent desire

In her analysis of the tenth book of Vitruvius' Ten Books on Architecture³³⁸, Catherine Ingraham argues that an architecture-of-stasis inevitably harbours a "lament" for an architecture-of-motion. However, Ingraham's argument suggests that architecture is an inherently static system, and she does not admit that movement in architecture is innate.³³⁹

There is a close similarity of approach in the architect's role in both of these parts of Vitruvius' *Ten Books*, as Ingraham has highlighted, between his manner of describing construction and proportioning of temples and theatres in earlier sections, and in Book Ten, the construction and proportions of the mobile "war machine" such as the "tortoise". Vitruvius' agenda in this writing seems to be to demonstrate how the architect uses "cunning" to tame the moving siege machine by

³³⁷ Harather, *Haus-Kleider: Zum Phänomen Der Bekleidung in Der Architektur*.

³³⁸ Vitruvius and Morgan, *Vitruvius: The Ten Books on Architecture*.

³³⁹ *Architecture, Lament and Power* Ingraham, "Architecture, Lament and Power."

settling it. It could be argued however that the two opposing tendencies of architecture, static and dynamic, might be seen as a complementary equilibrium or a perennial dialectic, implicitly part of heterogenous societies, and which needs to be considered carefully by architects.

Vitruvius writes that “machines are timbers fastened together to do work.”³⁴⁰ In this sense, the origins of the dwelling house and the machine are the same. The idea that architecture does work relates to ritual and the tools, rather than the object, of permanent settlement. Machines are based upon the principles of nature, and are responsive to humans. These responses of the machine are tied in to the larger scheme of things through the relationship to the revolution of the sun, moon and planets.

Vitruvius refers to clothing as an engine. In this context, he writes about architecture defined as the work and processes of architects as the essence of architecture, rather than the permanence or static qualities of constructions.

In introducing Book Ten, Vitruvius architecturally commends the principles which govern machines as being equally important as those governing buildings covered in his preceding nine books. The devices described range from hoisting machines and pumps, to more militaristic seeming ballistae (stone-throwers) and catapults to towers and tortoises. These machines are intended to illustrate “principles... most serviceable for times of peace and of war”³⁴¹ and form an essential part of his ten books which cover all the branches of architecture, which are significant as the earliest available such Western theoretical work.

Collaboration

The collaborative practice of architecture is a key to its contemporary role in social agency. Authorship in architecture may be transferred to a collaborative group in the same way that Deleuze and Guattari have described their process of collaborative writing.

³⁴⁰ Vitruvius and Morgan, *Vitruvius: The Ten Books on Architecture*, 283.

Deleuze and Guattari, in writing *Capitalism and Schizophrenia* dealt with the work in a collaborative way; "The two of us wrote *Anti-Oedipus* together. Since each of us was several, here was already quite a crowd".³⁴² Tamsin Lorraine follows Deleuze's conception of the self and writing, noting that living and writing are inevitably collaborative processes that are reduced to the acts of individuals only by discounting "living lines of flight" among multiplicities. Writers, 'becoming-imperceptible', are not unified subjects with histories, but nomads following lines of flight, "traitors to established practices with neither past nor future". Geographies of intensities are mapped in a "desert bereft of traditional landmarks", yet full of becomings and encounters with the imperceptible.³⁴³

Deleuze's overtly collaborative work with Felix Guattari actively engages nomadic subjectivity in its free-flowing connection with global cultures and events. Deleuze's way of presenting the collaborative process with Guattari suggests parallels between multiplicities of one self and multiplicities created by the collaboration of two selves.³⁴⁴

The relations between the process of writing collectively with nomadic subjectivity, and the collaborative processes of architecture are worth pursuing through Deleuze's reflections on this writing process:

We were only two, but what was important for us, was less our working together than this strange fact of working between the two of us. We stopped being "author". And these "between-the-tuos" referred back to other people, who were different on one side from on the other. The desert expanded, but in doing so also became more populous. This had nothing to do with a school, with processes of recognition, but much to do with encounters.

³⁴¹ Ibid., 319.

³⁴² Deleuze and Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia*, 3.

³⁴³ Tamsin Lorraine writes on 'Deleuze's Project' in Tamsin E. Lorraine, *Irigaray & Deleuze : Experiments in Visceral Philosophy* (Ithaca ; London: Cornell University Press, 1999), 133-34.

³⁴⁴ Ibid., 134.

And all these stories of becomings, of nuptials against nature, of a-parallel evolution, of bilingualism, of theft of thoughts, were what I had with Felix.³⁴⁵

The importance of these multiplicities and thefts for architecture are approached in Jonathon Hill's *Occupying Architecture*. Architecture, as a 'weak discipline' is approached in a state of distraction, but not a state of unawareness³⁴⁶. The type of awareness allows a person to perform simultaneously a series of complex activities that move in and out of focus from a conscious to a sub-conscious level. Hill writes:

"In architecture, habit, memory and experience are coupled with the sensual disembodiment of twentieth century forms of communication in order to form a complex compound of spatial and temporal layers."

Tribal societies show excellent examples of the ways in which architecture can be made collaboratively. The majority of the tents highlighted in this thesis require several participants to assemble them, and this collaboration is functionally efficacious but also socially highly significant.

In particular, Labelle Prussin in *African Nomadic Architecture* shows through the example of Gabra women constructing an armature tent that the architecture is part of a 'collage aesthetic' of house building.³⁴⁷ The architecture emerges "like a quilt"³⁴⁸ from the "intimate world of female kinships, friendships and rituals"³⁴⁹ Figure 24 shows two women assembling an armature tent in

³⁴⁵ *Deleuze Dialogues 1987 With Claire Parnet*, (NY: Columbia Uni Press) transl. H. Tomlinson and B. Habberjam p.17 cited in Ibid.

³⁴⁶ Architecture has always represented the prototype of a work of art, the reception of which is consummated by a collectivity in a state of distraction" Walter Benjamin *The Work of Art in the Age of Mechanical Reproduction*, in Walter Benjamin and Hannah Arendt, *Illuminations* (London: Fontana Press, 1992), 239.

³⁴⁷ Prussin, *African Nomadic Architecture : Space, Place, and Gender*, 189.

³⁴⁸ Ibid.

³⁴⁹ Showalter 1986, cited in Ibid.

tandem. The armature frame constitutes what Prussin reads symbolically as a "visual metaphor for gender-discrete, collective creativity"³⁵⁰



Fig. 24. Gabra Women erecting an armature tent.³⁵¹

The tendency toward tribal behaviour and deployment of architecture in some peripheral elements of Western society is a context that suggests an interest in collectivity and collaborative formation of architecture.

Collaboration, Collectivity, Choreography.

As noted in chapter 1 under 'Diagramming Performance', Lawrence Halprin's collaborative methods and others developed in the late 20th century may be worth reconsidering in light of the processes of collaboration developed through cross-disciplinary collaboration. Halprin's group incorporated dance, environment, community, and group dynamics, as part of their

³⁵⁰ Ibid., 190.

³⁵¹ Photograph reproduced from Prussin's *African Nomadic Architecture* Ibid., 191.

collaboration.³⁵² Collaborative movement was a "common point of departure" bringing together a group of "musicians, architects, painters, poets, actors, housewives, children, educators, and so forth".³⁵³ Contemporary work such as Sadler and Hughes' *Non-Plan* follows up this legacy³⁵⁴.

In contemporary research, an interest in choreography as an architectural tool has been developed by a number of architects and was the theme of a conference in 2001 at the Architectural Association³⁵⁵.

Ways of working developed by William Forsythe at the Ballett Frankfurt as means of improvised creative composition are reported in an architectural study by Steven Spier. Forsythe's research into engendering movement led him to pursue in particular the principles of counterpoint, proprioception, entrainment and authenticity, which allow both organisation and improvisation. Counterpoint is defined in the Frankfurt company as "kinds of organisation in time".³⁵⁶ It is ways of organising flow, the body moving contrapuntally with itself, with other bodies, and with music. Forsythe as choreographer aims to engender the dancers training in instinctive principles such as proprioception and entrainment. Proprioception is self-focused, a sensation of one's own experience, an element which Forsythe uses to incorporate in his choreography. Entrainment is the process of two or more people engaging in one another's rhythms and synchronising. Forsythe gives an example of how this works, when dancers work together on a complex body of choreographic material, dancing it every day for hours over a period of months. Then the configuration of sounds and bodies becomes semaphoric. Ultimately, the work is not about

³⁵² Halprin and Burns, *Taking Part: A Workshop Approach to Collective Creativity*, 10-11.

³⁵³ *Ibid.*, 15.

³⁵⁴ Jonathon Hughes and Simon Sadler's *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism* (Architectural Press 2000) puts this participatory movement in a broader context. Jonathan Hughes and Simon Sadler, eds., *Non Plan : Essays on Freedom Participation and Change in Modern Architecture and Urbanism* (Oxford: Architectural Press, 2000).

³⁵⁵ The conference *After the Diagram: Performative Notations in Architecture, Dance Film and Music* (May 2001) purportedly set out to "revisit the trajectory from the sign to the event in an attempt to overcome the frozen implementation of the diagram and investigate the performative operations in time of different notational systems." (AA Summer Term Events List 3, 08.05.01 - 11.05.01)

³⁵⁶ Forsythe cited in *Engendering and Composing* Steven Spier, "Engendering and Composing Movement: William Forsythe and the Ballett Frankfurt," *The Journal of Architecture* 3, no. Summer 1998 (1998): 135-46.

performing the choreography and being on stage, but maintaining the human desire in the expression. "...Choreography should serve as a channel for the desire to dance."³⁵⁷

The thesis suggests that this principle is very apt for architecture. The corollary of this would be that architecture itself should serve as a channel for the desire to actively inhabit. Although the question of bodily movement in architecture and the architectural capture of the moving body has been revived of late, the desire for movement is likely to have been a concern of architects since the times of Vitruvius.

Peripatetic reconciliation

Roger Sandall's controversial book *Culture Cult: Designer Tribalism*,³⁵⁸ reportedly argues along the lines that that struggling indigenous cultures should be assimilated into settled Western culture rather than be revered as "noble savages"³⁵⁹. This notion would support the perpetuation of the sort of imperialism that Edward Said has so carefully criticised through his analysis of the Western construction of a discourse of the other³⁶⁰.

This thesis has argued instead, that studying difference and otherness may benefit enlightened Western societies, through ongoing recognition of differences that accompany the processes of globalisation and reconciliation. It may be suggested, for example that Australian architectural culture might closely examine the pragmatic ephemeral, mobile and collaborative qualities of indigenous architecture.

The suggestion made by the thesis is that ideological conflict between nomads and the sedentary state, manifest in different sedentary and nomadic architectural practices, highlight nomadological

³⁵⁷ R. Sulcas 1995 *Kinetic Isometries* cited in *Ibid.*: 143.

³⁵⁸ Roger Sandall, *The Culture Cult : Designer Tribalism and Other Essays* (Boulder, CO: Westview Press, 2001).

³⁵⁹ According to a review of Roger Sandall's book *Culture Cult: Designer Tribalism and Other Essays*, in the *Weekend Australian* Newspaper 14 April, 2001 p.25.

³⁶⁰ Edward W. Said, *Orientalism* (New York: Pantheon Books, 1978).

considerations of ephemerality through timing (temporality), through movement, and through collaborative action, which are critical to the essence of human dwelling.

The thesis has indicated that these are evident in existing literature as well as in the built environment when architecture is regarded broadly as ways of dwelling. Western conceptualisation of architecture has inhibited the study of nomadology. Architecture, as a Western practice, has been concerned with reinforcing history and institutionalising process in a few ways. Durability of architecture has been promoted as a materialistic way of maintaining architecture physically as a 'phallogocentric fantasy' of a permanent monument, with less attention to the role of human usage and maintenance. Permanence and specificity of forms, following their functions, have made architecture irresponsive to natural change. Permanence is a form of political fortification, facilitated by architecture, and has led to the neglect of mobility and portability as constructive strategies of dwelling. Emphasis on isolating individual architectural leadership, and the pervasively paternalistic value systems of capitalism, neglects the importance of teams, collaborative, tribal and engendered forms of procurement and use of architectural environments.

In concluding this thesis on nomadology in architecture, an account has been made of *performative* considerations that emerge from *nomadological* readings of architecture.

Performative tools, diagrams as abstract machines, what have been described as nomadologies of architecture, have been shown as key components in developing a critical practice of architecture and architectural criticism in a global context that relates to the local. Architecture making can be educational and critical by positively and critically engaging processes of inter-cultural exchange and globalisation of architectural thinking, which are at once direct, local, tangible and human.

The strategies that have been proposed for using ephemerality, mobility and collaboration constitute the performance and deployment of 'nomadology' in contemporary architecture.

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