

Faculty of Humanities

**Overlapping dialogues: The role of interpretation design in
communicating Australia's natural and cultural heritage**

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Doctor of Philosophy
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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature:

Date:

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Abstract

This research investigates the development of interpretation design in Australia during the period 1980 – 2006, and its role in presenting natural and cultural heritage to audiences in visitor settings. It establishes Australian interpretation design at the intersection of two professional fields, interpretation and design. Where heritage interpretation originates from a background of spoken language, through narrative and storytelling, graphic and communication design have origins in visual language, communicated through images and text. This research positions interpretation design as a new field within design and traces its emergence as a hybrid of spoken and visual traditions of communication.

The study gives visibility to this previously undocumented and un-theorised hybrid field of design and creates a thematic conceptual framework within which to locate its historical, conceptual and practical origins. In substantiating interpretation design as a new field, three avenues of enquiry were considered; documentation and analysis of the visual artefacts of interpretation design, locating interpretation design in a wider conceptual and professional context through literature reviews, and consultation with designers in order to understand the challenges and problems in this new mode of design. Further, to facilitate designers to continue to work effectively in highly collaborative, complex and cross-disciplinary professional environments a conceptual collaborative tool was developed for use by interpretation design project teams. The conceptual tool integrates the theoretical and practical findings from this research and is based on a pattern language approach first developed by Christopher Alexander et al (1977).

The research is conducted from a design perspective, and integrates theoretical and professional knowledge from related fields into interpretation design practice. Through a progressively widening interrogation of the literature, professional contexts, and designed artefacts of interpretation design, this new area of design is examined from a number of perspectives, building up a multi-faceted framework for understanding its historical, conceptual and practical dimensions. A Grounded Theory methodology was adapted to develop the theoretical framework of this study and to gather a wide range of relevant data. The practical outcome of the research was developed using a Pattern Language methodology originating from a problem-based design approach in architecture (Alexander et al 1977) and underpinned the interpretation of data.

Conclusions of the research found that despite invisibility within the discourse of Australian design, designers working in this specialised field of practice have, since the early 1980s, contributed to projects which shape ideas, attitudes and visual representations of natural and cultural heritage in Australia's most widely visited and valued sites. Designer's practice is identified as part of an ongoing process of both contributing to Australian cultural narrative and being influenced by the legacy of culture. Contemporary interpretation design is highly cross-disciplinary and collaborative, characterised by a differentiated professional practice with dispersed networks of stakeholders. While interpretation design is located within a larger framework of the professional practice of interpretation, there exists many opportunities to enrich and better inform designers by integrating wider pools of knowledge that intersect the activities of interpretation, including education, tourism, visitor studies and psychology.

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Chapter 1 – Introduction

1.0 Overview of the study

This research investigates interpretation design, a new field of design which has emerged from the intersection of two established professions; interpretation and design. This research aims to give visibility to interpretation design, to document and trace its emergence in an Australian context and to develop a conceptual framework for understanding it as a new and specialised form of design practice. The term *interpretation*, in museum, heritage and tourism contexts, is used in relation to the presentation of an object or place to an audience. This research proposes that since the early 1980s, communication designers have been contributing to an emerging, yet currently unexamined new field of design, which I am calling *interpretation design*. Although Australian designers have played a significant role in the communication of ideas about Australia's natural and cultural heritage, documentation of their projects, the professional context of their work and their contribution to the wider fields of design and interpretation have not previously been examined nor theorised. This study offers an investigation into the emergence of interpretation design – examining both the designed artefacts of interpretation and the professional practice of designers who contribute to the field. It examines practice of interpretation designers in the context of shifts in contemporary communication design, and investigates the role that interpretation designers play in communicating ideas about Australia's natural and cultural heritage.

In heritage contexts, interpretation activity is a form of communication that originates primarily from the spoken word through storytelling, conversations and talks. Definitions of interpretation emphasise its intangible aspect by describing it as 'mysterious', 'unfathomable' and 'just out of reach' (Beck and Cable 2002, 7). This research brings under scrutiny the tangible, visual and visible dimensions of interpretation. Where interpretation originates from a background of spoken language, through narrative and storytelling, communication design comes from a background of visual language, using graphic devices – images and text. The surfacing of interpretation design over the last decades of the 20th Century, as a hybrid of spoken and visual traditions of communication, firmly locates interpretation design as a new field within design.

1.0.1 Background

An increase in the promotion, protection and management of Australia's natural and cultural heritage from the 1970s onwards, has seen the development of the professional field of interpretation, and the need to communicate effectively in tourist, recreational and educational settings. Previously, designed components of interpretation projects were limited to traditional media forms of maps, leaflets, signage and display panels. This material was produced with or without the input of professional designers and was frequently developed and produced in-house on limited budgets, by private and government agencies.

Since the appearance of larger-scale interpretive centres in the Australian cultural landscape in the 1980s (Beckman 1989, 148), the communication and design elements of interpretation practice have expanded dramatically, giving rise to the new hybrid field of interpretation design. Designers are now involved with highly complex design projects involving collaboration with specialists and stakeholders from a range of professions and sectors. In response to the expanded project requirements, designers are working in innovative ways and acquiring new knowledge and skill sets.

Motivating this research is the awareness of a lack of communication between designers *about* interpretation projects. Knowledge and experience gained from one project is not harnessed either formally or informally to be built on from project to project. Designers, in public discourse, have commented on the need to capture this knowledge; to alleviate the sense that each project existed in isolation, and each new project was started from ‘scratch’, with designers reinventing solutions to design problems without access to the considerable collective knowledge already developed in practice. This recognition of a gap in the field provided several opportunities to develop a program of research.

The opportunity to harness the considerable knowledge and expertise that was developing between the few designers working in this quite narrowly specialised, field became the starting point for the research. As there is currently no evidence in the discourse of design that recognises interpretation design as a specialised form of design practice, this was also the opportunity to give it definition and visibility. This research also offered the opportunity to look beyond practice at wider contexts for interpretation design and examine other fields of knowledge that, although related to interpretation design, were not currently integrated into designer’s knowledge and practice. Finally, this research offers the opportunity to contribute to and progress the field through the development of a practical conceptual tool for use in interpretation design.

The research began with a number of simple questions; What is interpretation design? What does it look like? How do designers work on these projects? What impact does their design have? and What could enhance their practice? In response to these initial questions, I pursued a systematic investigation into a field that lacked definition. By identifying the features that delineate interpretation design in its professional, conceptual and practical dimensions, I have compiled evidence for its existence, and in doing so defined the status of interpretation design during the period 1980 – 2006.

This research originates from a design perspective and has two aims:

- To make the field of interpretation design visible within design practice and history.
- To develop a conceptual and practical framework to build new knowledge both about and for the practitioners in the field.

The research addresses three broad questions:

- What is interpretation design?
- How can interpretation design shape ideas about natural and cultural heritage?
- What is the role of the designer in the process of interpretation design?

1.0.2 Scope of the study

This research focuses on the emergence of interpretation design as a field of communication within an Australian context. This communication is multi-faceted, uses a range of communication platforms, is located at a particular site and presents objects and places of natural and cultural significance to audiences. Interpretation design projects are typically concentrated in settings such as visitor centres, national parks, botanic gardens, historic sites, and museums. While recognising the value of both of tangible and non tangible cultural manifestations of interpretation including; music, poetry, landscape architecture, cultural events and ceremonies, and their significance to the field of interpretation practice, this investigation focuses on designed artefacts, generated from graphic and communication design professions. While also recognising the richness and contribution of vernacular design to the field of interpretation – hand made signs, advertisements, and local collections especially in regional and rural community museums and tourist operations, the scope of this investigation does not extend to non-professional design. Instead, the artefacts of design examined here are those designed by professionally contracted designers and interpreters. Chapter 9 – Tourist ephemera and Chapter 10 – Interpretation design: site visits and case studies, present examples of the designed artefacts investigated in this research. These examples and case studies are referred to throughout the research and in the Interpretation Design Pattern Language Tool.

This study investigates the emergence of interpretation design in the period 1980 – 2006. The appearance of interpretive centres in the Australian cultural landscape since the 1980s is a relatively recent phenomenon (Beckman 1989, 148), linked to the valuing, protection and management of Australia's natural and cultural heritage from the 1970s onwards. These sites present and contain information and education about natural and cultural environments and have evolved historically from a colonial, non-indigenous relationship to place. The separation between nature and culture has origins in European settler assumptions of place and ignores the fact that Australia's cultural landscape has been managed and modified, for many thousands of years by indigenous people. The concept of nature, is a cultural construct that depends on the presence of its opposition – culture. These distinctions are problematic and prevalent in communication, language and ideas about place. As the focus of this thesis is on communication – including ways in which the notions of nature and culture are constructed, rather than qualifying the terms natural and cultural throughout the discussion, I want to, at the outset, acknowledge that these concepts are interconnected, contested and problematic. These concepts will be further expanded in Chapter 8 – The conceptual context.

1.0.3 Australian context

This study examines the role of interpretation design and designers in Australia, set against a global backdrop of rapid change, increased complexity and threat to fragile environments. Australia is rich in natural heritage sites of global significance with 15 out of 17 of its World Heritage Sites being recognised for their outstanding natural

significance, and at the time of writing, 4 of these 15 sites meeting both cultural and natural criteria for inscription by UNESCO (UNESCO 2009). Australia's natural environment, with its unique biology, geology and indigenous history, has long been the drawcard for both domestic and international tourists seeking to participate in nature-based recreation experiences. National parks have become a significant feature of Australia's tourist market, especially for international tourists. The 2004 National Visitor Survey reported that 1.8 million people, or 64% of Australia's international tourists, visited a national park at least once over the course of their time in Australia (Tourism Australia 2005). This reflects a world-wide trend towards ecotourism, the experience of combining concern for the environment with tourism. The identification and protection of land and ecosystems in national parks, reserves and conservation areas, acts 'as a magnet for tourists, who are attracted by the very selection of those areas and the fact that the areas are made open to public access' (Preece 2004).

Tourism, with its demands on the natural environment, has a significant impact on these environmentally sensitive areas. Whilst tourism and visitor behaviour potentially pose a threat to Australia's natural environment, it is recognised that tourism (in particular ecotourism) and interpretation can also contribute to the conservation and sustainability of Australia's biodiversity, natural places and host communities. The fostering of sustainable and protective attitudes towards Australia's natural environment pivots on the successful communication of information, both regulatory and educational, to visitors and tourists. Successful communication of these messages has demonstrated positive social and environmental benefits including an increase in the appreciation, protection, conservation and sustainability of Australia's natural environment (Moscardo 1999, Preece 1996, Stewart 1998, Weiler 2002). The designed aspect of this communication – interpretation design, provides the visible interface for delivery of critical messages about education, conservation, safety, history and ecology.

1.1 Research framework

1.1.1 Aims and objectives

This research has two aims:

- To make the field of interpretation design visible within design practice and history.
- To develop a conceptual and practical framework to build new knowledge both about and for the practitioners in the field.

Within these broad aims, the following objectives are manifest:

- To investigate the role of communication design in shaping ideas about Australia's natural and cultural heritage.
- To examine the role and professional context of the designer in the emerging field of interpretation design.
- To develop a conceptual, theoretic and practical framework for interpretation design, which at present is largely ill-defined and un-theorised.

- To enhance the effectiveness of interpretation design through the development of a practical and conceptual tool for use in interpretation design.

1.1.2 Research motivations and questions

In the context of contemporary design practice, two issues have motivated this research. The first is the invisibility of communication design in constructing ideas about Australia's natural and cultural heritage. Visual representations of place through the fine art traditions of photography, painting, drawing and printmaking are already extensively addressed by the discourse on Australian landscape art. However, critical attention is lacking in design discourse on how the practice and products of communication design have influenced thought, attitudes and behaviour towards natural and cultural places in Australia

Discourse about Australian communication and graphic design is not noticeably evident or consolidated in the literature. The single most comprehensive examination of the development of graphic design in Australia, Geoffery Caban's *A Fine Line* was published in 1983. Since then, no single text traces developments in graphic design, leaving discourse over the past few decades to be constructed from a range of sources, including exhibition catalogues (Whitehouse 2005, State Library of Victoria 2001), survey books (Clark 2005) and magazine articles (Poynor 2002, *Eye Magazine* 2002). Since interpretation design has emerged from the field of graphic design it too is absent in design discourse. This absence, combined with a perception that design is ubiquitous, anonymous, and ephemeral makes the role of communication design indiscernible, despite its potential as a significant agent in the formation of ideas and identity (Whitehouse 2005). This absence also means that there is no framework to conceptualise the field of interpretation design, obscuring its presence as a new field of design with an identity in design history and design discourse. These absences led to the key research questions:

- What is interpretation design?
- How can interpretation design shape ideas about natural and cultural heritage?
- What is the role of the designer in the process of interpretation design?

The second issue motivating this research is the observation that in recent decades, design has shifted towards a more collaborative, cross-disciplinary and strategic practice, demanding designers to extend their knowledge and experience beyond traditional design related activities (Friedman 2000). Michael Ettema, former Curator of the Henry Ford Museum in Michigan, argues for designers to be more active in stimulating creative thinking in museums, and believes that there is a communication gap between designers and museum professionals. Ettema writes; 'unfortunately museum people and designers don't know each other very well, and they need to' (Ettema 1997, 197). At a workshop I chaired at the Interpretation Association of Australia (IAA) conference in Hobart in 1999, a panel of designers discussed ideas and issues arising from the challenge

of working on large scale and complex interpretation design projects. Panel members identified the need for better dialogue between designers and interpretation professionals who in this forum included; rangers, interpreters, historians, writers, zookeepers, education officers, curators, interpretation consultants, and public servants. These comments raised questions about the nature of collaborative practice in contemporary design and whether the experience of the panel members at the IAA conference was a reflection of a larger shift in design generally, or whether they were in fact contributing to the cross-disciplinary collaborative aspect of contemporary design.

1.1.3 Research methodology

This research uses interpretive and qualitative research methods, which have an affinity with inquiry into design processes. A Grounded Theory methodology was adapted to develop the theoretical framework of this study and to gather a wide range of relevant data. Rather than being specified in advance, the process of Grounded Theory studies the topic within its context using an emerging research process. In this way, Grounded Theory is suited to theory building rather than theory testing. The practical outcome of the research was developed using a Pattern Language methodology originating from a problem-based design approach in architecture (Alexander et al 1977) and underpinned the interpretation of data.

Research methods used include:

- In-depth literature survey to delineate and give definition to interpretation design themes.
- Interviews and survey of designers working in interpretation design.
- Site visits to document interpretation design practice and artefacts.
- Analysis of interpretation design projects and natural and cultural heritage design artefacts.

Data provided by the designer's knowledge, artefact analysis and literature searches provided the contextual and thematic foundation from which to develop and conceptual thematic framework for interpretation design. As the emerging field of interpretation design intersects fields including design, interpretation and tourism, the literature review provides a cross-disciplinary starting point from which to develop propositional themes that define and describe its conceptual and professional terrain. An initial literature review examines the two 'parent' fields of interpretation and design and introduces key terms and reviews contemporary literature to set the historic and professional context for the emergence of interpretation design. The conceptual thematic framework for interpretation design developed through delineating three contextual spheres for investigation, with each field addressing: (1) the professional context, (2) the conceptual context and (3) the regulatory context. Through a progressively widening interrogation of the literature and professional contexts, interpretation design is examined from a number of perspectives, building up a multi-faceted framework for understanding the historical, conceptual and practical dimensions of interpretation design.

The use of a Pattern Language provided a method for interpreting the data, grouping and sorting findings into a more generalised form extending beyond the tacit knowledge available through the practice of designers. This approach also enabled the adaptation of conceptual and tacit knowledge into a practical format and led to the development of the Interpretation Design Pattern Language tool as a practical outcome of this research. This conceptual tool is based on architect Christopher Alexander’s pattern language and aims to bring together diverse professional knowledge (Alexander et al 1977). As this research originates from a design perspective, and through a problem-solving approach, the tool aims to develop a shared language which has a relational and multi-pathed approach to the type of problems encountered in interpretation design. I am proposing that a pattern language approach is suited to hybrid form of practice such as interpretation design, which is relational and recombinant rather than prescriptive and linear. This propositional tool aims to further orient and assist interpretation designers towards ways of working in the future.

1.1.4 Thematic conceptual framework

The thematic conceptual framework is developed throughout this thesis in a series of investigations into the professional, conceptual and regulatory aspects of interpretation design. A framework is built by adapting and integrating concepts from other fields into interpretation design. This framework also provides the foundation to apply knowledge from other fields into a practical useable tool – The Interpretation Design Pattern Language.

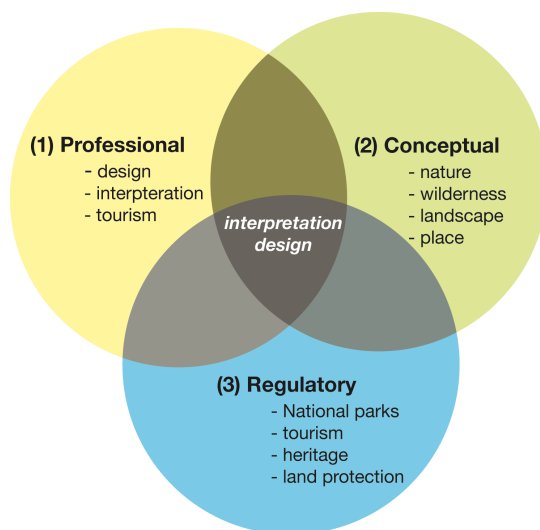


Figure 1: Thematic contexts of interpretation design.

(1) Professional themes

The professional context of the research focus on the process of interpretation design and the ways in which designers are able to communicate and collaborate effectively in a divergent and complex professional environment. The study includes the commercial and professional activities of design, interpretation and tourism — the educative, marketing

and socially driven aspects of communication produced by private and government sectors involved in heritage, tourism, land management and protection. With design activity characterised by increased collaboration and multi-disciplinary teamwork, the field of interpretation design poses the challenge for designers to work across a number of disciplines and professions.

(2) Conceptual themes

The conceptual context of this research is based on interrogating individual and collective understandings, ideas and assumptions about natural and cultural heritage, place, and the environment within an Australian context. There is a lack of discussion surrounding the impact of design in forming ideas about nature, despite the pervasiveness of the artefacts of travel and tourism penetrating our fields of vision through tourist guides, magazines, visitor centres, advertisements and the internet. Instead of being regarded as a significant contributor to the formation of ideas and attitudes of nature, design – unlike the disciplines of fine art and literature, occupies an elusive and invisible position.

(3) Regulatory themes

This research situates the practice of Australian interpretation design and designers within the regulatory framework that governs the presentation and communication of protected areas. Heritage, tourism and land protection agencies are governed by policies, conventions and legislation, which deliver mandatory public communication through interpretation. The framework of these regulatory bodies and conventions are discussed with the intention of understanding how regulatory agendas form part of the communication of messages and information in natural and cultural heritage sites.

1.1.5 Significance of the study

This research is intended to benefit interpretation designers and interpreters who are working in collaborative teams with designers. This research is integrative and synthesising. There is currently no integrative framework combining the fields of design and interpretation (Moscardo 1996). This research focuses on the tangible, visual and visible dimensions of interpretation and its designed artefacts. It traces the spoken and visual traditions of design and interpretation respectively and examines how interpretation design blends these two communication modes together.

The research creates definition and increased visibility for interpretation design, forming a conceptual and thematic framework for a previously unrecognised field. Alongside more familiar contributions from artists, writers and historians, this research positions interpretation designers as significant agents, contributing to the ongoing narrative and interpretation of place. Since its emergence in the 1980s, interpretation design has not been researched, documented or given a conceptual framework by either fields of design or interpretation. Although individual projects have received descriptive commentary (Robinson 1994, Poynor 2002), a more detailed, critical analysis of interpretation design is absent. Through this research, interpretation design is given a context in design history and is discussed in relation to developments in wider design discourse. The research

offers an original contribution to professional and academic discourse in the following ways:

- It provides interpretation design with a historic and theoretical framework.
- It integrates the fields of design and interpretation.
- It defines and raises the visibility of the field of interpretation design through its contribution to discourse about the ‘national image space’ (Morris 1988), and Australia’s ongoing cultural narrative.
- It contributes a practical collaborative tool for use in the field of interpretation design.

Through a critical examination of interpretation design, this research contributes to a theoretical discussion about issues facing designers in the wider field of communication design. By encompassing bodies of knowledge outside of, yet relevant to design, this research contributes to the ongoing expansion and re-definition of design thinking. The research also expands theoretical discussions of landscape and natural and cultural heritage by contributing ideas from a communication design perspective. To facilitate this integrative process I have proposed a practical collaborative tool devised specifically for interpretation projects. The tool’s purpose is to strengthen the dialogue between designers and non-designers, and is offered as an original contribution to the field of interpretation design.

1.2 Thesis structure

This thesis is structured in four parts reflecting the program of research and the research findings:

Part one describes the theoretical perspectives and research methods (Chapter 2), along with a literature review of the separate fields of interpretation and design (Chapter 3).

Part two examines the professional aspects of interpretation design, including the professional contexts of design (Chapter 4), interpretation (Chapter 5) and tourism (Chapter 7). It also examines the form of interpretation design (Chapter 6), and the conceptual framework of ideas and assumptions that underpin this field (Chapter 8).

Part three examines the designed artefacts produced by interpretation designers. Here the artefacts of tourism ephemera (Chapter 9) and interpretation sites (Chapter 10) are presented and analysed. The perspective of the interpretation designers are also presented (Chapter 11)

Part four presents a conceptual and practical tool designed to apply knowledge from the fields of interpretation and design to interpretation design projects. Patterns and themes relevant for interpretation design highlighted by designers and found in a wider literature search are presented (Chapter 12). The Interpretation Design Pattern Language is then developed (Chapter 13) and presented (Chapter 14).

Chapter 2 – Theoretical perspectives and research methods

2.0 Introduction

This research has been undertaken from within the discipline of design, with an emphasis focused through a design informed perspective. Design, with its origins in arts and crafts and an emphasis on tacit knowledge, has evolved in its contemporary form to intersect the domains of many disciplines practices and research approaches. The absence of clearly articulated methodologies either generated from, or closely aligned with design research, motivated investigation of suitable research methodologies found in other established research traditions. The examination of interpretation design – previously an ill-defined and un-theorised field, requires research methods that give visibility to the field and develop a theoretical knowledge base beyond practice-based know how. With the intention of producing new theory-based knowledge that generates useful practical outcomes for design, a Grounded Theory methodology developed in social science has been adapted to develop the theoretical and methodological framework of this study. The practical outcome of the research was developed using a Pattern Language methodology developed from a problem-based approach in architecture. The selection of these two guiding methodological approaches reflects the cross disciplinary nature of the investigation and allows for the development of both theoretical and practical knowledge

This chapter outlines how the program of research has been developed; the methods used and the research process. This research is qualitative — with theoretical perspective being developed from interpretive approaches found in the humanities and social sciences. Qualitative research focuses on studying natural settings and by attempting to make sense of, or interpret, phenomenon and the meanings people bring to them (Denzin and Lincoln 1998). A cross-disciplinary approach has been used to examine the existing context for interpretation design and to develop a thematic conceptual framework to discuss interpretation design practice, which is presently absent in the literature and design discourse. In this chapter, my stance as a researcher, the philosophical assumptions informing the research methodology, and links to methodological approaches are identified.

2.1 Design theory and research

This research fits within the relatively recent and emerging field of design research which lacks a long tradition of well established theory and methodology. In 2003, Friedman writing about the status of design research observed that;

A body of writings equivalent to the rich literature of inquiry on theory construction in the natural and social sciences has yet to be developed in design studies. This is understandable in a discipline that is quite new compared with information science, physics or sociology, let alone philosophy, mathematics or geometry (Friedman 2003b, 516).

Since this time research in the discipline of design has continued to develop to include forums of theory development such as conferences and graduate programs but compared to other more well established disciplines is still in its emergent stages. Methods and

methodology established in other disciplines including social sciences and humanities are frequently consulted to guide design enquiry.

Friedman calls for the field of design to generate theory of its own that takes it beyond tacit knowledge, knowledge generated from practice, to more generalised theories of design that can be directed towards solving problems in an increasingly complex world (Friedman 2003, 519). Further, he recommends that theory needs to go beyond the clinical, micro-level research generated by individual designers, and instead move towards a well articulated explicit knowledge that can be applied back to other problems and scenarios. This research through its methodical enquiry into a particular form of design practice – interpretation design, is aiming to generate theory about an un-theorised aspect of design. By examining the practice of interpretation design and making explicit the tacit knowledge interpretation designers have, the research aims to contribute to this theory at a more generalised level by examining the wider professional and historical contexts in which interpretation design operates. Through participating in a ‘rich cycle of knowledge management that moves from tacit knowledge to explicit and back again’ (Friedman 2003, 520), it is anticipated that the theoretical knowledge produced will generate useful practical strategies for the design profession faced with increasingly complex design challenges.

2.2 Theoretical framework

2.2.1 Overview

The theoretical perspective of this study draws on social science traditions of qualitative research; that is, research that involves understanding and interpreting social phenomenon in ways that do not require measurement and quantification (Abercrombie et al 2006, 213). Qualitative researchers question the notion that there is one external, observable reality that can be understood and measured. Instead qualitative research is interpretive – in that it presents one of many alternative representations of reality. In qualitative research it is acknowledged that the researcher’s particular worldview imbues the nature of the research process and cannot be separated from the researcher’s philosophical assumptions and beliefs. This study is focused on the activity surrounding interpretation design, including the professional work of designers and the social impact of their designed artefacts. Designed artefacts are defined in the research as the tangible outcomes of a process of design, generated by a professional designer.

2.2.2 Theoretical assumptions

This research examines two aspects of communication design, (1) how designed artefacts as texts are understood and received by audiences and viewers and (2) the role designers play in the production of these artefacts. In other words, the research investigates both the lived experience of the design process for the designers and the designed outcomes of their work. From this investigation, theory-based knowledge is proposed that can in turn be used to underpin practice-based strategies for use by designers. This process of

qualitative investigation rests on several philosophical assumptions. In making these assumptions explicit it is useful to consult John Cresswell's framework for identifying philosophical assumptions. He writes;

These [philosophical] assumptions are related to the nature of reality (the ontology issue), the relationship of the researcher to that being researched (the epistemological issue), the role of values in the study (the axiological issue), and the process of research (the methodological issue) (Cresswell 1998, 25).

Cresswell's categories of assumptions outlined above, help in identifying the subjective nature of the research and the researcher. Ontological assumptions can be revealed by asking the question: What is the nature of reality? In this research, reality is treated subjectively, and as constructed by the individuals involved. This subjectivity assumes there are multiple realities existing side-by-side including; the reality of the researcher, different realities experienced by the designers being interviewed, realities of audiences engaged in interpretive situations and realities of those reading the study itself. This assumption also extends to the way design artefacts and texts are viewed and constructed. It assumes that through the process of constructing and designing, designers are making subjective choices guided by a multitude of possible solutions, rather than pursuing only one possible outcome that exists as an external reality or solution waiting to be discovered.

The epistemological assumptions reveal the theory of knowledge embedded in the theoretical perspective and thereby in the methodology (Crotty 1998, 9). These assumptions can be ascertained by asking; What is the relationship between the researcher and that being researched? In qualitative interpretive studies such as this one, meaning and lived human experience is the focus, bringing with it the assumption that the research is conducted from a subjective, insider's perspective. In this study, the focus is on professional practices of a small number of interpretation designers, analysis of their designed outcomes and the professional contexts in which they work. As a researcher, I was not distanced from the participants, but shared a recognised professional background, where both researcher and participants are designers and have a professional relationship. As a designer, my judgments about the effectiveness, aesthetic qualities and 'success' of designed artefacts is culturally and socially bound, giving rise to subjective and personal evaluations of the artefacts I examined.

Finally, by acknowledging my own values and biases that shape the narrative presented in this research, its axiological assumptions are revealed. As an educator, I value the educative function of interpretation over interpretation linked to commercialism. My professional background as a designer aligns me with the perspective of designers in multi-disciplinary teams rather than other professional groups such as architects, interpreters or scientists. Holding conservationist values also impacted on my decision to select interpretation design as an area for research. Having been educated in the latter part of the 20th Century in the fields of sociology, geography and art theory, I have absorbed a postmodernist stance which informs the research approach, process and analysis.

2.2.3 Methodological approaches

The methodology used in research is the strategy, plan of action, process or design lying behind the choice and use of individual research methods (Crotty 1998, 3). A methodology frames the data using ideas and concepts from different theoretical traditions and perspectives. Methodological assumptions affect way the whole research process is conceptualised (Travers 2001), and extends from the theoretical assumptions of the qualitative researcher. The methodological process used in this research is inductive, that is, it produces a generalised claim or principle from observed instances. This assumes that the ‘researcher works with particulars (details) before generalisations, describes in detail the context of the study, and continually revises questions from experience in the field’ (Creswell 1998, 75). This research is part of an enquiry into design and design processes. In order to develop theory out of data, a methodology that proceeds inductively was needed to allow theory to evolve out of observations in the social world (Abercrombie et al 2006, 213).

Furthermore, the inductive approach is also guided by design enquiry, similar in itself to the design process which attempts firstly to understand, and then to solve problems. The process of design, as defined by Herbert Simon in a seminal lecture on design in 1968, rests on a problem identifying and problem solving approach, and ‘seeks to devise a course of action aimed at changing existing situations into preferred ones’ (Simon 1982,129). This view of design as a problem solving process, driven by the desire for change and enhancement underlies the methodological approach of this research. A design perspective, coupled with a less definitive design research tradition, required devising a methodology that could firstly generate theory in an under-theorised field and secondly take a problem-based approach suited to design. The research methodology used is aligned with the process of two methodological approaches, Grounded Theory and Pattern Language. Elements of both methodologies were adapted in undertaking the theoretical and the practical elements of the research. Both methodological approaches originated in America during the 1960s and 1970s, and have and been adopted and adapted by a range of other researchers from outside their parent disciplines of social science (Grounded Theory) and Architecture (Pattern Language).

Grounded Theory

Grounded Theory originated from American sociology in the 1960s as a reaction to extreme, abstract empiricism. In contrast to abstract theory, Grounded Theory, as the name implies, is ‘grounded in data which have been systematically obtained by social research’ (Abercrombie et al 2006, 174). First developed within the tradition of symbolic interactionism by Barney Glaser and Anselm Strauss (1967), Grounded Theory has become prominent as a method of social analysis in fields such as education and health studies through the analysis of ethnographic stories, bibliographic narratives, and interviews. The general approach is developed in progressively more detail by Glaser (1978), and Strauss (1987) with a detailed treatment of Grounded Theory procedures presented in Corbin and Strauss (1990). Glaser and Strauss (1967) invited the use of their

strategies in a flexible and adaptable way. Kathy Charmaz, a student of Glaser in America in the 1970s, has continued to shape the contemporary form of grounded research and argues that Grounded Theory has evolved as a process in the past forty years (Charmaz 2006, Bryant and Charmaz 2007). While Grounded Theory has adapted and changed over that time, Charmaz warns that the term can lead to confusion as in some cases it refers, correctly, to the result of the research *process*, but in many other cases it refers to the *method* used in the research process (Bryant and Charmaz, 2007, 2).

Grounded Theory Process

Grounded Theory, as it was originally formulated by Glaser and Strauss proposed a set of guidelines for generating abstract theoretical explanations of social processes. It proceeds in a non-linear fashion, in several stages that include; gathering rich data, coding the data, memo writing, sampling, saturation and sorting. Glaser and Strauss maintained that by following a systematic qualitative analysis, theory would emerge. Grounded Theory involves a systematic coding system to analyse social data from which patterns are identified and then integrated into theory. In using this approach, cycles of research occur, new questions emerge and further research is conducted. This cyclical approach is what Jennifer Mason calls a ‘dialectical’ process where theory, data analysis and data generation are produced dialectically, or by establishing truths on many sides rather than disproving one argument (Mason 2002, 180). A Grounded Theory perspective uses as data ‘all incidents that come the researchers way...to compare, generate concepts and to induce the patterns involved’ (Glaser 1998, 8). The use of this inclusive approach affords the availability of a wide range of material for analysis to build theory and concepts.

Glaser summarises the ‘all is data’ approach, writing:

...uniformity of data is not required for comparing. Diverse data from other emergent sources can be compared. By diverse I mean whatever may come the [Grounded Theory] researcher’s way while theoretically sampling: documents and current statistics, newspaper articles, questionnaire results, social structural and interactional observations, interview, casual comments, global and cultural statements, historical documents, whatever, whatever as it bears on the categories (Glaser 2001, 147).

Literature is included and regarded as data and is consulted as it becomes relevant, rather than being searched in advance. This way progressive accessing and reading of relevant literature becomes a part of the data collection process. Glaser writes;

As relevant literature emerges, the Grounded Theory may take the researcher into less familiar or even unfamiliar fields. In doing so the researcher may be providing opportunities for multi-disciplinary and interdisciplinary approaches in research (Glaser 1998, 77).

Rather than being specified in advance, the process of Grounded Theory studies the topic within its context using an emerging research process. In this way, Grounded Theory is suited to theory building rather than theory testing.

The generation of a Grounded Theory starts with conceptualising a problem from the data so a conceptual theory/analysis can gradually start emerging or so concepts can be related to concepts. At this point the researcher gains very strong control over the research and emerging theory. (Glaser 2001, 38)

Bryant and Charmaz claim this attribute as one of its benefits as it ‘offers a rationale for researchers as they begin their research—the method eliminates and precludes the need for hypotheses and conjectures at the start’ (Bryant and Charmaz 2007, 47). Critics of Grounded Theory argue that the ‘procedural machinery’ of Grounded Theory’s coding and methodology overwhelms the interpretation and the qualitative voice of the data. Thomas and James (2006) regard the relevance of Grounded Theory as being firmly within the time period of its emergence, dismissing the possibility of new versions, despite others who argue for its flexibility and adaptability (Charmaz 2006, Bryant and Charmaz 2007). Thomas and James (2006) argue that despite its widespread appeal, Grounded Theory constrains and hampers qualitative enquiry because the procedure overwhelms the interpretation.

Grounded Theory and Design Research

As yet Grounded Theory has not been widely applied to design research. Approaches influenced by Grounded Theory have been used to investigate new and emerging areas of design – including research into the design of military load carriage systems (W. Tutton personal communication 7 July 2009), design promotion (Raulik-Murphy 2009), creative design computing (Sevaldson 2005) and the design of commercial online spaces for female users (Sadowska 2003). Friedman points to Grounded Theory as a potential starting point to generate more generalised theories of design that can be directed towards solving problems in an increasingly complex world. He writes;

So far, most design theories involve clinical situations or micro-level grounded theories developed through induction. This is necessary, but it is not sufficient for the kinds of progress we need. In the social sciences, Grounded Theory has developed into a robust and sophisticated system for generating theory across levels. These theories ultimately lead to larger ranges of understanding, and the literature of Grounded Theory is rich in discussions of theory construction and theoretical sensitivity (Friedman 2003b, 319).

Tutton used Grounded Theory to construct an organised view of the data, rather than placing an order on the data (W. Tutton personal communication 7 July 2009). Sevaldson found the highly specific methods from Grounded Theory proved to be too rigid, and ‘thus a looser and less resource-intensive approach needed to be developed for the designing practices under development and reflection’ (Sevaldson 2005, 347). The benefits of Grounded Theory as a theory-building rather than theory-testing approach, are appealing for design researchers investigating new fields or where there is a shortage of existing data (Raulik-Murphy 2009 personal communication 7 July). In new or ill-defined areas of design research, Grounded Theory is an appropriate starting point as it allows research questions to be generated and theory to be built in the absence of established knowledge. Thus the process of categorising, sorting and mapping a practice where a complete overview has not previously existed creates a meta-level of knowledge (Sevaldson 2005, 179).

Adapted Grounded Theory

Evidence suggests that design researchers are adapting Grounded Theory methodology to create categories, sort data and to generalise patterns and principles (Sevaldson 2005, Sadowska 2003, Raulik-Murphy 2009). To recap the *process* of Grounded Theory is appropriate for design research as it encourages:

- an ‘all is data’ approach, including a diverse range of materials and artefacts as data
- theory-building rather than theory testing
- cyclical loops of investigation
- adaptation of the Grounded Theory methodology
- progressive consultation of multi-disciplinary literature

At this point it is necessary to clarify where this research is aligned to the process of Grounded Theory and where it departs from the process. A Grounded Theory approach is not a linear process, instead the research proceeds in a number of staged non-linear pathways. The diagram below summarises the cycles of investigation in this study.

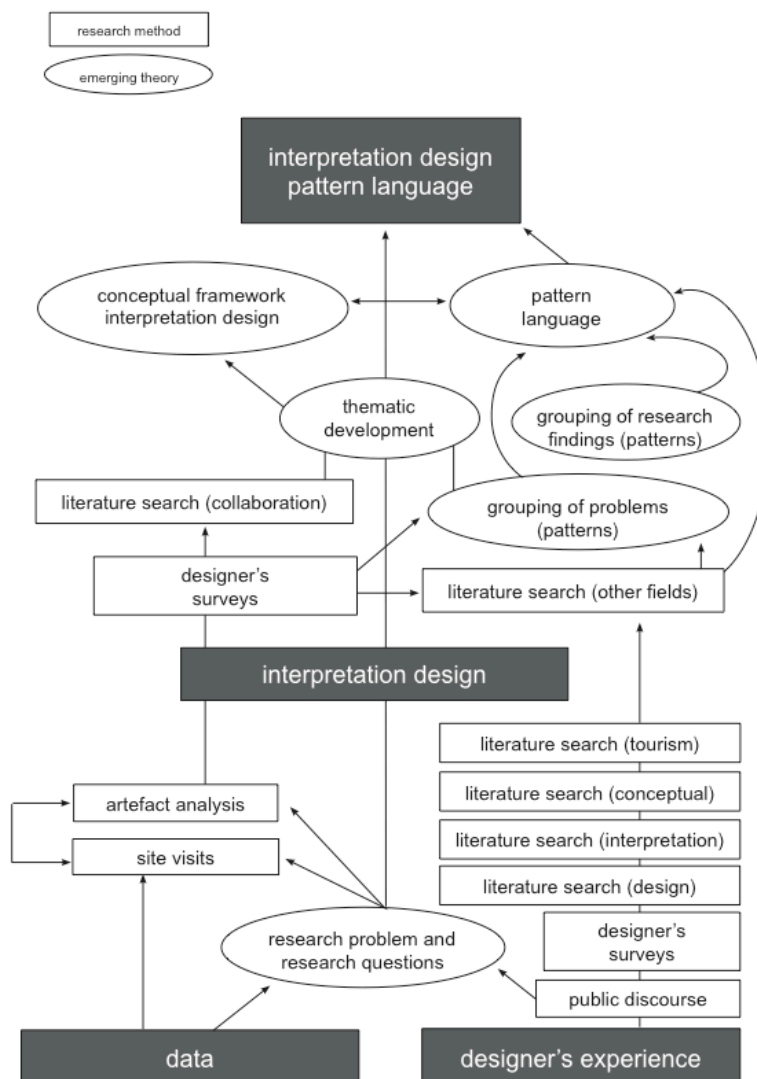


Figure 2: Overview of research process

Where the methodology is most closely aligned with Grounded Theory is in the sequence of investigation where the field of interpretation design is mapped and defined through a series of iterative cycles. Progressive literature searches yielded further interdisciplinary fields to investigate. Interviewing designers led to further literature searches and artefact analysis, all helping to building the conceptual framework of the study. The methodological strategy of this research uses pathways of investigation using research methods outlined in the diagram above. During the course of the research, cycles of inquiry generated emergent theory. A conceptual thematic framework emerged from literature reviews (Chapters 3 – 7) interviewing designers (Chapter 11), analysing artefacts and sites (Chapters 9 – 10), identifying patterns and problems (Chapter 12) and investigating how designers collaborate. From this program of research, a conceptual thematic framework emerged and a conceptual tool for use in interpretation design was developed as a practical outcome of the research. The tool, an Interpretation Design Pattern Language is described in Chapter 13.

The theoretical and conceptual framework for interpretation design which emerged in the absence of previous theoretical investigation is grounded in the data of artefacts, literature reviews and the practice of interpretation designers.

While Grounded Theory was used as a starting point to map and define an ill-defined field, there were also points of departure from this process. This research investigates multiple aspects of design activity. Part of the research analyses projects and artefacts, another part analyses design processes, while another part is dedicated to enhancing collaborative design practice. The methodology used differs from the traditional Grounded Theory methods used to group and sort data. Instead of using the complex coding system of Grounded Theory, a range of diverse data, including, in some instances quite complex designed artefacts, is examined and sorted by a process of finding common patterns of problems, issues and themes. Thus pattern finding, grouping and sorting — intrinsic stages of the investigation, are embedded in the larger cycles and loops of the investigation.

Pattern Language

Much of design process and design practice focuses on a ‘problem finding’ and then a problem solving approach. Hence an appropriate tool was needed to be able to deal with the problems identified through the gathered data. While the pathways of investigation and data collection followed a Grounded Theory approach, the problem-based approach was developed out of a ‘pattern finding’ system. This approach is based on a ‘pattern language’, initially proposed in the 1970s by Christopher Alexander as a critique of modernism and modernist architecture, and has since been widely used in other disciplines including software development (Griffiths 2004, Lea 2003), environmental psychology (Kaplan et al 1998), education (Jessop 2004), management and industrial design (Junestrand 2001). Stemming from problem solving strategies in architecture and design, this approach involves identifying frequently occurring problems and issues as patterns.

Problem identification and problem solving are fundamental to the process of design, which Friedman articulates as;

You're able to start to figure out how to solve that problem for a legitimate stakeholder or problem owner. You're able to bring the appropriate kinds of skills to bear by asking good questions, opening the question space coming to understand the genuine problem before jumping to solutions. And then, you must be able to open the solution space, laying out a range of solutions, choosing the most effective solution for the circumstances, then able to bring it to bear (Steinberg 2008).

Not only was a pattern finding methodology found to be an appropriate method to group and sort data, the pattern language approach became a practical way to consolidate problems identified in the theoretical framework into practical outcomes for interpretation design. While Grounded Theory guided the data gathering process, the pattern language approach provided a tool to synthesise the data collected into a problem-based solutions. The pattern language approach became a further stage of interpretation of the data. The distinction between the approaches of Grounded Theory and Pattern Language used in the research is summarised in the diagram below.

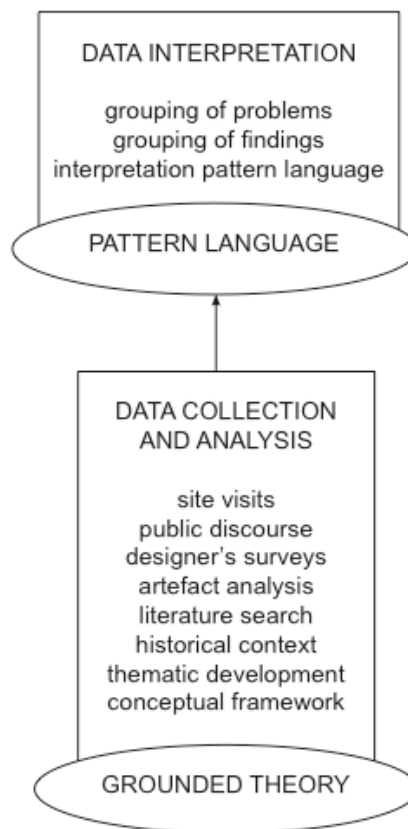


Figure 3: Overview of Grounded Theory and Pattern Language methodological approaches

Data provided by the interviewed designers, artefact analysis and literature searches provided the contextual and thematic background to interpretation design. The Pattern Language approach provided a method for interpreting the data, which grouped and sorted it into a more generalised form, adding a layer of knowledge beyond the tacit

knowledge revealed through the designer's surveys. The final stage of this process being a synthesis of knowledge into a practical and useable tool.

2.3 Research Methods

In order to conduct this research, different tools were used to gather and analyse the data including questionnaires, interviews, case studies (site visits), textual analysis (archived design artefacts), literature searches and noting comment in public discourse such as lectures, workshops and conferences. These methods will be discussed in the context of describing the research process.

2.3.1 Research process

As outlined above in Figure 2, the research process did not proceed in a strictly linear way; however for the purposes of this thesis the research process fall into four groups:

- literature review and thematic development (Chapters 3 – 8)
- public discourse (Chapters 2 and 9)
- designer's survey (Chapter 11)
- artefact documentation and analysis (Chapters 9 – 10)

2.3.2 Literature reviews and thematic development

Initially the literature was examined to find material that related to Australian interpretation design. This revealed that the literature published on Australian interpretation design or design communicating about Australia's natural and cultural heritage was not extensive and was limited to project descriptions (*Eye magazine* 2002), commentary (Whitehouse 2005, 2007 and Bonyhady 2005), conference presentations and newsletter articles by Interpretation Australia Association (IAA). This confirmed that in the area of interpretation design there was a conspicuous absence of documentation, critical writing or analysis. In light of the absence of secondary sources on interpretation design, primary sources of material about the disciplines of graphic design and interpretation became the starting point to develop a propositional thematic framework from an extensive cross-disciplinary base of literature. An initial literature 'review' process became instead a process of drawing out relevant themes, through which interpretation design could be discussed and located. In order to establish and define the parameters of this emerging field, material relating to the individual fields of design and interpretation was examined. This was necessary, in order to understand how these two established professional fields have contributed to the emergence of the hybrid specialised field of interpretation design.

In keeping with Grounded Theory (Glaser 1998, 77), the conceptual and thematic terrain of interpretation design was established via the literature. Designers were surveyed to identify professional practice issues, and the designer's panel discussion also contributed to building this understanding of professional practice. Through the examination of related literature and consultation with designers, a wider inclusion of material than the initial starting points of interpretation and design was prompted; incorporating other

disciplines including visitor studies, tourism, education, landscape architecture, and environmental psychology.

The thematic framework was developed in two stages. Chapters 3 – 8 detail the professional, conceptual and regulatory spheres of interpretation design. The second stage was developed through surveying designers revealing the importance of inter-disciplinarity for interpretation design. These themes are summarised in Chapter 12 – Looking to other disciplines.

2.3.3 Public discourse

Part of the data gathered for this research was found in public discourse including a professional panel discussion and a public lecture. This data contributes to understanding the questions:

- Who are the designers engaged in interpretation design?
- What are their experiences in this particular form of design practice?

In September 1999, I convened a panel discussion at the Interpretation Australia National Conference, *The Human Factor*, in Hobart, on the designer's role in interpretation. This session titled 'Graphic designers as interpreters', was initiated by local designers who frequently found themselves taking on the double role of project managers and designers on interpretation projects. The purpose for the discussion was to address a perceived lack of understanding of designer's roles in interpretation teams, and the limited opportunities for designers to share their experiences. The rationale for the workshop was summarised by the initiator of the workshop Julie Hawkins, who wrote:

After attending last year's interpretation conference in Sydney, I felt that it was important to point out the role that graphic designers can play – many interpreters don't have experience in dealing with designers, and there was tremendous interest in the few segments at the 98 conference dealing with graphic design...Should graphic designers be included as an integral part of the interpretation team, or should they simply be employed to add a bit of gloss at the end of the project?... Some of the graphic designers who worked on these projects will then form a panel to discuss issues raised by the overview, and answer questions from the audience. We expect that questions will range from the philosophical – at what point should the graphic designer be involved in the process? – to the practical – where did you source that particular effect? The session will be of interest to a wide audience: interpreters who work with graphic designers, students from both graphic design and interpretation courses, and last but not least, other graphic designers. We are interested in examining the contribution of the graphic designer in interpretation projects, and a sampling of projects around Tasmania offers a varying perspective (J. Hawkins personal communication 1999).

The panel discussion brought together six designers and an audience of delegates from the conference. The panel members were:

- Dean de Vries: designer, Roar Three
- Julie Hawkins: designer, e.g. Design
- Lynda Warner : designer, Lynda Warner Design
- Gordon Harrison-Williams: designer, Workhorse Design Group
- Stephen Goddard: designer
- Margaret Woodward: designer, convenor

Each panel member was given a particular theme to address and discussion and questions followed. Themes covered included:

- Educating clients (Gordon Harrison-Williams)
- Timing (Stephen Goddard)
- Team Collaboration (Lynda Warner)
- Buildings and fabrication (Dean de Vries)
- Philosophical issues (Julie Hawkins)

To set the context of the projects, I gave a presentation of key interpretation projects which panel members had worked on in Tasmania including; the Cradle Mountain Visitor Centre, the Lake St Clair Visitor Centre, the Wild Way Tourist Trail, the Strahan Visitor Centre, the Tasmanian Agricultural Trail, the Cascades Female Factory, the Waterworks Interpretation Centre and the Port Arthur Interpretation Centre. Notes from the designer's presentations were archived as text files and have been used as primary material this research. The second source of data from public discourse was a public lecture by interpretation designer David Lancashire as part of an Art Forum program run by the Tasmanian School of Art, University of Tasmania, on April 27, 2007. The lecture was recorded as an audio visual file.

2.3.4 Designer's survey

Interviewing interpretation designers contributed data to understanding the following questions:

- What is the designer's role in the interpretation design process?
- What are their experiences in this particular form of design practice?

In 2004 – 2007, seven designers working on interpretation projects were either interviewed or surveyed about their involvement with interpretation design in order to understand their practice and identify issues, patterns and to generate questions for further investigation. Designers were selected because they had worked on interpretation projects including visitor centres, botanic gardens and interpretive trails. A request to the membership of Interpretation Australia was made for designers to respond to the survey, however most of the respondents were approached personally.

The questions asked both in interview and in surveys were:

1. List interpretation projects you have worked on (including dates).
2. Given the complexity and scale of interpretation projects, does the role of the designer differ in these projects than on more traditional projects?
3. How have you experienced the process of working with a range of other professionals on interpretation project teams? Feel free to comment on both positive and problematic aspects.
4. What are the most challenging aspects of working on interpretation projects?
5. What would you consider to be the most valuable skill/approach that designers can contribute to interpretation projects?
6. What skills or disciplines areas outside of the designer's traditional repertoire would you consider as being useful for working on interpretation projects?
7. From a design management perspective, what factors could enhance the design process of interpretation projects?

8. Do you have a personal/ideological commitment to working on projects concerned with the management of or preservation of the natural and cultural heritage?

The material gathered during the designer's surveys is presented and discussed in Chapter 11, from which patterns, problems and themes were identified.

2.3.5 Artefact documentation and analysis

Over time, communication about the natural environment has been distributed across many artefacts, sites and texts. From the 1980s onwards, complex multi-media visitor centres have been key site for communication about natural heritage, previously carried by print-based media including posters, advertisements, guidebooks, postcards and travel brochures. In order to develop a visible framework for, and to understand the visual, tangible and physical dimensions of interpretation design, studying documentation and analysis of designed artefacts was an integral and ongoing component of the research. To better understand contemporary interpretation, site visits were made and documented. From these visits a series of case studies were developed which present examples of practical, and theoretical issues in interpretation design. Selected archival texts, which pre-dated contemporary forms of interpretation design, were examined to better understand the predecessors of current interpretation design, and how these artefacts are linked to the formations of current ideas attitudes about nature and place.

2.3.6 Archival texts

Artefacts of interpretation design such as visitor centres, emerged with the development of nature-based tourism in the late 1980s. In order to understand the emergence of contemporary forms of interpretation design, and the ideas surrounding nature based tourism, a sample of designed artefacts that pre-dated visitor centres were analysed. Tourism marketing material can be considered as the pre-cursors to interpretation design. In order to understand contemporary interpretation design, consulting earlier forms of tourist material could reveal how communication design interface has developed or changed in response to shifts in attitudes, design aesthetics and tourism practices. Archival research of government tourism marketing material was conducted through examining commercially designed tourism publications the State Library of Tasmania during a State Library Research Fellowship in May 2006. The Tasmaniana Library — part of the State Library of Tasmania, holds the state's collection of historical and contemporary published material relating to Tasmania. It includes books and pamphlets, maps, printed ephemera, audio-visual and digital publications ranging across all subjects and many formats – history, biography, literature, description, travel, science and technology, the arts, politics, post cards, videos, sound recordings and digital materials. Within this collection, I examined ephemeral tourist literature to identify how 'portable (and competing) mythologies' (Morris 1988, 169–170) of tourism are constructed and communicated through designed artefacts of the Tasmania's tourism industry. Using concepts from tourism studies (Urry 1995, Dann 1996 and MacCannell 1999), I examined tourist material from 1900 to the present, to identify how messages, 'tourism

myths' and metaphors were communicated in government tourism publications. Original material accessed in the Tasmaniana collection was photographed, photocopied and annotated. Artefacts from this part of the research are presented in Chapter 9 – Tourism ephemera, and help shape the historic context for interpretation design.

2.3.7 Sites

Examples of heritage sites of cultural and natural significance in Australia were examined for this research during the period 1998 – 2006. Although many of these sites were already situated in or near national parks, reserves and tourist attractions, the time frame of visitor centre development and interpretation design was in the 1990s and 2000s. Visits to interpretation sites over the duration of the research were documented in order to survey and identify contemporary interpretation design, practice and issues. Site visits were also made to projects referred to by designers in the interviews in order to understand the context of their comments through the projects they had worked on. Opportunities to hear designers talk about their projects in situ were sought through public discourse and Interpretation Australia events. These site talks and events became a forum for discussing themes, issues and problems in interpretation and design with reference to the sites. Documentation and analysis from site visits is presented in Chapter 10. Documentation of sites and best practice also provided the basis for developing the Interpretation Design Pattern Language tool presented in Chapter 13. Examples gathered in the site visits are used to illustrate the pattern language.

2.4 Summary – Theoretical perspectives and research methods

This chapter has outlined the program and process of the research; how it has been developed and the methods used. The absence of interpretation design in either interpretation or design discourse motivated the following questions:

- What is interpretation design?
- How can interpretation design shape ideas about natural and cultural heritage?
- What is the role of the designer in the process of interpretation design?

Two methodological approaches have been used and adapted in the research. A Grounded Theory approach has guided the process of the research, in the stages of gathering data and building a conceptual framework. A Pattern Language approach guided the interpretation of the data, and the synthesis and integration of new knowledge into the development of a practical conceptual tool for interpretation design. The next chapter will present a literature review of the two fields that the research is grounded in interpretation and design.

Chapter 3 – Literature Review – interpretation and design

3.0 Literature review interpretation

Interpretation design is an emerging form of practice – a hybrid of the fields of interpretation and design. In this chapter, I will review the literature relevant for this research from the two separate fields, interpretation and design. Rather than give a comprehensive account of the large body of literature in both, and given that this research is grounded in two large fields encompassing the professional practice and theory of design and interpretation, I have reviewed selected literature in each field. Through the literature review, I will introduce key terms and contributors in each discipline and a review of contemporary literature will set the historic and professional context for the emergence of interpretation design. Issues in each field will be summarised and critiqued. Current gaps in the literature will be identified and defined.

Currently there is limited academic literature specifically on the field I am defining as ‘interpretation design’, however there exists a considerable body of related literature outlining specific issues, case studies, and research, but without referring to the practice of ‘interpretation design’ as such. This wider source of related literature has provided the foundation for a significant component of this research, and the development of a conceptual framework for interpretation design. This related literature is also integrated throughout the thesis in the discussion of the professional context for interpretation design and the thematic conceptual framework that emerges through Chapters 3 – 5. Underpinning this research is an interdisciplinary selection of literature, which was consulted in a number of stages. As outlined in Figure 2 in Chapter 2, several groupings of literature were reviewed including:

- (a) literature on design
- (b) literature on interpretation
- (c) literature on other related fields
- (d) literature on collaboration

Through the literature review of interpretation and design the main issues, ideas and gaps in knowledge in the literature will be introduced. The professional and historical contexts of these fields will be further examined through the literature presented in the thematic framework in Chapters 3-5.

3.0.1 Origins of interpretation literature

American writer Freeman Tilden (1883 – 1980) formalised and named the practice of interpretation in the 1950s, and his seminal text *Interpreting our Heritage* originally published in 1957 (Tilden 1977), was widely disseminated amongst American National Parks staff and guides and is now a classic text on interpretation. Tilden based the text on his experience as a guide, creative thinker and playwright, as the book was based on his observations as a tour leader and supported by a grant from the American National Parks service to enhance its education programs. *Interpreting Our Heritage* has had a pervasive

influence and still informs the contemporary professional practice of interpretation in Australia and worldwide. There had been a plethora of interpretive activities predating Tilden with the development of public museums, and cultural tourism in the 19th century in the form of guided tours, lectures, artworks, guidebooks, signs and re-enactments (Fennessy 2007, Urry 2002). Tilden however, is regarded as the founder of contemporary interpretation practice. His principles of interpretation are frequently referred to in the literature and underpin contemporary definitions of interpretation used by heritage and interpretation organisations (Association for Heritage Interpretation 2004, Interpretation Australia Association 1997, Interpretation Canada 2006, Scottish Interpretation Network 2003). Originating from a non-professional but none the less, deeply conservationist perspective, Tilden's principles emphasised the need to provoke an emotional response and make personal connections with audiences (Tilden 1977, 8).

The interpretation of Australian natural and cultural heritage developed in parallel with management practices in America and New Zealand of National parks, reserves and 'wilderness' areas. Literature from New Zealand (Stewart et al 1998) and America provide insights into the evolution of the professional practice of heritage interpretation. Australian and American literature shares a common focus on natural heritage and in particular the relationship between ecotourism and tourism and natural heritage tourism (Ham 2002, Knudson 1995, 2003, Beck and Cable 2002). The significant reference *Heritage Interpretation*, comprising two volumes (Uzzell 1989a, 1989b) encompasses a broad selection of contributions on theoretical issues, historical overviews and practices for natural and cultural heritage management in urban and built environments from a range of authors from the U.K., U.S.A. and Australia. While historical perspectives are important in understanding the evolution and historical context of current interpretation practice (Weiler, 2005, Uzzell 1989a, Knudson et al 1995), literature that refers to practical and theoretical issues and debates in current interpretation, is crucial to the development of innovative interpretation practice and to further extend and stimulate innovative interpretation design.

3.0.2 Practice-based literature

Much of the discourse in the interpretation profession is closely aligned with practice-based activities initiated by professional bodies, conferences and workshops where knowledge is practice-led. Practical guidelines for interpretation management from an operational perspective provide an insight into the professional practice of interpretation (Moscardo 1999, Ballantyne et al 2000 and 2008, Parks Victoria 2003). There is also a large body of practice-based knowledge available through professional bodies, conference proceedings and publications for professional interpreters covering planning, strategy, leadership, case studies, history and theory of interpretation (Scottish Interpretation Network, Interpretation Australia Association, National Interpreters Association, Interpretation Canada, Interpretation Network New Zealand).

Ballantyne and Uzzell (1999) report that contemporary interpretation has seen a shift away from a technical perspective towards a more social emphasis. They argue that interpreters are now concerned both with the content of their message as well as their impact on visitor behaviour and society. Although such a shift indicates a move away from a tacit knowledge base to a more academic knowledge base, the literature reveals that while interpretation has a readily available body of practice-based literature, it does not draw on a well developed body of knowledge derived from research.

3.0.3 Research-based literature

Meecham argues that interpretation as a ‘field is traditionally bedevilled by a lack of academic rigour and theory’ (Meecham 2007, 116). There is a considerable body of research relating to interpretation, but generated from the integration of several other discipline perspectives. Ballantyne and Uzzell (1999) note that despite the pervasiveness of Tilden’s principles of interpretation through to the 1980s, contemporary interpretation practice is now informed by a much broader multi-disciplinary theoretical base; with input from research in education, psychology, sociology, cultural studies and tourism. A lack of emphasis on research in interpretation has led those interested in developing theory and research towards integrating theory and knowledge from other disciplines. Ballantyne and Uzzell (1999, 62) cite influences of theory and research on interpretation, including; place and place identity, the role of social interaction in learning, gender issues, visitor motivation, social theory, learning theory, constructivism, communication and visitor behaviour. Moscardo (1988, 1996, 1999) and Pearce (1991a) have brought research and theory from cognitive psychology to interpretation. Scholars from other disciplines including geography and environmental studies (Fallon and Kriwoken 2003), also contribute to interpretation research, and there is a wide body of quantitative research from the fields of tourism and leisure studies that contributes in particular to placed-based interpretation (Ringer 1996, Stewart et al 1998, Woods and Moscardo 1996). Literature relating to academic research from within tourism, but with bearing on interpretation practice is largely concentrated in the two international Journals, *Annals of Tourism Research* and *Tourism Management*. *Annals of Tourism Research* comes from a multidisciplinary, social sciences perspective and is dedicated to developing theoretical constructs. *Tourism Management*, also interdisciplinary focuses on the planning policy and management aspects of tourism and travel.

3.0.4 Australian Literature

Australian interpretation research started in the 1970s and early 80s, when the Churchill Trust provided travelling fellowships for national parks staff to visit the United States to look at approaches to interpretation (Beckman 1989). Discussions of contemporary issues and practice and issues in Australian interpretation are found in research journals and as reports and conference papers (Wearing 2007, Ballantyne and Uzzell 1999, Beckman 1989, 1999, Weiler 2002, 2005, and Ham and Weiler 2002). A comprehensive literature review of Australian interpretation is found in the National Parks management

publication, *Best Practice in Park interpretation and Education* (DNRE, 1999). In Weiler's article *Interpretation Research in Australia*, she notes that despite the significant body of knowledge generated from the profession, in 2005 there were fewer than 100 publications in refereed journals focusing on interpretation in Australia (Weiler 2005, 39). Likewise Wearing recognises a deficiency in interpretation scholarship in Australia (Wearing et al 2007). There is no Australian journal dedicated to interpretation research, however there are articles on Australian interpretation published in refereed journals relating to interpretation (*Journal of Tourism, Journal of Interpretation Research and Annals of Leisure Research*). Ballantyne and Uzzell (1999, 61) recommend that Australian interpretation professionals look to research and practice in other disciplines to remain at the forefront of international 'best practice'.

3.1 Issues in interpretation

Literature on museum practice illuminates the complex challenges for interpretation practice more broadly, and the treatment of issues and tensions arising from post colonialism, settler contact, environmental impact and reconciliation. Healy and Whitcomb (2003) in *South Pacific Museums: experiments in culture* give an excellent overview of these issues in the South Pacific region where significant, new or expanded museums have been on the increase from 1990s onwards. Museum and interpretation practice are critically analysed and illustrated using examples from a wave of new museums emerging during the period 1990 – 2003. The editors introduce the volume, by summarising the scope of the examples presented;

The museums under analysis are part of the complex field of heritage, where national economies meet global tourism, where cities brand themselves, where indigeneity articulates with colonialism, where exhibitionary technologies and pedagogies meet entertainment, where histories are fought over, where local identities intersect with academics and popular knowledge, where objects and provenance are displayed and contested, where remembering and forgetting dance their endless dance (Healy and Whitcomb 2003, 01.1).

This sets the scene for the complex web of issues, technologies and interdisciplinary intelligence that comprise contemporary museum and interpretive practice, and illustrates the milieu that designers have now entered in interpretation design.

In 1999, The *Journal of Interpretation Research (JIR)* published by the American professional organisation The National Interpreters Association (NAI), produced a special edition on Australian interpretation. This edition positions Australian interpretive practice in a regional and international context and highlights significant issues and debates in the field. An article by Ballantyne and Uzzell (1999) predicts future directions for Australian interpretive research and practice. They identify five international trends in 1999:

- (1) a growing concern for theory in interpretation
- (2) the rise of ecotourism and consequent changes in the interpretation of environmental issues
- (3) reactions to globalisation and the tension between homogeneity and uniqueness
- (4) the need to interpret emotive issues and contested heritage
- (5) adopting a grassroots approach to interpretive planning (Ballantyne and Uzzell 1999).

These themes are also significant for this research. The lack of theory has already been identified as an issue for both design and interpretation. This research aims to develop a conceptual framework and generate some broad explanatory patterns for interpretation design. By integrating knowledge from other disciplines into a practical tool, the interpretation pattern language, the aim is to widen the theoretical and practical base of interpretation design. Constructing places as tourist destinations and natural heritage relies on constructions of uniqueness rather than homogeneity. Designers, while involved in designing communication that emphasises the differences between places, are also involved with the commodification and homogenisation of the tourist products and heritage to appeal to a global market. Volger (2007) argues that while heritage displays can be manipulated to be instantly recognisable by a global audience, and thus support an already accepted image of heritage, there is also a powerful opportunity to value the local. She writes

Places that are constructed as destinations have to compete with other places – ‘indeed almost everywhere’ – attempting to attract the same tourist dollar/euro/yen. It may therefore seem like a plausible strategy to design products to catch the eye by emphasizing and even exaggerating their difference from other competing destinations. Emphasising cultural or geographical difference to that end provides a powerful opportunity to localize in an increasingly homogenous global community (Volger 2007, 105).

The challenge for designers communicating about place, destinations and natural heritage lies in negotiating the tensions created by these two oppositions, uniqueness and homogeneity.

With the rise of ecotourism there is an expectation of communication in and about natural and environmentally sensitive habitats. The interpretation of controversial topics and events, also referred to as ‘hot’ interpretation attempts to communicate complex and contested issues about heritage, land use and conservation audiences that expect more educative and ‘truthful’ interpretation of difficult events and stories. Literature related to issues of ecotourism and hot interpretation will be presented here in more detail.

3.1.1 The rise of ecotourism environmental issues

Ecotourism is the experience of combining concern for the environment with tourism. The contemporary tourist is described as being ‘more educated, more destination oriented, more flexible, more independent and more green’ (Poon 1993, 13). Interpretation is now regarded as a central tool in fulfilling ecotourist’s expectations that visits to national parks and natural areas will provide personal enrichment through relaxation, renewal and education. Moscardo (1999, 18) connects good interpretation and communication with sustainable tourism, thereby protecting both the environment and the quality of life of the host community. Kim (2008) however, reports that there are mixed findings over the effectiveness of interpretation, and recommends the more specific questions of ‘how’ and ‘when’ interpretation is effective, giving insights into visitor behaviour, and settings ‘rather than simply asking ‘whether’ interpretation influences visitor’s environmental attitude and behaviour’ (Kim, 2008, 4).

As tourism to natural places increases, debates appear in the literature as to whether tourism can be sustainable, or whether it is contributing to the depletion of already sensitive environments (Ryan, Hughes and Chirgwin 2000, Preece and Oosterzee 2004). Ecotourism, 'nature-based' tourism and 'green-tourism' have emerged in response to minimising the negative impact of tourism. Blamey identifies the attributes of ecotourism as tourism which is nature-based, educative and sustainable (Blamey 1977). The International Union for the Conservation of Nature (IUCN, World Conservation Union) calls for tourism to promote experiences that go beyond passive sightseeing to a more active role that promotes positive environmental ethics and empathy for natural places. Stewart et al (1998), Moscardo (1999), Preece et al (1996) and Weiler (2002) contend that successful interpretation is pivotal in promoting positive social and environmental benefits including an increase in the appreciation, protection, conservation and sustainability of natural environments. Ballantyne and Uzzell (1999) position Australia at the forefront of ecotourism and the interpretation of environmental issues, and signal that Australian interpreters have the opportunity to contribute to theory and practice of environmental interpretation internationally. Similarly, Ham regards alignment of interpretation to tourism in Australian practice as a strength (Weiler 2005, 39). Ryan et al (2000) claim that that ecotourism is yet another form of tourist consumption of nature enacted through what Urry calls the tourist gaze (Urry 1995, 2002). They argue that the ecotourism experience lies with the intensity of interaction with the site and are critical of design artefacts that can detract from the intensity of the experience (Ryan 2000, 159–160).

Ringer (1996) warns of the social fall out ecotourism can have as previously 'undiscovered' communities are transformed into tourist destinations provides case studies of two Alaskan 'ghost' towns. Similarly Fallon and Kriwoken's (2003) research on the small town of Strahan on Tasmania's west coast concludes that consultation with stakeholders and local communities in designing interpretative centres is crucial in contributing to the sustainability of the cultural and social capital of the host communities as they are developed as tourist destinations. The rise of ecotourism therefore poses unprecedented challenges for interpreters and designers who are reaching more critical and more aware audiences.

3.1.2 Emotive issues and contested heritage

Ballantyne and Uzzell (1999) use the construct of 'hot' interpretation to describe the emotional dimension of interpretation particularly in relation to difficult, conflicted and contested issues. They argue that 'hot' interpretation 'appreciates the need for and injects an affective component into its subject matter' (1999, 154) and through confronting emotional and contentious issues can contribute to reconciliation and community development. Trotter (1999) adds that 'hot' interpretation can also be used to foster social capital.

A strong theme within contemporary tourism and interpretation confronts uncomfortable issues such as tourism associated with death; ‘thanotourism’ (Dann 2001) and ‘dark tourism’ (Kazalarska 2003); atrocity (Mason et al 2003) and dissonant heritage (Ashworth 1996). The interpretation of issues such as heritage ownership, environmental impacts and historical events are complex and open to contestation. In 1999, Ballantyne and Uzzell (1999) observe there has been a reluctance to interpret Australian indigenous cultural heritage, urging interpreters to confront the difficult post-contact issues, histories and places surrounding the stolen generation, massacre sites and mission sites. Since then several major ‘national’ museums have opened including the National Museum of Australia 2001, Melbourne Museum 2001 (Bunjalaka), following on from Te Papa in New Zealand in 1998. A wave of new museums and visitor centres have ushered in new approaches to interpreting indigenous history and culture, which acknowledged that murder and even massacre also played roles in the settler’s struggle for land (Young 2006, 5.2). These museums have devised deliberate strategies to include the complex of multiple voices, perspectives and viewpoints, although not without criticism of delivering a ‘black armband’ version of history, in the case of the National Museum of Australia under the directorship of Dawn Casey, an indigenous Australian between 1999–2003 (Casey 2003, Young 2006). Indigenous Tasmanian Greg Lehman stresses the importance of consultation with indigenous people and communities to ensure a wide range indigenous experiences are told, to counter the difficulty in representing the whole community (Fallon and Kriwoken 2003, 303). Dawn Casey signals that future interpretation can no longer rely on the reassuring single voice;

There is no going back to the grand, simple narrative of national progress, however much some of our critics may long for it. The national story is complex and emerges not from a neat time line, nor from a list of facts, but from the interplay of many stories and points of view. These can range from the profoundly tragic, through the ironic or quirky, to the absurd or the joyful. They are the sum of us (Casey 2003, 5).

3.2 Literature on interpretation design

Having singled out some of the potential ‘big issues’ for interpretation in an Australian context; the rise of ecotourism, interpreting contested sites and heritage, and the construction of natural places as unique, the next section examines how these impact on interpretation design. The references to interpretation design in the literature are scarce. Wearing (2007, 16,) and Moscardo (1996) point to the need for further research into interpretation design. Trotter (1999) and Stewart et al (1998) acknowledge that designers and planners have a role in welcoming visitors. Pearce (1991b, 2004) argues that excellent design is part of developing distinctive experiences that connect visitors with their surrounding environment. Issues for designers to be mindful of are highlighted by Fallon and Kriwoken (2003), who discuss design and designers in relation to other project and community stakeholders. From their study of community involvement in the Strahan Visitor Centre on Tasmania’s West Coast, they recommend that designers and planners ensure they foster community ownership, credibility and referral among the host community. ‘Authenticity’, ‘truth’ and the political dimensions of both these concepts are

raised, and alert designers to consider whose truth is being represented (Fallon and Kriwoken 2003). Although Fallon and Kriwoken (2003, 291) review design elements and considerations to enhance the role and function of visitor centres, their study does not focus on design from a designer's perspective.

Ballantyne and Uzzell identify a differentiation of roles in the field of interpretation. Whereas previously the interpreters were also responsible for design, designers are now included and involved in interpretation. They observe that interpreters are now less concerned with acquiring 'the technical knowledge and experience to design exhibits that communicate information and entertain visitors' than previously (Ballantyne and Uzzell 1999, 61). This signals the presence of interpretation design – where previously the designed aspects of an interpretation project were integrated into the role of interpreters, now the design of the interpretation interface has become differentiated as a much expanded and specialist form of design-practice undertaken by professional designers working in collaboration with interpreters and other professionals. Websites with tips and pointers towards designing effective interpretation such as *Interpretive Signage: Principles and Practice* (Ballantyne et al 2008) cater for interpreters and non-designers, staff of tourist sites who want to design brochures and signs. These resources describe only the designed outcomes of design practice, not the forces causing and shaping it. Nor is adequate coverage given to the potential that design has to move beyond the technical to the conceptual and as a force for social change.

Absent from interpretation discourse is a discussion of communication design, which goes beyond exhibition and display design. The *Journal of Interpretation Research* has some design related articles from an evaluation perspective (Moscardo 1999, Beckman 1999), art and interpretation (La Page 2001) and label design (Bitgood 2000). However discussion is often limited to tips, guidelines and techniques on design for traditional communication formats such as signs and brochures, aimed at providing non-designers with the knowledge and skills to develop, evaluate and improve their interpretive facilities (Carter 2001, Ballantyne, Hughes and Moscardo n.d., Falk and Dierking 2000, Serrell 1996, 1999, Knudson 1995, 2003). Also absent, is a discussion of how contemporary design has the potential to bring a rich, integrative, conceptually deep and fully researched process to interpretation, and conversely how interpretation could benefit and influence the field of design. To interpret the layers of meaning overlaid on any place is a complex and challenging task (Markwell et al 2004). The complexity of issues, and viewpoints expressed through a myriad of available technologies to create audience interfaces, sets up unprecedented potential for designers and interpreters to communicate meaningfully and memorably.

3.3 Literature review Design

The second part of this chapter reviews literature from the field of design, the second of the two 'parent' disciplines of this research. The status of design research has already

been summarised in Chapter 2, as a field with a relatively recent but growing strand of academic research that is moving towards creating generalised theoretical knowledge out a field primarily informed by practitioner know how or tacit knowledge. The work of key design writers and researchers will be examined and large-scale shifts in current terminology and practice will be traced. In the absence of an established body of research in interpretation design, key design issues will be linked the field of interpretation design in an as an emerging hybrid form of design. Current gaps in the literature will be identified and defined.

3.3.1 Design – definitions and keywords

The word design, originating from Latin in the mid-16th century and literally meaning drawing, has grown to become a ‘discipline’ in the latter decades of the 20th century with a range of objects, discourses, practices and information that define it as field of knowledge (Lupton 1996). Herbert Simon, leader in the fields of computer science, organisational development and artificial intelligence, in a seminal lecture in 1968, proposed a now frequently referred to definition of design. Here he placed the emphasis on the act of design rather than the end product, writing:

Everyone designs who devises courses of action aimed at changing existing situations into preferred ones (Simon 1982, 129).

Simon’s definition was key in expanding the conception of design to include strategies, ideas and processes along with artefacts, products and objects. Friedman brings Simon’s definition into a contemporary context describing the process of design as being not only the development of design solutions, but as including thinking, research and planning as well as physical production, assembly, packaging and presentation (Friedman 2001, 21). Friedman updates Simon’s definition writing:

A designer is a thinker whose job it is to move from thought to action. The designer uses his mind in an appropriate and empathic way to solve problems for clients. Then, the designer works to meet customer needs, to test outcomes and to follow through on solutions (Friedman 2003b, 511).

This expanded definition of design signals a new meaning for design in the 21st Century as a complex interdisciplinary, integrative discipline whose activities and effects are ubiquitous. Julier contends that ‘few practices of intellectual and commercial human activity reach into so many areas of everyday private and public life’ (Julier 2000, 1). Buchanan describes design as a ‘surprisingly flexible activity’ that defies a single simple definition that ‘adequately covers the diversity of activities and methods gathered together under the same label (Buchanan 1995, 3). Buchanan suggests that design is expanding its meaning and practice, revealing some unexpected connections and directions, as the practice of design shifts from a trade activity to what he describes in American terminology as a ‘new liberal art of technological culture’ (Buchanan 1992, 5). Friedman argues that design now occupies many different domains and has produced an inventory of approximately 800 fields and sub-fields, disciplines and sub-disciplines of design and design research (Friedman 2001, 40, 2008).

In a contemporary context, the ‘discipline’ of design encompasses the professional practice of design, its products and services, and the discussion and debate that forms and informs it. Design educator and theorist Richard Buchanan, describes the discipline of design as being in its early formative stages and in many respects, incomplete (Buchanan 1995). Lupton and Abbot-Miller describe design at the end of the 20th Century as a ‘nebulous cultural identity’ and question how an ‘inconsistent series of objects, people and practices be grouped under the one name?’ (Lupton 1996, 66). Their description of design concludes that it is shaped by historical and technological forces, and dispersed across a network of technologies, institutions and services (Lupton 1996). By the end of the 20th Century the description of design has expanded, diversified and become nebulous and fragmented.

Among designers, design educators and researchers, the definition of the word ‘design’ is one that is much debated, having accumulated many different meanings which have evolved over time and shift according to the context in which the word is used (Julier 2000, 30). The usage of ‘design’ is constantly in a state of flux, in some instances used as a noun to describe a pattern or artefact, in other circumstances referring to a process, aligned with problem solving, production, strategising and planning. This ambiguousness is problematic when consumers, designers, academic and other professionals understand and use the term differently and when it has been subject to re-invention and revision over time. The evolution of design is complex and nuanced underpinned by technological developments, historic factors and shifts in creativity, workplace practice and now research and academia. The aim of this research is to delineate interpretation design as a recent field of design. In the process, an in-depth examination of the surrounding conceptual, professional and historic context will give clarity and definition to yet another hybrid and emerging conception of the term design. While the field of interpretation design will be built throughout this thesis, the literature review here will focus on selected issues in design that are key to interpretation design.

3.3.2 Shifts in design

Early to mid 20th Century graphic design focused on the media and the end product (Benjamin 1936, McLuhan 1967). Taken as a whole, the design profession in the latter part of the 20th Century has been transformed, redefining itself from a position of ‘occupying a well-defined, limited role in a production sequence, to a more comprehensive, richer and more challenging professional engagement’ (Friedman 2000, 15). Since the introduction of computers into the design industry from the mid 1980s onwards, communication designers have become participants in what Drucker calls the ‘knowledge industry’, with its requirements for research, strategy, project management and marketing, and increasingly enabled by communication connectivity and globalization (Drucker 1993). The contemporary design profession is typical of what Richard Florida calls the ‘creative class’ (Florida 2003). Florida argues that a ‘creative

economy', where human capital consisting of innovative ideas, is the successor to the industrial economy (Coy 2000).

An increase in the complexity of design projects has been accompanied by a rise in cross-disciplinary teams working together both within and outside the design professions. Julier (2000) identifies that design has expanded from a multi-disciplinary to an interdisciplinary design practice. He argues that design has always been *multi-disciplinary*; where designers traditionally dealt with an eclectic range of specialists within the industry. Now, he argues, design is *interdisciplinary* and *cross-disciplinary* operating in a more expanded arena, moving across disciplines, both within design and beyond. He writes:

This precarious, creative activity has in recent years undergone perhaps its most fundamental revolution yet. It has shifted from being a problem-solving activity to a problem-processing one and thus from a multi-disciplinary to interdisciplinary activity (Julier 2000, 2).

Hybrid areas of design are developing alongside the rapid uptake of new technologies van Dijk (2007), VanPatter (in Bogaards 2005, 2), forecasts the significance of cross-disciplinarity for design and signals continued evolution and revolutionizing of patterns of work and conceptions of design practice, its boundaries and limitations. The increasing adoption of the cross-disciplinary way of working in organisations that may or may not be design companies has had and continues to have a gigantic impact on design. In this emerging space much of the old logic from the vertical disciplines no longer applies as it once did. Where previously there were clear and discrete boundaries between the activities of design, we now see new descriptions of niche design activity such as service design, experience design, multi-media design, information design, retail design and the focus of this thesis, interpretation design. These changes have deep implications for the ways in which designers work. Friedman observes that:

Most of today's design challenges require analytic and synthetic planning skills that cannot be developed through the contemporary design professions alone. This is why design requires research, and why designers will increasingly work in multi-disciplinary teams (Friedman 2003a, 9).

In light of these changes, designers are now compelled to look outward for new approaches, skills and attitudes to redefine their professional practice. The implications of these shifts on the design profession will be expanded and treated in more detail in Chapter 4 – The professional context – design.

3.4 Design discourse

Issues significant for design can be identified in the conversations, debates, writing and discussion about design; in professional practice and academic contexts. Despite observations that designers have contributed little to their own definition and understanding of design (Margolin 1989, Frascara 1995, Press 1995, Buchanan 1995, Lupton 1996), the field is emerging as an academic discipline with its own discourse and debate taking place through design studies, design education, and design research.

Graphic design, a sub-field of design lacks the historical self-awareness common to other humanist disciplines that have long traditions of debate over theory, style, and purpose (Lupton 1996, 201). Buchanan acknowledges the overlap between design and other disciplines arguing that design needs its own body of theory and research:

Discussions of design shift uneasily among art, aesthetics, engineering, human factors, management, and a variety of other disciplines, each of which is well established today and rests on a compelling body of theory and research for which there is no equivalent in design (Buchanan 1995, 78).

The last 10 years has seen design discourse expand along with conferences, graduate programs, academic publications design research projects, but compared to other more well established disciplines is still in its emergent stages. Enriched and informed by other disciplines, design is in turn influencing thought and practice outside its previously narrowly circumscribed sphere. Friedman describes design as an ‘integrative discipline, positioned at the intersection of several large fields or bodies of knowledge’ (Friedman 2000, 22). Julier observes that academics from other disciplines including cultural studies, sociology and geography are starting to step into design territory, while design academics are increasingly looking to the research methods and philosophies of the social sciences to expand the theoretical discourse on design (Julier 2000, 1). Theoretical positions and strategies of analysis influenced by social sciences and applied to design include; postmodernism, (Lupton 1994, Poynor 2003), rhetoric (Buchanan 1989, Kinross 1989), critical theory (Friedman 1997), semiotics (Lupton and Abbott Miller 1996), sociology (Robertson 2003, Poynor 2003) and feminism (Attfield and Kirkham 1989, Rothschild 1999).

From the existing expansive body of design literature, a number of pertinent issues and themes which overlap with concerns in interpretation, form the foundation for delineating the field of interpretation design. These are:

- (a) human-centred design and social dimensions of design
- (b) the emergence of hybrid areas of design
- (c) the significance of collaboration in design
- (d) ‘wicked’ problems in design
- (e) Australian graphic design

For the purpose of the discussion in this thesis, the descriptors graphic designer and communication designer are both used depending on the historical context of the discussion and according to how individual designers describe their practice. These shifts in naming will be contextualised later in Chapter 4 section 4.1.3.

3.4.1 Social dimensions of graphic and communication design

The integration of design with fields of knowledge, theory and methodologies from the social sciences, has foregrounded social dimensions and the development of a human-centred design perspective. Frascara (1995) maintains that graphic designers need to consider more than the aesthetic and material aspects of design. Instead he prioritises the social impact of design and its ability to act as an agent of change over the visual aspects of communication. Frascara conceptualises graphic design as an organising or pattern

constructing activity, responsible for structuring the visual communication in society, as follows:

Graphic design is the activity that organises visual communication in society. It is concerned with the efficiency of communication, the technology used for its implementation, and the social impact it effects, in other words, with social responsibility. The need for communicative efficiency is a response to the main reason for the existence of any piece of graphic design: *someone has something to communicate to someone else* (Frascara 1995, 46).

Moles uses the postmodernist construct of the ‘text’ to describe the world, and ascribes the designer with the role of interpreter in ‘a labyrinth that must be unravelled, a text that must be deciphered’ (Moles 1989, 129). Moles argues that it is the task of the designer, who works with symbols and signs, to provide a system of mediation to orient the individual, and interpret the world.

Graphic design has no ideology of its own, but it has results. It acts as a social amplifier of the messages, attempting to tell well what someone has to say: “go to such and such a place, do such and such, understand such and such a process, accept such and such a value” (Moles 1989, 122).

For Moles the graphic designer’s task has a social motivation; to increase the legibility of the world; to make the visible intelligible, and be able to negotiate a strategy for action. Both Frascara and Moles position the designer as the mediator, the interpreter between the audience and the world, where the message and the strategy for action is emphasised as well as end product or designed artefact. In human-centred approaches to design the audience is regarded as active participants in the interpretation and construction of meaning. Human-centred designers, prioritise the relationship with audiences, human communication and social responsibility as critical to the activity of design before ‘universal aesthetic paradigms or personal choices of the designer’ (Frascara 1997, 3). Human-centred approaches consider social impacts of design and acknowledge the potential for both negative and positive social consequences of communication (Frascara 1997, Moles 1989 and Tyler 1995).

3.4.2 Hybrid areas of design

As designers operate in much more complex and multi-layered professional environments, both specialist and broad knowledge are simultaneously required. New knowledge is adapted from other fields generated from both inside and outside of design, resulting in new hybrid branches of design (Friedman 2001, 40, Friedman 2008). ‘Service design’ is an example of a hybrid area of design developed around a system-focused activity, which is a combination of interaction design, product design, industrial engineering, consumer research and services marketing described by van Dijk as:

The reason for the emergence of a new label such as service design is that it expresses the fact that the most interesting and innovative concepts these days no longer exist as isolated products, devices or websites. They rather exist in a system, or network, of both tangible and intangible elements that together make up the service consumer’s use and experience (van Dijk 2007, 29).

Designing for the museum experience is an example of service design, where the museum visit is extended beyond the temporal frame of the actual visit. In addition to the

tangible exhibition, visitors may use personal mobile devices to access background information, or store a personal selection of the information online for later for reference (van Dijk 2007, 29). Interpretation design is typical of a hybrid design branch. It brings together several professional fields connected in a network of knowledge systems and focuses on the visitor's experience. Thackera (2007) forecasts that it is only through developing new hybrid areas of design that designers will be able to respond to urgent current and future problems;

What we have to do is transform material, energy and resource flows that, right now are killing us. To do that, we have to re-design the structures, institutions and processes that drive the economy along. A new kind of design practice is needed. In this new design practice, boundaries between infrastructure, content, equipment, software, products, services, space and place, are blurred. (Thackera 2007, 57).

3.4.3 Collaboration in design

As a by-product of cross-disciplinarity, the issue of collaboration has come to the forefront in design literature from the mid-1990s onwards, particularly in the literature on design management. Commentators in current design discourse flag collaboration as critical to new modes of future-focused design practice (Conklin, Badasur and VanPatter 2007, Thackera 2006, 2007). David Garcia (2007) points to the wider significance and reach of collaborative practice in contemporary society in the introduction to the recent book (*Un) Common Ground Creative Encounters across sectors and disciplines*. He writes:

The ubiquitous concept of the interdisciplinary is too narrow a term to capture the intensity and plurality of today's networks of collaboration. Collaborative practice not only extends its reach across all disciplines but across whole sectors and levels of society. There is a gathering recognition that we are witnessing the rise of an era of multi-dimensional collaboration which is not only leading to significant innovation and commercial advantage but also embodies, in and of itself, a powerful transformation in our ways of producing, consuming and relating to one another and to our world (Brickwood et al 2007).

Friedman describes a successful contemporary designer as 'a leader who organises teams when one range of talents is not enough' (Friedman 2008, 11), recognising that there is now a need for designers to work more collaboratively in order to harness multiple forms of expertise required by problems of increased complexity.

In general discourse, collaboration is linked with innovation, the 'creative industries' and is seen as essential in forming strategic partnerships between education, government and the private sector (Cox Review 2005, 12). In design literature, the connection between collaboration and innovation is also stressed, as Rothstein and Wolf note:

Designers have also abandoned the "lone genius" approach and embraced teams as a way to super-charge innovation. Product development – cross functional teamwork, in other words, collaboration, is critical to engage the "innovation opportunity" (Rothstein and Wolf 2005, 64).

While research into teamwork and collaboration is relatively new in design, the growing body of literature on collaboration over the past decade has come not from communication design, but from research in building design (Busseri and Palmer 2000,

MacMillan et al 2001), architecture (Coyne and Snodgrass 1993), engineering, product, industrial and software design. Business, management (Rothstein 2002), and education (Valkenburg and Dorst 1998), have also contributed to research on collaboration which is useful for communication design, especially when the research focuses, not on what teams produce, but how they work together collaboratively. A common theme in the literature is that teamwork is essentially a social skill, one that depends on successful communication, articulation of ideas, social interactions and relationships (Cross et al 1995, Sonnenwald 1996, Chiu 2002, Stempfle and Badke-Schaub 2002).

Much of the literature on collaboration in design, focuses on problematic aspects of collaboration. Diane Sonnenwald, Director at the Center for Collaborative Innovation at Göteborg University calls this difficulty ‘contested collaboration’, which she says can lead to conflict and has a negative impact on the quality of the design process and design outcomes (Sonnenwald 1996, 279). She writes:

Collaboration is an integral component of many research, work and educational settings where complex and dynamic goals, problems and tasks require expertise and other resources from different disciplines, organisations and countries. Yet collaboration can be challenging as individuals with different expectations, knowledge, language, resources, work practices, and personalities try to bridge their differences to effectively share information and achieve their goals (Sonnenwald 2006).

Stempfle and Badke-Schaub (2002) maintain that a change of emphasis is needed from focus on the traditional end-product design methodology to a practitioner-centred design methodology, which takes into account into how people work with complex problems and the constraints of real working environments. Busseri and Palmer (2000) working with building designers, found that self-assessing performance during design tasks, where the path of action can be adjusted and adapted, appeared to improve the way the teams functioned and raised team satisfaction. Austin et al (2001) looked at the conceptual activity of interdisciplinary teams and found that designers felt they performed better if they agreed on and followed a design process.

Some studies highlighted the amount of work yet to be done to strengthen interdisciplinary teamwork. MacMillan et al (2001) maintained that in building design where there is no model to follow for interdisciplinary teams, there should be a prescriptive and systematic procedure that can be adapted to suit the team and the project. Valkenburg and Dorst (1998) attribute a lack of understanding about how design teams work, to a lack of experience of teamwork in education and Rothstein (2002) suggests students be introduced to cross-disciplinary teamwork before their last year in college, despite the perception that working in teams stifles their creative spark. Despite many authors promoting collaboration and inter-disciplinarity along with an increase in complexity of projects and problems, few refer to the tensions and contradictions originating from the culture of design. Architects Coyne and Snodgrass (1993) argue that despite design being widely acknowledged as a team-based activity, this is contradicted by ideas that privilege design primarily as an individual pursuit:

So there is a tension between the idea of the team and the individual within design culture. However, it appears that individualism also pervades common perceptions of team design. Even where design is seen as a collaborative activity, it is one where *individuals* come together to share skills and insights. Working as a group is thought to produce benefits that derive from the pooling of the private skills and insights of individuals. According to this view the *private*, the world of the individual, comes first, and then the *public*, the world of the group is considered. Collaboration is then seen to involve compromise (Coyne and Snodgrass 1993, 164).

3.4.4 'Wicked' and second generation problems

It is evident in the literature that research on collaboration is a recent area of study, and a sense that this is part of wider set of transitions affecting design. Some studies acknowledge that the types of problems designers are undertaking in teams, are what Rittel and Weber (1973) described as 'wicked' – or second generation problems that are difficult to define and resolve without further levels of problems being revealed as soon as 'solutions' are reached. Rothstein and Wolf cite sustainability as an example of this new level of problem. They write:

Discipline specific or interdisciplinary teams may be adequate for many design and business problems but they simply do not provide enough expertise or variation in thinking to handle the economic, social and environmental dimensions of sustainable product development. That requires transdisciplinary teams in which boundaries between knowledge and perspectives are integrated (Rothstein and Wolf 2005, 66).

Problems that are more involved, and more intricate, instigate the need to bring together different 'expert' teams. The distinction between different levels of problems is linked to a shift from modern to postmodern thought (Conklin et al 2007). Conklin also argues that the postmodern features of approaches to wicked problems would include tools and skills for making conversations among diverse stakeholders more effective and successful. For Conklin, collaboration and communication are crucial elements in approaching wicked problems:

You don't so much "solve" a wicked problem as you help stakeholders negotiate shared understanding and shared meaning about the problem and its possible solutions. The objective of the work is coherent action, not final solution. Thus, Rittel and Weber's contribution was well ahead of its time, and is now finally helping us understand why communication and collaboration, more even than creativity, keep emerging as critical to success on large projects (Conklin et al 2007).

Conklin et al (2007, 19) identify new approaches to problem solving as contingent on good communication, believing that creativity will follow after the barriers to communication are removed and will thrive in a design context that provides opportunities for innovation and creativity during the problem definition phase, rather than in seeking solutions in a linear more predictive fashion.

3.4.5 Australian graphic design

Discourse about Australian graphic design is not highly visible nor consolidated in publications, with much of the discussion and debate happening within the profession in

forums and professional body activities. Poynor comments on the lack of information about Australian graphic design, writing:

...even more crucially, Australian graphic design has lacked a vigorous, well established design press to report on its activities, analyse developments, encourage debate and reflect its sense of identity, though there are signs that this could change (Poynor 2002, 20).

The single most comprehensive examination of the development of graphic design as a profession in Australia since European colonisation until the early 1980s, is Geoffery Caban's *A Fine Line* (1983). No single text tracks recent developments and departures in graphic design since Caban's publication in 1983 – leaving the discourse about graphic design in the past few decades to be constructed from a range of disparate sources.

Contemporary graphic design discourse is accessed in a number of ways; through public discourse, in literature and in collections held by museums and libraries. Public discourse includes conferences, talks, events, lectures and websites organised and sponsored by educational institutions, museums, professional bodies and design companies. Instances of public discourse which address graphic design include; annual AGIdeas conferences (Design Foundation), Melbourne Design Festival (National Design Centre), Sydney Design Week, Semi-Permanent, Futureground Conference 2004 (Design Research Society), Character Forums 2005 – 2007 (Stephen Banham RMIT) and annual conferences held by the Australian Graphic Design Association (AGDA). Both AGDA and the Design Institute of Australia (DIA) have websites accessible for professional members to a range of practice-based information and dialogue. The Powerhouse Museum in Sydney produces Design Hub, an extensive online design resource of Australian design content. Australian magazine *Desktop* presents a range of graphic design topics including education, technology, surveys of designers and their work and professional practice issues. Since 2005, AGDA has published a refereed journal *visual:design:scholarship* with scholarly contributions from design academics, researchers and practitioners. Publications with essays generated as catalogues to accompany exhibitions on Australian design that focus on national identity include those produced from institutions such as; The State Library of Victoria (Downer 2001), The National Library of Australia (Hetherington 2001), Australia Post's Postmaster Gallery (Whitehouse 2005), The National Gallery of Australia (Butler 1993) and The Powerhouse Museum.

Although some of the above publications and websites report on particular interpretation design projects (*Eye Magazine* 2002), so far no analysis or study of interpretation design as a specialised or hybrid form of design has been published. I have personally contributed to the academic and professional discourse on interpretation design by presenting conference papers on several aspects of interpretation design (Woodward 2000, 2003, 2005 and 2007b). Interpretation Australia Association (IAA) also has a selection of un-refereed conference papers and presentations available to members on related topics such as art (de Luca 2005), trail design (Enting 2005) and identity (Hoffmeister 2005), but only one directly on interpretation design (Brine 2001).

Literature and discourse about Australian graphic design is less visible in comparison to that of Europe and the United States.

3.5 Summary: literature review interpretation and design

This chapter provides an overview of the literature that has been published in the fields of interpretation and design. Despite interpretation design being practiced in some form or another for a number of decades, academic research that combines both interpretation and design is lacking. The profile of interpretation design as a potential shaper of discourse of design practice and natural and cultural heritage is even less well developed. As a result, knowledge of the field is built from the tacit knowledge of practitioners, through guidelines produced from heritage management, non-peer reviewed practice notes and conference presentations. As yet there is no integrative framework that brings the fields of interpretation and design together at either a theoretical or practical level (Ettema 1997, 197, Moscardo 1996). Importantly, this literature review has confirmed the limitations of relying on either literature from interpretation or design to provide an in-depth theoretical framework for interpretation design. To understand interpretation design as a new field of design, a much more detailed and deeper understanding of the field is needed. This shortfall in the literature is addressed in the next contextual chapters in Part Two which provide a theoretical framework for the field, examining its practical, professional and conceptual dimensions.

PART TWO

Part Two of the thesis investigates the professional, historical and theoretical context for the practice of interpretation design. The emerging field of interpretation design intersects and sits at the nexus of three overlapping professional fields; design, interpretation and tourism. This research aims to give visibility to interpretation design, trace its emergence in an Australian context and to develop a conceptual framework for it as a new field of design. By examining interdisciplinary practices and perspectives related to interpretation design, concepts are drawn from other disciplines to form a lens through which to view and make visible interpretation design. The following contextual chapters on design, interpretation and tourism will expand concepts and constructs already developed in these professional fields, and integrate them within interpretation design practice. The concepts identified in these chapters form the foundation for the conceptual framework developed throughout the thesis.

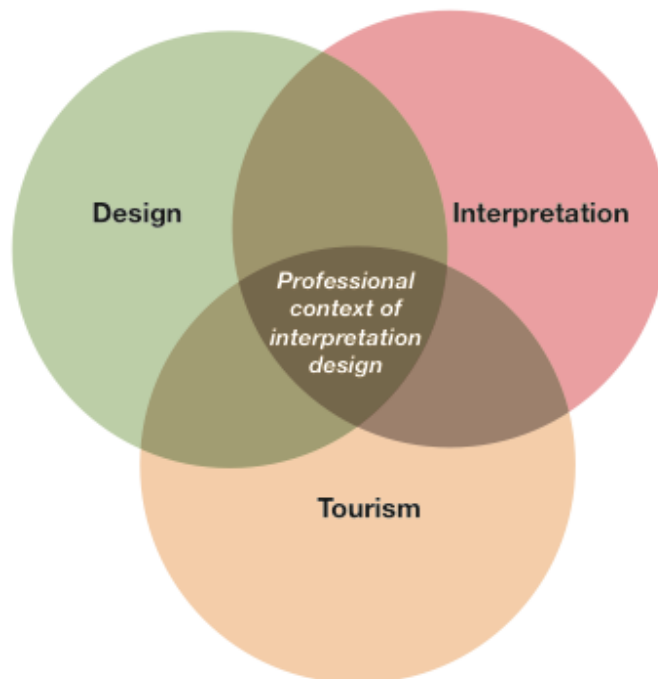


Figure 4: The professional context of interpretation design.

Chapter 4 – The professional context – design

4.0 Introduction

The foundations of the thematic framework come from synthesising an extensive body of cross-disciplinary literature from which to build concepts and give form to interpretation design. The first part of the conceptual framework for interpretation design will be developed in this chapter by discussing the following themes related to the professional context of design;

- Historical origins of graphic design, communication design and interpretation design
- Transformations in graphic design
- Postmodernism as an historical backdrop to interpretation design.

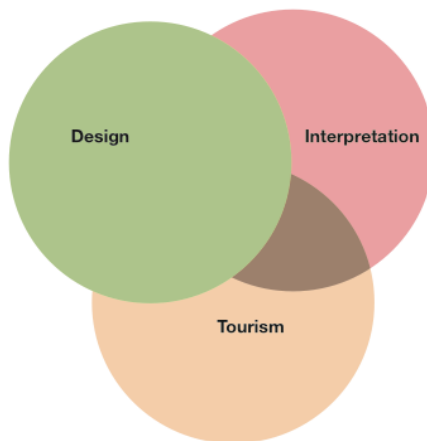


Figure 5: The professional context – design.

4.1 Defining the field of graphic design

Graphic designers use a visual language; its fundamental elements being words and images, to communicate information and messages on behalf of a client to an audience and give visual form to information. This practice is dedicated to constructing visual messages intended to affect an audience's knowledge, attitudes and behaviour. Using Simon's (1982, 129) conception of design as changing existing situations into preferred ones, the practice of graphic design produces designed artefacts as agents of change through communication. Designers disseminate information and knowledge; create brand positioning of products; advertise events and products, and provide information and education. As a result, changes occur in patterns and rates of consumption, productivity, awareness, education, attitude or behaviour. The designed artefacts in this research relate to the social and commercial activities of tourism, leisure and knowledge and are the outcomes of professionally engaged designers.

4.1.1 *Origins of graphic design*

Originating from the Latin word ‘disegno’ literally meaning drawing, the everyday meaning of the word ‘design’ has expanded to be used both as a verb and as several different nouns. The verb, whose first written citation in English appeared in 1548 refers to the act of designing, including the process of thought and planning. Later, design was used as a noun referring to the results of the design process, that is; the drawings, sketches, plans and models generated as part of the process, or the finished product itself. Design is also used to refer to an overall pattern. The term ‘design’ has had an adaptable and flexible evolution, its usage bifurcated into two streams, one relating to the process of designing, and the other relating to the artefacts or outcomes of the design process. Friedman (2000) argues that although the word design has become popular shorthand for designed artefacts, the use of design as a verb to describe the process of design, should take precedence over all other meanings, as it describes a rich and dynamic process.

Graphic design is the ‘parent’ profession from which this research originates. Previously known as commercial art, the term ‘graphic design’ was coined by William Addison Dwiggins in 1922, but was not widely used until after the Second World War. With graphic design now identified as a separate activity, comes the early stages of differentiation of an activity that was previously integrated into the production aspects of publishing and printing, handled by printers and typesetters. An aspect of graphic design became more oriented towards personal expression, illustration and image making, regarded as ‘an extension of the expressiveness of the fine arts, pressed into commercial or scientific service’ (Buchanan 1992, 12). Other facets of graphic design further developed as part of the service industry, where advertising agencies engaged graphic designers and creative directors to provide design solutions for clients’ advertising needs. In the latter part of the 20th Century, graphic design underwent yet another transformation, expanding from a trade and service closely aligned with printing and advertising, to an expansive process including research, strategy, project management and marketing.

The contemporary practice of graphic design is now radically different to the profession it was twenty years ago. It is now more complex, more dependent on digital imaging and communication technology, less media-specific and more focussed on communication rather than media. The practice boundaries of the graphic design profession are constantly expanding, evolving and becoming more blurred, as designers employ technology and practices from other areas such as film, multi-media, time-based media, music, information science and digital design. Where previously the graphic designer generated print-based artefacts, the designer now needs to take into account not only the wider array of communication media available, (sound, video, multi-media, digital), but also a more detailed knowledge of the broader systems within which the communication fits. The focus is no longer solely on the media and the end product delivery system, influenced by semiotics, deconstruction and participation have seen the focus shift both to the message itself, and to the audience receiving it. Messages and communication are now customised

for a wide range of readily available media, acknowledging that audiences self select preferred media from a range of competing systems. The rapidity of new communication media development and the concept of ‘seamlessness’ between cross media platforms, encourages audiences, users and consumers to no longer regard communication as discrete messages delivered by separate communication products and devices. Rather they expect consistent and related messages to be easily accessible and recognisable via a network of different media systems.

4.1.2 Technological challenges to graphic design

The traditional profession of graphic design was challenged by the desktop publishing revolution and personal computer technology of the 1980s. As the tools of the publishing trade were made widely accessible via computers to professionals and non-professionals alike, the practice of graphic design had the potential to expand to encompass much more than the production and reproduction of images and text. Haslem comments on the way graphic design as a discipline responded to this challenge:

It forced it to think about what it actually was, what it’s strengths were and where it wanted to be. In doing so graphic design matured as a practice. No longer is graphic design about how to produce visual material for mechanical reproduction. It has become about the whys and the wherefores of the impulse to produce such material and the strategic application of such material along with any other incarnation to achieve desired ends. It is about strategy, meaning, responsibility, and context and it has started to take itself seriously (N. Haslem personal communication February 14 2007).

The technological challenges driving the redefinition of the profession in the latter part of the 20th Century shifted graphic design from ‘occupying a well-defined, limited role in a production sequence, to a more comprehensive, richer and more challenging professional engagement’ (Friedman 2000, 15). In light of this redefinition, the adequacy of the term graphic design to describe the contemporary practice comes under question. Designers no longer just design the ‘graphic’, the final product, the designed artefact; instead they are engaged with an intricate system of activities which has surpassed its print-centred origins. A more accurate description of the process is required to distinguish and describe this more layered more differentiated activity.

4.1.3 Shifts in naming – graphic design to communication design

The forced redefinition of graphic design since the 1980s now sees the identity of the profession in transition. The single practice traditionally known as graphic design is now also described as ‘communication design’ and ‘visual communication’. The description ‘communication design’, places the emphasis on the message, the complex processes surrounding communication, and acknowledges the medium of communication in design. Naming is a declaration of professional engagement and identity and an important indicator of how an individual or profession defines its practice. In 2006, the executive board of ICOGRADA (International Council of Graphic Design Associations) voted to adopt the term communication design over graphic design. An online survey conducted by ICOGRADA and accessed in 2008 suggests that the terminology used by the

profession itself is very much in transition (ICOGRADA 2008). The results reveal an internal change in the perception of professional identity. From 424 responses to the question ‘What do you call yourself?’ 48.58% preferred graphic designer, 9.91% opted for communication designer and 41.51% responded with ‘other’ description. These results indicate that about half of the respondents were in transition, signalling a redefinition of the discipline previously described solely as graphic design.

Referring to how design companies describe their practice also reveals insights into changes in identity. Cato Partners, one of Australia’s largest and well established design companies, omits to mention graphic design in their website description of their services:

Cato partners provides all facets of identity design from brand and product strategy to packaging and built environments. We apply proprietary methodologies such as Broader Visual Language™ to achieve maximum market impact. Lead, sell, position, communicate or influence; we provide brand strategy, design architecture, implementation, audits, print and digital asset management. In a world where lasting audience connection is visual, we build brands that are versatile, visually distinctive and enduring.

(http://www.cato.com.au/content.asp?Document_ID=1&Site_ID=150. Accessed January 15, 2008).

In descriptions such as these, systems, strategies, assets management and methodologies replace the traditional notions of the graphic designers and their tangible products of business – cards, posters, logos and brochures.

Here, the adequacy and currency of the term graphic design needs to be considered. The question arises, whether graphic design is still an accurate description any more, or does it reflect that the naming is lagging behind a rapidly evolving practice. Whether it should be called graphic design, visual communication or communication design is not at issue here. Rather these trends are indicative of larger transformations underway in a field that is rapidly evolving and responsive to changes in technology, communication and fashion. While remaining connected to traditional industries such as printing, packaging and advertising it is also highly flexible, responsive and recombinant, giving rise to new hybrid fields of design. For the purpose of the discussion in this thesis, the descriptors graphic designer and communication designer are both used depending on the historical context of the discussion and according to how individual designers describe their practice.

4.2 Transformations in graphic design

To understand the context of the transformations underway in the field of graphic design, one needs to look further than descriptions of professional identity. By linking professional issues with wider changes in society, a deeper understanding of the professional context for design is gained. Several significant shifts occurring from the 1980s onwards were identified in the literature review, including the participation of design in the knowledge economy, an increase in cross disciplinarity, the emergence of new hybrid fields of design and the increasing complex problems that designers are

tackling. The wider historical context for these shifts are now developed further here in consideration of the impact on the design profession.

4.2.1 Shift from service to knowledge economy

Sociologist Daniel Bell, in his book *The Coming of Post-Industrial Society* (Bell, 1976), predicted a post-industrial society where the shift from manufacturing to services creates a ‘service economy’. Peter Drucker, coined the phrase ‘knowledge economy’ to describe the shift during the 1960s and 1970s from manual and process-driven labour to work which is information-based and creates knowledge, where intellectual property is valued as a business asset. The last few decades have seen communication designers participate in the knowledge industry with its requirements for research, strategy, project management and marketing, and increasingly enabled by communication connectivity and globalisation. Communication designers actively shape the currency of the knowledge economy by representing information through the interface of design. The design profession also makes up part of what has recently been termed the ‘creative class’ by Richard Florida, who writes on social and economic theory (Florida 2003). Florida argues that a ‘creative economy’, where human capital consisting of innovative ideas, is the successor to the industrial economy (Coy 2000).

Drucker, Bell and Florida’s concepts are pertinent for interpreting shifts in the contemporary design profession which are still evolving. Although the constructs of trade, service, knowledge and creative economy are useful when considering design’s development as a profession, these categories are not absolute. The diversity of contemporary design practice sees designers participating in all these economies.

4.2.2 From objects to systems

As well as understanding the information environment in which the service or product will be delivered, the designer today, also needs to be informed about its surrounding ‘knowledge context’. For example, a designer who creates a website for a particular national park, not only has to understand the technical, functional and aesthetic requirements of the website, but also needs to know how the website fits within larger systems of information and design. The needs and preferences of local and global tourists, their concerns for ecotourism and sustainability, as well issues concerning transport, regional economy, government policies and national parks legislation all need to be researched and considered as contributing to the overall design system. In interpretation design, designers contribute to the visualisation and communication of information, products and ideas within the geographical, economic and political systems surrounding place.

4.2.3 From linear to complex problems

The nature of today’s problems are becoming increasingly intricate and involved; this is a key factor driving the formation of teams and the need to bring together different ‘experts’ in collaboration. The shift from simple to complex problems is also a

distinguishing characteristic of contemporary design which Conklin et al links to a shift from modern to postmodern thought (Conklin et al 2007). Where design theory traditionally conceived of a linear model for design, that of problem definition followed by problem solution, this thinking is now being challenged by the conception of contemporary design problems as being ‘wicked problems’. The concept of a wicked problem was originally proposed by Horst Rittel and Melvin Webber in 1973 to describe problems in planning and design that are messy, indeterminate, contradictory and ill-defined. Traditionally, design theory has tried to define a linear model for design, in the hope of coming to a logical understanding of the design process. This model involves problem definition followed by problem solution. According to Conklin, the steps in the sequence are a derivation of a primitive scientific process: (1) Gather the data, (2) Analyse the data, (3) Formulate a solution, (4) Implement the solution. As design theorist, Richard Buchanan points out in his seminal paper ‘Wicked Problems in Design Thinking’, this conventional model has serious flaws as the actual sequence of problem identification, design thinking and decision-making is not a simple linear process (Buchanan 1992, 15). Rittel (1973) proposed that solving a wicked problem is more emergent and interactive, more ill-defined and ‘fuzzy’ than any prescribed linear sequence of steps can handle, and finding one solution may reveal another even more complex problem. Rittel described the problems addressed by designers as wicked problems, that is:

A class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing (Churchman 1967).

This description is similar to descriptions projects undertaken by contemporary designers working within information systems, with multiple stakeholders and with intersecting yet different knowledge bases (Lupton 1996, Friedman 2000). More specifically this description also fits the field of interpretation design.

4.2.4 Summary of shifts

To summarise, design activity now operates within the knowledge or creative economy with an emphasis on research, strategy and systems, rather than objects. This type of professional practice is more collaborative and team-based than ever before, with designers working in complex situations determined by linked networks of multiple stakeholders. Design is no longer seen as a value-added extra, but is now recognised as a complete process, incorporating problem identification and solution strategies, project management, and production. Table 1 summarises the major shifts and forces that have shaped the evolution of design since the early 20th Century.

Traditional	Contemporary
Graphic Design, Commercial Art	Visual Communication Communication Design
Media	Message
Object/artefact/product	Strategy/systems/experience
Service/trade industry	Knowledge economy/creative economy
Multi-disciplinary	Interdisciplinary/cross-disciplinary
Print	Digital
Media specific	Multi-media/non-media specific
Universalism/ designer aesthetic	Human centred
Printer and publishing industry	Studio/agency/consultancy/freelance
Individual	Collaborative/teams
Simple, linear, first generation problems	Complex, 'wicked' second generation problems

Table 1: A summary of shifts in graphic design

These shifts are best understood as tendencies or points of transition on a continuum of change, rather than exclusive and absolute. Much design practice moves between and along the spectrum rather than on one side or the other. Contemporary design practices and tendencies often still include elements from traditional practices, such as a mixture of print and digital, or individuals at times working collaboratively. The shifts above identify most clearly the expansion of design as a multi-faceted practice, and certain practices within design such as interpretation design exemplify a contemporary form of practice.

4.3 Historical context 1980 – 2006

The shifts outlined above and previously in the literature review, can be further contextualised by examining the historic backdrop to contemporary design and the emergence of interpretation design in the last two decades of the 20th Century. Contemporary design and the professional context within which designers operate has changed significantly over the past twenty years. My own professional knowledge and experience in the industry formed during the last few decades, the literature review, plus participating in academic discourse has initiated a search for wider social and historical explanations for transformations in the design profession. In order to build a valid conceptual framework for interpretation design, reference to wider societal transformative shifts is necessary. Here, I will make observations about contemporary design through a conceptual framework which attributes changes in design practice to a 'postmodernising' process. This discussion will provide a historical time-frame to contextualise change in design practice, propose connections between postmodernist thought and design and provide a reference for further discussions developed throughout this thesis.

In presenting a wider historical context for understanding the significant shifts in design I have previously outlined I am using Lash's conception of postmodernism as a 'cultural paradigm'. Lash observes 'that the cultural terrain on which we now all live, work, love, and struggle is pervaded by postmodernism' (Lash 1990, 3). If Lash's proposition is true, then design, interpretation design and designers will have been affected by what Best and Kellner (1997, viii) call the 'postmodern turn'. Best and Kellner (1997) in the introduction to their book *The postmodernist turn* put forward a definition which indicates the extent of the postmodern paradigm shift;

We are calling this dramatic transformation in social life, the arts, science, philosophy, and theory 'the postmodern turn,' and argue in this book that we have now entered a new and largely uncharted territory between the modern and the postmodern. The postmodern turn involves a shift from modern to postmodern theory in a great variety of fields and the move toward a new paradigm through which the world is viewed and interpreted (Best and Kellner 1997, viii).

A common theme in postmodernist theory and thought is the notion of a 'radical break,' that is, a discontinuity between past and future trends whether cultural, political-economic, or philosophical' (Dear 2000, 5). The extent of the transformation is extensively debated (Harvey 1989, Hassan 1985, Jameson 1984, 1985, Lyotard 1984). Huyssen (1986) while cautious in his description of the extent of the radical break with the past, recognises that the effect of postmodernism in 1986 is noticeable and transforming;

The nature and depth of that transformation are debatable, but transformation it is. I don't want to be misunderstood as claiming that there is a wholesale paradigm shift of the cultural, social, and economic orders; any such claim would clearly be overblown. But in an important sector of our culture there is a noticeable shift in sensibility, practices and discourse formations which distinguishes a post-modern set of assumptions, experiences and propositions from that of a preceding period (Huyssen 1986, 181).

Harvey (1989) questions whether postmodernism, represents a radical break with modernism, or is it simply a revolt within modernism against certain form of 'high modernism'. This gives rise to the question whether postmodernism does exist in its own right without reference to its opposition, modernism. Hassan (1985) argues that the term postmodernism is problematic, unstable and 'evokes what is wishes to surpass or suppress, modernism itself' (Hassan 1985, 121). It is not my intention here to summarise the extensive work of major authors and theorists writing and reflecting on postmodernism during the period from 1980s onwards. Instead I want to give depth to the discussion of changes in the field of graphic design by developing a conceptual framework which identifies the 'postmodernist turn' in graphic design.

Having already outlined that transformative changes are underway in the profession of graphic design, my intention here is to identify graphic design's postmodernist 'turn'. Changes can then be interpreted in the wider context of an historic turn from modernism to postmodernism. Dear (2000) identifies three important meanings associated with postmodernism; style, epoch and method (Dear 2000, 33 – 35). The discussion of postmodernist style on artefacts of interpretation design will be referred to later in this

thesis, but here the discussion will focus on the historic epoch of postmodernism, with the intention to set a backdrop for contextualising the emergence of interpretation design. To start this process I have developed a schema, which both summarises changes in the design profession and is a reference for further discussions presented elsewhere in this thesis. Schemas that provide a précis of the postmodernist epoch have been developed as useful frameworks drawing on diverse fields of knowledge to present differences between modernism and postmodernism (Hassan 1985, Solomon 2003, and Irvine 2004).

Necessarily these schemas present large-scale ideas and changes over time in a simplified way, relying on polarisations and generalizations to synthesise complex information.

Such schemas constitute a general frame of reference to capture ‘that profound shift in the structure of feeling that separates modernity from post modernity’ (Harvey 1989, 65).

While such schemas are always going to be incomplete they are useful as starting point to construct an overview of change. In the absence of any such schema for design I have extended a schema developed by Solomon (2003) to outline a historic contextual setting for the contemporary profession of design and interpretation design. In the following table I have adapted Solomon’s schema to summarise how the ‘zeitgeist’ of these societal and technological characteristics translate to contemporary design. The first two columns use Solomon’s distinctions between modernism and postmodernism as oppositional headings. The third column represents my observations and interpretations of how these changes apply (or not) in the field design. These observations are based on my personal and professional experience as a designer, and are also developed from the literature search and through surveying designers. The characteristics in this table are intended to build a highly generalised and summarised framework of reference for the discussions of design practice and design discourse in later chapters in this thesis.

Modern (after Solomon)	Post Modern (after Solomon)	Manifestation in contemporary design (developed by Woodward)
Utopian, elitist	Populist	<ul style="list-style-type: none"> • Shift from unified manifestos about design e.g. modernist universalist visual language, towards eclectic professionals and non-professionals studying and practicing design. • High differentiation of design practice, niche designers. • Computer technology increases access to design tools and number of people who call themselves designers. • Blurring of distinctions between professional design and vernacular design.
Patriarchal	Non-patriarchal, feminism	<ul style="list-style-type: none"> • Shift from modernist male sole operators, designer 'gurus', heroes and personalities towards collectives of anonymous designers. • Increase in women designers.
Hierarchical	Anarchical	<ul style="list-style-type: none"> • Previous advertising and printing industry classifications of junior, middle weight and senior designer, or trade apprenticeships • Now replaced with solo operators, freelancers, self styled designers and people trained outside the academy or profession.
Totalised	Non- totalised/fragmented	<ul style="list-style-type: none"> • Previously non-differentiated profession, where printers, typesetters and designers integrated. • Now differentiated into many roles, specialisations and collaboration. • 1980s–90s desktop computer revolution encouraged further de-differentiation.
Centred	Dispersed	<ul style="list-style-type: none"> • Formerly design activity clustered around urban printing centres, now computers, internet and distributed electronic media, make the profession geographically dispersed. • Access to centre still important for production and some distribution, but increasingly design is prepared and delivered remotely and peripherally.
European, Western	Global and multi cultural	<ul style="list-style-type: none"> • Previously design practice and education historically linked with Europe (Bauhaus, Swiss modernism, Italian, Scandinavian design objects). • Design now globalised with sharing of images information and projects across national boundaries. • Western design acknowledges and absorbs Eastern culture and aesthetic.
Master Code Uniformity	Idiolects Diversity	<ul style="list-style-type: none"> • Master/apprentice model dominated education with legacy of universalism, modernism, Bauhaus 'language of vision' as code of visual elements maintained (Moholy-Nagy and Kepes). • Now diversity celebrated, many solutions probable, range of design models available via web. Value placed on innovation, 'bespoke' solutions tailored to fit client needs. • Designers skilled in problem identifying and strategy rather than aesthetic styling.
Determinist	Indeterminant	<ul style="list-style-type: none"> • Traditionally a linear model for design involving problem definition followed by problem solution. • Contemporary design characterised by 'wicked problems' messy, indeterminate, contradictory and ill-defined.
Detached	Participatory	<ul style="list-style-type: none"> • Previously designer holds solutions and imposes a personal aesthetic style to design outcomes • User-centred design responds to individual client and user/audience's needs. Meanings accessible and interpreted by audiences.
Separated from and control of Nature	Ecological, harmonious with nature	<ul style="list-style-type: none"> • Green ethic entering the design profession, regard for waste, toxicity, recyclability, sustainability even questioning whether design is necessary or not.
Staid serious Formal	Playful and ironic Non-formal	<ul style="list-style-type: none"> • Deliberate use of irony in design solutions. • Names of design studios, indicative of less serious

Purposeful	Playful	ephemeral partnerships (e.g. Anyhow, Droog, Tomato, Nonsense,). • Movement into and expansion of games and entertainment industry.
Intentional	Non- intentional	• Previously a sense that there was an underlying structural code to visual elements, (form, colour, line texture) from which to construct communication, with rules governing usage in problem solving. • Now a place for randomness in media and outcomes, both from audience participation and designer. • Design discourse deconstructs design reflexively, pays critical attention to the rhetoric of design.
Constructive	Deconstructive	
Theoretical	Pragmatic	• Here it is reversed, much more an emphasis on theory to legitimise and give credibility to the profession which has always been pragmatic and practice oriented.
Reductive, analytic	Synthetic	• Increase in hybrid media, convergent technologies, cross-disciplinarity, collaborations, collectives and partnerships.
Linear	Multi-pathed	• Design process linear, proceeding from problem definition to solution. • Now design process recognised as being more complex, ‘wicked’, fuzzy indeterminate. • Multi-pathed media and approaches. • Hypermedia, web-design, social networking..
Harmonious integrated	Eclectic non-integrated	• Previously universal code of style dominated and extended across different design disciplines and practices. • Mixing of styles, media and genres from different time periods. Borrowing typefaces and images from the past, nostalgia, vernacular and niche products.
Non- narrative	Narrative	• Design complicit in communicating meta-narratives of society. • In contemporary design, narrative acknowledged as a ‘representation’ of truth. Inclusion of multiple voices in communication, reflected in stylistic treatment.

Table 2: Postmodernisation of design adapted from Larry Solomon chart (Solomon 2003).

As discussed in Chapter 2, the profession and practice of design is in a state of flux and rapid re-invention. The schema above, while useful for giving definition to changes in design, is best interpreted as set of tendencies towards either modernism and postmodernism. In developing a conceptual framework for interpretation design, I am suggesting that the design profession over the last few decades has been in a state of transformation, a ‘postmodernising’ process, which is still underway. The broad-brush tendencies outlined in the schema give a framework which includes a descriptive set of historical concepts and tendencies to understand the rapidly changing and evolving profession of design. Themes and trends in contemporary design practice will now be discussed in more detail expanding some of the observations outlined in the schema.

4.3.1 The postmodernisation of design practice

Unlike the fields of art, literature and architecture, discussions of postmodernism as a cultural condition in relation to graphic design are not found in the literature. Instead the discussion centres on postmodernist stylistic devices in design (Byrne and Witte 1990, Poyner 2000). Lupton and Abbot Miller (1996) make reference to the ‘epoch’ of postmodernism suggested by Dear (2000) describing graphic designers as subject to the

‘zeitgeist’ of postmodernism, ‘a philosophical germ circulating in contemporary culture that influences graphic designers even though they might not know it’ (1996, 10). While there are detailed commentaries on postmodernist design treatments, decorative visual style (Poynor 2000), and typography (Keedy 1998), the construction of graphic design as a postmodernised profession under discussion here is new.

Postmodernist characteristics are recognisable where design professions have become more differentiated, are accessible to those trained outside of the academy and where the tools of design are readily available through the capacity of the personal desktop computer.

Contemporary designers now operate where traditional discipline and media boundaries are blurred, niche products and markets are important and the internet and hyper-media transcend the physical limits of print media (Irvine 2004). Berger (2003, x) observes that the rise in the use of images, media and simulations have broken down the sense of reality and fixed boundaries in postmodernist society. Communication designers deal in representations of reality, and are significant agents in the global traffic of images, simulations and hyper-reality; where the mediated experience delivered by visual media can become more powerful than unmediated experience. The design profession has experienced its own dissolution of discipline and media boundaries, where visual media is now perceived as un-differentiated and convergent media delivers messages that transcend geographical borders with interfaces that belie the complexity of media technology.

Lash argues that postmodernism brings a ‘colonisation’ of artistic fields from outside. One characteristic of this process is the ‘partial breakdown of the boundaries between high and popular culture and the concomitant development of a mass audience for high culture’ (Lash 1990, 11). The impetus for designers to expand the breadth of their experience to include other disciplines and professional knowledge and adapt to new media and convergent technologies requires flexibility to constantly adapt their practice and fosters the rapid take-up of new technologies and innovative methodologies. The contemporary communication design profession has evolved as an increasingly fragmented, hyper-differentiated practice which design writers Lupton and Abbot-Miller claim no longer has authority as ‘as a definitive sequence of objects and subjects’ (Lupton 1996, 66). They describe contemporary design as being dispersed across a network of technologies, institutions, and services and even questions the wisdom of using one term to encompass such a diverse field. This fragmentation and specialisation has encouraged designers to collaborate, out-source and form teams of specialists in recognition that no single designer can possess all the skills to undertake more and more complex projects. Interpretation design practice, which will be examined more closely later in the thesis, can be described using the dimensions of the schema above as a postmodernised form of design practice.

4.3.2 Australian graphic design practice

So far the discussion of graphic design history and trends has been at a global level; however, there are some distinctive features of Australian graphic design that will set the professional context for the field of interpretation design. Caban's publication *A Fine Line* (1983) which examines the development of graphic design in Australia, describes a design profession on the cusp of postmodernism in 1983. This is evidenced in his description of design graduates;

While graduates do not normally refer to themselves now as commercial artists, and though the scope of their activities has widened recently, they are entering a profession where the ground rules have not changed much in a hundred years (Caban 1983, 3).

Bearing in mind that the Apple Macintosh computer was introduced into Australia in 1984, Caban's publication not only describes the tendencies towards modernism prior to the computer revolutionised the profession, but documents a profession on the brink of significant change.

Graphic design developed as a profession in Australia with a keen awareness of what was happening in both Europe and America. British design writer and educator, Rick Poynor, writing in *Eye* (International Review of Graphic Design), on Australian graphic design comments that:

Australian practitioners have always measured themselves against what was happening abroad and from the 1930s to the 1960s – and beyond – many would seek work experience overseas (Poynor, 2002, 19).

Australian designers including Gordon Andrews, Douglas Annand, Les Mason, Graeme and Dahl Collings, were all influenced from their work experience in Europe and exposure to modernist design codes in larger centres of trade and publishing (Caban 1983). Their experience left a pervasive legacy of a modernist design aesthetic on Australian design artefacts lasting well into the 1970s. Reactions to modernism and the early advent of globalism through the arrival of American advertising agencies in the 1970s, were evident in the work of All Australian Graffiti during the 1970s and more recently in the work of Mambo and Inkahoots. Such design work that challenges meta-narratives and stereotypes contributed an alternative perspective to the discourse on national identity. Later forms of practice see shifts away from a Eurocentric perspective aesthetic and geographical focus, with contemporary Australian designers, operating independently and with a greater awareness and interest in place and Australian culture.

Caban compares the development of the profession in Australia during the early 20th Century with that of Europe and America. He notes that due to lower demand, designers in Australia have always had to be adaptable and multi-skilled. Caban writes:

Whereas in America and Europe a greater design awareness and, consequently, a greater demand for design work have led to a tendency for designers to specialise, the comparative lack of opportunities in Australia has led, conversely to many designers becoming a jack of all trades (Caban 1983, 2).

Contemporary design practices have inherited this legacy of small scale businesses, adaptability, and sourcing of projects from a variety of directions rather than

specialisation in one particular area. The ‘jack of all trades’, approach has continued in Australian design practice, partly from an attitude of improvisation and ‘having a go’ and partly from being isolated from the main stages of world publishing and larger companies, where specialised roles afforded opportunities to more designers. Through necessity, a level of multi-disciplinarity has always existed in Australian design and may be the source of the level of interdisciplinarity now evident in contemporary design practice. The Australian Graphic Design Association (AGDA), the peak body in Australia for graphic design, currently lists 89 specialist skills and activities, from which to search their data base of graphic designers, none of these specialisations are currently described as interpretation design (AGDA). As well as considering the development of graphic design practice in Australia, also significant for the field of interpretation design, is examining the contribution of graphic design to shaping Australian national identity and visual culture.

4.3.3 Graphic design’s contribution to discourse about national identity

Australian graphic design has helped shape an evolving national identity through visual language. Another significant way in which design contributes to discourse is through the production of design artefacts which help shape visual culture and discourse about national identity. This takes place both in formalised publications and artefacts of design. State and national libraries hold important collections of graphic design ephemera forming an archive of Australian design work since European colonisation. Publications with essays generated as catalogues to accompany exhibitions on Australian design include those produced from institutions such as; The State Library of Victoria (Downer 2001), The National Library of Australia (Hetherington 2006), Australia Post’s Postmaster Gallery (Whitehouse 2005), The National Gallery of Australia (Butler, 1993) and The Powerhouse Museum. Archived design material held in such collections, is a valuable and increasingly accessible resource for researchers of Australian design. Importantly these artefacts can be analysed as an insight into the discourse on national identity, revealing stereotypes and contested cultural identities.

Whitehouse points out that graphic design is an agent of identity formation and that this is a continuous process of reaction, response and adaptation (Whitehouse 2007, 52). She examines the role that Australian graphic design has played in building what Meaghan Morris calls the ‘national image space’. Through examining tourist brochures, advertisements and the globally broadcast Sydney 2000 Olympic games opening ceremony, Whitehouse outlines how ideas of ‘discovery, exploration, settlement and nation building’ are given visual form through graphic design (2007, 53). Whitehouse’s essay ‘This is Australia, The Panoramic Narrative, Graphic Design and Spatial Consciousness’ is a singular and important commentary on how this process operates in Australian ‘national image space’. She writes:

This image space being the public zone in which popular histories, aesthetic symbols, ideas and myths circulate and endure through the agency of design, giving visible form to the imagined community that binds people and place into a nation (Whitehouse 2007, 52).

A significant component of how this image space is created in visual culture draws on Australia's natural environment to create symbols, icons and myths about place and national identity. In an Australian context, interpretation projects present significant opportunities to engage with place. Interpretation projects present designers with significant opportunities to engage with place and extend visual language in a more engaging, complex and critical way that expands beyond nationalistic stereotypes. Interpretation design artefacts including visitor centres and the ephemera of travel and tourism contribute to discourse about national identity and, I will argue through this thesis, also form ideas about 'natural' identity.

Design also has the potential to challenge 'mainstream' ideas, reminding us that cultural identity is in a constant state of flux. Whitehouse develops this idea in writing about the design group All Australian Graffiti, whose work in the 1970s challenged the prevailing cultural paradigm of a White-Anglo society:

The achievements of AAG [All Australian Graffiti] clearly illustrate how cultural identity is always being contested, always in a state of change and adaptation and that these changes are made visual and concrete through graphic design, that is through our shared popular visual language (Whitehouse 2005, 8).

The work of Australian design groups such as All Australian Graffiti, Mambo and Inkahoots reveal prevailing attitudes towards indigenous culture, flora and fauna and national icons by playful, ironical and sometimes subversive references. Long held 'national values' often promoting racism, suspicion of difference, sexism and a lack of respect for the natural environment have been uncovered and challenged by such design groups. The Federation Tapestry in the Melbourne Museum (Case study 2, Chapter 10) has a more detailed discussion of issues relating to national identity.

4.4 Summary – professional context of design

The significance of the change in terrain of contemporary design practice has dramatic implications for future ways of working in design. Ideas of design are being revised in light of rapid changes in technology, business, and the nature and scale of problems undertaken by designers. By the beginning of the 21st Century, design has evolved to become part of the knowledge industry, with designers actively engaged in helping to address large-scale social and complex challenges in unprecedented ways (Conklin et al 2007). Participating in and contributing to the knowledge industry requires designers to look to fields outside of traditional design arenas in order to acquire research skills, knowledge and to collaborate with non-designers. The preceding discussion on the state of contemporary design charts the transition from graphic to communication design and argues that design is both multi-disciplinary *and* interdisciplinary in its outlook and practice, and sees the emergence of cross-disciplinary teams incorporating a wider pool of expertise.

Friedman urges us to consider design as being an 'integrative discipline, positioned at the intersection of several large fields or bodies of knowledge' (Friedman 2000, 22). Rather

than being solely object-based, the artefacts of communication can be understood as being part of intersecting systems of information. This ‘distributed’ nature of communication design makes it more elusive and harder to define than ever before, and therefore prone to be overlooked despite its ubiquity. I have proposed in this chapter that contemporary Australian communication design has its own particular place-based characteristics, and has been subject to several global shifts occurring in design in the past three decades, which can also be understood as part of a postmodernising influence. Having established that the discourse on Australian design is also elusive and fragmented, this research aims to give visibility to interpretation design within its ‘parent’ discipline of design. Several perspectives are presented in order to give clarity to interpretation design and build a picture of its contemporary Australian form.

This chapter has firstly outlined broad shifts in design, then adapted a framework which summarises postmodernist tendencies and mapped design against this. This gives a framework which includes a language and a set of historical concepts and tendencies to understand a rapidly changing and evolving profession. Finally the Australian context of graphic design adds another facet, and informs the background to interpretation design in Australia.

This chapter has established the following elements of the conceptual thematic framework for interpretation design:

- Introduced definitions and contemporary usage of design language to interpretation design.
- Summarised shifts in graphic and communication design (Table 1).
- Outlined a historical background to the emergence of interpretation design. characterised by a postmodernised form of practice of design (Table 2).
- Linked graphic design with the formation of Australian national identity.

Where this chapter has presented the *design* related context of interpretation design, the next chapter will present the *interpretation* context of interpretation design.

Chapter 5 – The professional context – interpretation

5.0 Introduction

In museum, tourism and heritage contexts, interpretation refers to the communication and presentation of a place or object to an audience. The field of interpretation includes the presentation of objects in museum collections as well as places of natural and cultural significance including; museums, national parks, protected areas, walking or driving trails, botanical gardens, historic sites, private sanctuaries, zoos, game reserves and recreation areas. The focus here will be on the presentation of place, also referred to as site interpretation.

The practice of interpretation resonates with many other professional fields. It uses approaches found in education, has the persuasiveness of marketing and advertising, and uses the visual rhetoric of communication design combined with behavioural insights from psychology – all enacted against a backdrop of tourism, leisure and recreational settings. It is an activity that involves the communication of information, ideas, stories and experiences, primarily through language-based activities, but also has a visual and experiential dimension. It is the visual aspects of interpretation carried by design interfaces, that is under investigation in this research. This chapter examines the professional context for interpretation design from the perspective of the professional practice of interpretation.

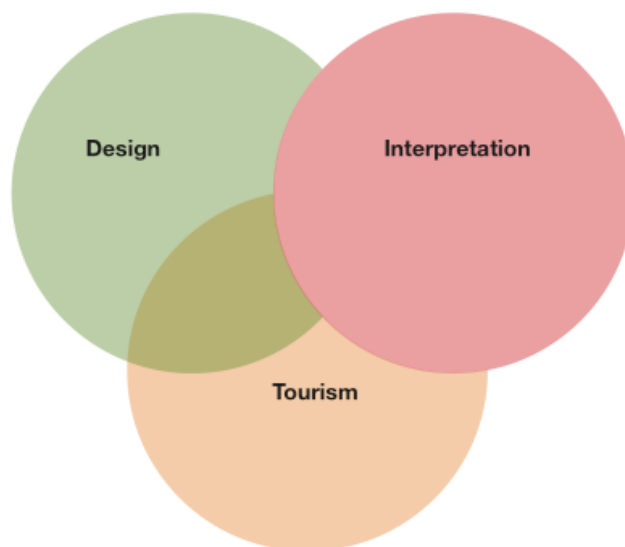


Figure 6: The professional context – interpretation.

5.1 Defining interpretation

5.1.1 Origins of heritage interpretation

Far from being a recent phenomenon, interpretation is part of a long tradition of storytelling, encouraging appreciation for and understanding of place, which Uzzell describes as ‘one of the oldest practices for cultural transference in existence’ (Uzzell 1989a, 2). New Zealand researchers Stewart et al (1998) trace the relationship between place and interpretation back to Ancient Greek times and to the role of the *periegete* who was:

An expert local guide who led people around, pointed out notable sights, described the local rituals, explained customs, and told traditional stories of historical and mythical events associated with the place. A written commentary describing a place, a travel guide was known as a *periegesis*. No *periegesis* have survived but the sentiment of those times has, and is echoed in the modern day definitions of interpretation (Stewart et al 1998, 257).

Interpretation also has origins in the 19th Century with the development of activities associated with heritage, art, public museums and cultural tourism including guided tours, lectures, outdoor sketching and re-enactments. In Australia, botanical and zoological gardens were important places for colonists to learn about the natural environment in combination with contemplation and gentle exercise. Fennessy, in writing about the role of the Melbourne Botanic Gardens in public education notes that;

While strolling in the ‘orderly, predictable, and accurately labelled wilderness’ of a botanic garden and reflecting upon the beauty of the natural world, visitors were expected to acquire useful scientific knowledge and simultaneously cultivate their souls (Fennessy 2007, 166).

Technological advances in photography and printing enabled wide circulation of designed visual artefacts including; postcards, guidebooks, photographs, commodities, arcades, dioramas, mirrors and plate-glass windows (Urry 2002, 148), all of which can be considered as forerunners to interpretation design.

The development of interpretation in natural environments and national parks has origins in the United States where private guides provided lectures to guests in resorts, camps and tours in places of natural beauty. Enos Mills, a resort owner in Colorado began training people as guides and published *The Adventures of a Nature Guide* (Mills 1920), which informed early guiding practice in national parks (Knudson et al 2003, 5). The work of playwright and philosopher Freeman Tilden formalised the contemporary professional practice of interpretation through the publication of *Interpreting our Heritage* in 1957, where he laid out six principles of interpretation, which are still quoted in contemporary interpretation literature. Tilden’s six principles are;

1. Any interpretation that does not somehow relate to what is being displayed or described to something within the personality or experience of the visitor will be sterile.
2. Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.
4. The chief aim of interpretation is not instruction but provocation.

5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole person rather than any phase.

6. Interpretation addressed to children (up to the age of 12) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best will require a separate program (Tilden 1977, 8 – 9).

Ballantyne and Uzzell (1999, 61) maintain that despite the pervasiveness of Tilden’s principles of interpretation through to the 1980s, contemporary interpretation practice is now informed by a much broader multi-disciplinary theoretical base; with input from research in education, psychology, sociology, cultural studies and tourism.

5.1.2 Heritage interpretation – definitions

Tilden’s original definition of interpretation developed in 1957, still informs many current definitions of interpretation:

Interpretation is an educational activity which aims to reveal meanings and relationships through the use of original objects by first hand experience and by illustrative media, rather than simply to communicate factual information (Tilden 1977, 8).

While there is no universal consensus on a definition for interpretation, most agencies, authors and professional organisations following Tilden, emphasise communication, appreciation and conservation in their definitions (Aldridge, 1989; Knudson, Cable & Beck, 1995, Faggetter 1996, IAA 1997).

Tilden (1977) Originally published in 1957	Interpretation is an educational activity which aims to reveal meanings and relationships through the use of original objects by first hand experience and by illustrative media, rather than simply to communicate factual information.
Interpretation Australia Association (1997)	Interpretation is a means of communicating ideas and feelings which help people enrich their understanding and appreciation of their world and their role within it
Faggetter (1996)	Interpretation is a form of communication that endeavours to share the meaning and significance of a place with its visitors. It should link them with the site's spaces and places, its objects, the experiences that it provides, and its ideas and stories.
Murphy (1997)	Interpretation is an interactive communication process, involving the visitor, through which heritage values and cultural significance are revealed, using a variety of techniques in order to enrich the visitor experience and enhance the enjoyment and understanding of the site
Harrison (1994)	Interpretation is the art of presenting the story of a site to an identified audience in a stimulating, informative and entertaining way in order that the visitor leaves with an understanding of why it is important and with a sense of place
Department of Conservation and Land Management (Western Australia)	It is an interactive process involving the visitor, the medium and the resource which creates memorable and personal experiences which motivate people to greater understanding and care of the environment being interpreted, as well as an appreciation of the effort required to protect and sustain the environment.
Young (1996)	Interpretation is the communication of ideas about nature and history which make certain material culturally significant.

Dean (1996)	Interpretation is the act of process of explaining or clarifying, translating, or presenting a personal understanding about a subject or object.
Prentice (1996, 55)	Interpretation is a process of communicating to people the significance of a place so that they can enjoy it more, understand its importance, and develop a positive attitude towards conservation. Interpretation is used to enhance the enjoyment of place, to convey symbolic meanings and to facilitate attitudinal or behavioural change.
National Association for Interpretation (US)	Interpretation is a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource.

Table 3: Definitions of interpretation currently in use.

Interpretation has been defined differently by many writers and agencies, and as noted, many definitions are derivative of Tilden’s writings and principles. Table 3 shows a survey of definitions found in the literature and currently in use and, despite being customised to meet particular agency’s objectives, evidence strong connections with hermeneutics, subjective understandings and personal experiences. In defining interpretation, Beck and Cable (2002, 7) focus on its elusive aspect describing it as ‘mysterious’, ‘unfathomable’, paradoxical and ‘just out of reach’. This intangible quality can be further explored by looking at the etymological origins of interpretation shedding light on its contemporary usage. *The Macquarie Concise Dictionary* (2002, 592) lists the following definitions of the word interpretation:

1. the act of interpreting, elucidation
2. an explanation given
3. a construction placed on something
4. a way of interpreting
5. the rendering of a dramatic part, music, etc., so as to bring out the meaning, or to indicate one’s particular conception of it
6. translation

These definitions (elucidation, explanation, construction, rendering, meaning, conception, translation) highlight the fact that interpretation is a subjective, human-centred activity concerned with interpreting and transmitting messages. Hooper-Greenhill (1999) considers hermeneutics as central to interpretation in museums. Hermeneutics is regarded as a theory of interpretation of all meaning structures, texts, as well as human action, culture and society. Originally the interpretation of religious, legal and literary texts, hermeneutics owes its contemporary form to German philosophers Wilhelm Dilthey (1833 – 1911) and Hans-Georg Gadamer (1900 – 2002). Dilthey distinguished between the natural sciences concerned with explanation, and the ‘cultural sciences’ where understanding is sought through interpretation. Emphasis is placed on the interpretations of situations where meaning is not fixed or firm but changes with time and situation. Gadamer uses the concept of the ‘hermeneutic circle’ to understand how meaning is made. Interpreting a text, human action, or a historic or aesthetic object involves a movement between part and whole, and past and present so that a ‘fusion of horizons’

occurs where the scholar and the text's histories are merged (Mautner 2005, 162). In linking interpretation with hermeneutics Greenhill writes:

Much of the focus of hermeneutics, or interpretive philosophy, concerns how understanding can be achieved. 'Interpretation' is seen as a process of arriving at an understanding; it is concerned with coming to a fuller understanding of what things mean. Much of the focus of the various hermeneutic approaches centres on this process of 'interpretation', which is located in the relationship between, typically, a reader and a text (Hooper-Greenhill 1999, 3).

Hermeneutics has links with both professional heritage interpretation and communication design. In communication design, the designer acts as the interpreter making sense of the world, through a symbolic system of orientation that builds on meaning in a circular and referential way. Interpretation, rather than performing a simple transmission of facts or information, aims to provoke its audience to question, construct meanings, and elucidate ideas, building on prior knowledge.

In heritage interpretation, it is assumed that communicating a message to others requires a form of interpretation by the transmitter and also by the receiver (Aldridge 1989, 83), similarly in communication design, the designer 'interprets' the message based on their personal and subjective experience. Hooper-Greenhill (1999, 4) argues that any interpretation is provisional, dynamic, open to change and historically situated, 'Meaning is constructed through and in our culture'.

5.2 Contemporary practice of interpretation

The contemporary practice of interpretation contributes to cultural narrative in a dynamic way. Evolving from cultural practices associated with tourism, guiding and education, the professional background of interpretation is multi-disciplinary, drawing on professional bodies of knowledge from science, museum studies, history, writing, education and the professional experience of land protection agencies such as national parks. In Australia the professional body for interpretation is Interpretation Australia Association (IAA), which is made up from a diverse range of members including rangers, guides, naturalists, museum curators, interpretation officers, heritage communicators, docents, educators, visitor services staff, interpreters, designers, interpretation consultants, tourist operators and academics. Similar professional bodies exist in Scotland (Scottish Interpretation Network), Canada (Interpretation Canada), The United Kingdom (Association for heritage Interpretation) Europe (Interpret Europe) and the United States (National Association for Interpretation). Designers are among the members of these organisations, however the primary objectives of the professional bodies is to support those working in interpretation.

5.2.1 Objectives and motivations for interpretation

Although interpretation has always been seen as a tool for management for visitor behavior and awareness, Ballantyne and Uzzell (1999, 61) note a shift from management towards a more social perspective in interpretation, including concern for education and enjoyment and also for interpretation as an attraction in its own right. Knudson et al

(1995) in *Interpretation of cultural and natural resources* list the objectives of interpretation as:

- To increase the visitor's understanding, awareness and appreciation of nature, of heritage, and of site resource.
- To communicate messages relating to nature and culture, including natural and historical processes, ecological relationships, and human roles in the environment.
- To involve people in nature and history through first hand (personal) experience with the natural and cultural environment.
- To affect the behavior and attitudes of the public concerning the wise use of natural resources, the preservation of cultural and natural heritage, and the respect and concern for the natural and cultural environment.
- To provide an enjoyable and meaningful experience.
- To increase the public understanding and support for an agency's role, its management objectives and its policies.

(Knudson et al 1995, 13).

Similarly, the objectives and motivations for interpretation as outlined by land management authorities fall into two distinct groups; for enrichment and education, or management and regulation (PV 2003, PWST 1999, DNRE 1999). Enjoyment, understanding and education are acknowledged as intrinsically beneficial to the visitor. As more people seek tourist experiences, there is increased pressure on sites from environmental damage, pollution and overcrowding, detracting from the quality of the attraction itself. Management and regulation, through interpretation, lead to extrinsic environmental benefits. Balancing the requirements of environmental protection with the demands of tourism and recreation are complex and difficult tasks for governments and management authorities to reconcile. Management and regulation, through raising awareness of appropriate behaviour, particularly in natural sites, is essential for the future sustainability of the site itself.

Conservation is one of the key motivations for natural heritage protection, and this extends into the practice of interpretation. Lane (1991) claims that successful communication with the visitor will foster a sense of stewardship and conservation for a place, while Stewart et al (1998) argue that good interpretation will accelerate the process of visitors developing an appreciation and sense of care for a place. Aldridge (1989) traces the philosophical origins of attitudes towards conservation spanning 3,000 years, and provides a useful reference for analysing the messages behind the content of interpretation. He cites twenty-six examples of philosophical influences on conservation, grouping them into four predominant views: economic, scientific, sensory enjoyment and the physical and mental health view. Aldridge argues that Romanticism with its emphasis on natural forms, landscape, beauty, emotion, and the subjective, introspective experience underlies many conservation attitudes. Evidence of Romanticism and tourism will be expanded later in the thesis.

Commercialism motivates some forms of interpretation, whereby it is co-opted as a way of 'value-adding' to tired tourist attractions, or as a way of drawing tourists to regional

areas with a particular commercial base, including winegrowing, forestry or mining, or as a justification for the economic value of national parks (Uzzell 1989a, 3). Tourist-attracting visitor centres create retail and marketing opportunities for private tourist developers and the commercial sector. The commercial benefits of interpretation, while easily recognised by private tourist operators can lead to conflicting and inaccurate information. An example of a strategy to manage ‘private’ interpretation by a government agency is *The Tasmanian Advantage* (TPWS 2003) aimed at developing detailed consistent knowledge about the environment and interpretive skills for Tasmania’s ecotourism business operators.

5.2.2 Australian site interpretation

Interpretation of the natural environment is delivered on-site or off-site, in a variety of ways; ranging from visitor centres, interpretive trails and websites to the use of the landscape itself as an interpretive tool. A distinction is made between face-to-face, personal interpretation with people conducting talks, walks and dramas; and stand alone or impersonal interpretation provided by signs, panels, driving or walking trails. The appearance of visitor centres and interpretive centres since the 1980s in the Australian cultural landscape is a relatively recent phenomenon (Beckman 1989, 48), and is linked to the development of interpretation design. Visitor centres provide a focused introduction to a park or region through information, interpretation orientation and visitor facilities. Other terms used to describe such centres include welcome centre, tourist information centre, interpretive centres and visitor resource centre (Pearce 2004, 9). In 1991, tourism researcher Gianna Moscardo (1991) described Australia as in the grip of visitor centre fever, following trends set in Britain and North America, where visitor centres have been providing access and information for much longer. At the same time, Philip Pearce describes visitor centres as an ‘emerging built feature in the landscape, a new force reflecting changing public attitudes expectations and consciousness’ (Pearce 1991a, 8).

Visitor centres have now become part of the cultural landscape of tourism. As well as the task of enriching visitor experience, most national parks authorities also regard visitor centres as playing an equally important role as a management tool, especially in managing the pressure of increasing numbers of visitors in a fragile environment such as the Tasmanian Wilderness World heritage Area (Sugden 1991). While acknowledging that visitor centres throughout the world exhibit great diversity in their scale, location and focus, Pearce (1991a) describes visitor centres as fulfilling four functions:

- Marketing and access – the active promotion of an area or product.
- Information and enhancements – enriching the visitor experience through appreciation of the product.
- Control and filtering – regulating the pressure of visitors on a fragile resource.
- Substitution – where the visitor centre becomes the attraction as the resource may be inaccessible or too scattered for many visitors (e.g. marine or desert environments). (Pearce 1991a).

The Great Barrier Reef Marine Park Centre in Queensland is an example of the substitution function in operation; where the marine environment of the reef is many kilometres out to sea and inaccessible to the majority of visitors, limited by time, money, or physical capabilities such as diving skills. Another example of substitution is the visitor centre at Lake St Clair-Cradle Mountain National Park in Tasmania. Cradle Mountain the iconic feature of the park is often not visible due to weather conditions and therefore the visitor centre has to act as a substitute for not being able to see the mountain itself. Ballantyne and Uzzell (1999, 61), notes that the rise in the popularity of interpretation has in some instances caused the visitor centre to become a tourist attraction in its own right, and in doing so, ‘upstages’ the site that it is promoting. Comments from rangers at national parks indicate that for many reasons some visitors fail to venture beyond the visitor centre to experience the natural environment, particularly in harsh weather conditions—sometimes because the visitor centre provides a perceived substitute for the real experience. Pearce (2004) sees the visitor centre as playing an important role within a region’s tourism activities and adds the symbolic value of a visitor centre as a further function to those he outlined previously. Visitor centres signal the importance of a town or site for tourists, (Pearce 2004,11), and for this reason it is important to gain community support for the centre in its initial planning and design (Fallon and Kriwoken 2003).

5.3 Regulatory framework of interpretation

Australian interpreters work within a broad regulatory framework that governs the presentation and communication dimensions of protected areas. Legal and administrative conventions govern the mandatory public communication activities of heritage, tourism and protected area agencies. While designers are usually contracted directly by a client, often a government, heritage or conservation agency; there is a larger framework of legally binding conventions that regulate conservation and heritage activity both on a national and global level.

5.3.1 Protected areas

The concept of a ‘protected area’ is useful when discussing the regulatory framework for managing natural and cultural heritage. A protected area is an international classification specified by the World Conservation Union (IUCN) to recognise areas that are protected for their natural or cultural significance. A protected area as defined by the World Conservation Union (IUCN) is:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means (UNESCO 1972).

The IUCN specifies six categories of protected areas protected area which are:

1. Strict nature reserve/wilderness area: protected area managed mainly for science or wilderness protection.
2. National park: protected area managed mainly for ecosystem protection and recreation
3. Natural Monument: protected area managed mainly for conservation of specific natural features.

4. Habitat/Species Management Area: protected area managed mainly for conservation through management intervention.
5. Protected Landscape/Seascape: protected area managed mainly for landscape/seascape protection and recreation.
6. Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems (UNESCO 1972).

These IUCN categories of protected areas form a guide to consistent land management by a range federal, state and territory agencies. In Australia The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and state legislation covers the 6,755 protected areas which comprise 10.08% of Australian land, a total of 77,461,951 hectares. Of this protected land there are 533 national parks, or 3.66% of Australian land, totalling 28,159,653 hectares (Australian Department of the Environment and Heritage). The type of areas managed in Australia vary, and range from strictly protected areas managed mainly for science with very little public access, to areas where recreation is encouraged, but not resource development detrimental to the conservation of the environment. There are also multiple use areas where ecologically sustainable resource utilisation, recreation and nature conservation can coexist (ABS, 2004). An idea of the range of protected areas within one state can be gained by looking at the list of protected areas in Tasmania where protected areas comprise a large proportion (36.83%) of the area of the State and include: conservation areas, forest reserves, game reserves, historic sites, indigenous protected areas, marine nature reserves, national parks, nature recreation areas, nature reserves, protected areas, regional reserves and state recreation areas. In total, the Tasmania Parks and Wildlife Service manages 423 reserves covering 2,508,297 hectares, or about 36.83% of the area of the State. Strategies for managing the demands placed on natural areas by tourists include communication and education about appropriate behaviour in protected areas, regulation enforcement, and minimising visitor impact on fragile natural environments (Beckman 1989, 148).

5.3.2 Communication mandates

Agencies responsible for the management of protected areas have a legal mandate and responsibility to communicate both locally, and in the case of World Heritage areas globally. Wherever there is public access to protected areas for recreation or research, there is a need to inform and regulate visitors. Policies governing the delivery of communication to visitors to protected areas are developed by land protection agencies. For example the following extract from the Parks Victoria's Information, Interpretation and Education Manual outlines their communication policy:

Information, interpretation and education are part of the core business of Parks Victoria. They enable the organisation to carry out the objective of the national parks Act 1975 that relates to Information, Interpretation and Education, which is "to make provision...for the use of the parks by the public for the purposes of enjoyment, recreation or education and for the encouragement and control of that use (Parks Victoria 2003).

Agencies develop, monitor and evaluate interpretation and education programs and visitor services and are bound by their policy, guidelines and charters by which they are governed. Places and objects may require conservation strategies, for consent permissions

to be given and for heritage and environmental impact assessments to be conducted. The interpretation policy of a particular agency will determine how the communication of a particular item or place is handled. According to The New South Wales Heritage Office an interpretation policy:

Consists of clauses and guidelines that provide an intellectual and conceptual framework for communicating the significance of an item. Policies may deal with fabric, setting, history, archaeology, audiences and other people, contents related places and objects, disturbance of fabric, research and records (New South Wales Heritage Office 2005, 3).

The interpretation policy of the land protection agency will inform the development of an interpretation plan, which provides detailed strategies for interpreting a heritage item or place. It is with this plan that the designer will work, in conjunction with the agency, to formulate a communication plan for the interpretation design.

5.3.3 Interpretation and education programmes

References to interpretation as a key tool in the management of protected areas can be found within the conventions, management plans and mission statements of international and national heritage and protection organisations. The International Council on Monuments and Sites (ICOMOS) is a professional association that works for the conservation and protection of cultural heritage places around the world. ICOMOS was founded in 1965 as a result of the Venice Charter of 1964 and offers advice to UNESCO on World Heritage Sites. As a precursor to ICOMOS the Athens Conference on the restoration of historic buildings in 1931, organized by the International Museums Office proposed the idea of international heritage. In the Athens Charter 1931, the role of education in preserving heritage is first mentioned in the following way:

- The role of education in the respect of monuments.
- The conference, firmly convinced that the best guarantee in the matter of the preservation of monuments and works of art derives from the respect and attachment of the peoples themselves.
- Considering that these feelings can very largely be promoted by appropriate action on the part of public authorities.

(The Athens Charter 1931).

In 1964, the Second Congress of Architects and Specialists of Historic Buildings meeting in Venice, put forward the International Charter on the Conservation and Restoration of Monuments and Sites, better known as the Venice Charter and created ICOMOS to carry out this charter. An Australian Branch of ICOMOS was formed in 1976, and in 1979, adopted the *The Burra Charter* (2008) which defines the basic principles and procedures to be followed in the conservation of Australian heritage places.

The Burra Charter accepted the philosophy and concepts of the Venice Charter, but wrote them in a form which would translate to an Australian context. The Athens, Venice and Burra charters form the guiding principles for heritage management in Australia and have been updated and amended to respond to shifting perspectives and definitions of heritage, *The Burra Charter* was revised in 1999, to take account of changes in

conservation practices, significantly, to now include and acknowledge the meaning people attach to place and the less tangible aspects of cultural significance, including memories, meanings and the symbolic significance of places. The definitions in article 1 of the charter give context to the way ICOMOS principles apply in Australian interpretation practice:

1.15 Associations mean the special connections that exist between people and a *place*.

Associations may include social or spiritual values and cultural responsibilities for a place.

1.16 Meanings denote what a *place* signifies, indicates, evokes or expresses.

Meanings generally relate to intangible aspects such as symbolic qualities and memories.

1.17 Interpretation means all the ways of presenting the *cultural significance* of a *place*.

Interpretation may be a combination of the treatment of the fabric (e.g. maintenance, restoration, reconstruction); the use of and activities at the place; and the use of introduced explanatory material (*The Burra Charter 2008*).

In 2007, the American organisation, International Network for Traditional Building, Architecture and Urbanism (INTBAU) wrote a declaration on the Venice Charter, updating it to reflect new problems and complexities that exist in maintaining sustainable environments and acknowledging challenges that lie beyond Europe and the United States. The preamble makes particular note of the importance of interpretive work, stating:

the goal of authenticity must not be interpreted to require an absolute state of preservation of pre-categorised moments in time. Rather it must reflect the complex pattern of change and recurrence across the ages, including the present. It is to be established as much in interpretive materials as it is in the techniques of accurate conservation (INTBAU 2008).

Michael Mehaffy in commenting on the INTBAU declaration goes further in saying that interpretation itself becomes part of heritage. He writes;

so much of what heritage is, clearly, is within the living narrative of a culture, so interpretation is not only an important tool for heritage — it is a key part of it! More so than any presumed fixed set of "historically accurate" structures. As we now know, that is much too neat and over-simplified a view of things! (M. Mehaffy February 14, 2008).

5.4 Summary – Interpretation

Interpretation is the communication tool that helps to provide quality visitor experience as well as regulate visitor impact. Ensuring environmental protection is balanced with the demands of tourism and recreation is a complex and difficult problem facing governments and management authorities. Communication, therefore, is a key strategy towards raising awareness of complex issues and to control visitor behaviour. Moscardo argues that the role of effective communication is crucial in making tourism and recreation more sustainable, writing:

Effective communication with visitors can help managers by directing visitors to choose activities wisely, by creating positive and rewarding experiences, by informing visitors about appropriate behaviour, and by creating careful, rather than careless, visitors (Moscardo 1999, 18).

In the 21st Century, environmental problems and issues facing the planet are increasingly complex and difficult. Interpretation takes up the challenge of communicating information that directly affects people's relationship with places, both on a local and global level. Effective communication about history, conservation, biodiversity, sustainability and other environmental issues is crucial for the stewardship of places of significant heritage value.

The role and significance of interpretation is written into a number of conventions and charters on the preservation of natural heritage. This is, in turn, interpreted by individual agencies and organisations charged with the management of protected areas, through management plans, communication strategies and interpretation plans. Interpretation designers are engaged to give visual form to the communication requirements of heritage and tourism agencies bringing interpreters and designers together in collaboration to fulfill the communication and education mandates of these agencies. Both disciplines; interpretation and design, have the imperative to communicate. Interpreters using words, stories and narratives to provoke questions and reveal meanings attached to place, and designers using text, image, signs and visual media to communicate, inform and educate.

This chapter has established the following elements of the conceptual thematic framework for interpretation design:

- The origins, language and definitions of interpretation.
- The site-specific dimensions of interpretation in Australia.
- A framework of the regulatory bodies and conventions governing interpretation in Australia.

This chapter has presented the professional context of interpretation. The next chapter will present the practice of interpretation design.

Chapter 6 – Interpretation design

6.0 Introduction

Interpretation design is the focus of this research. Where previous chapters have treated the professional perspectives of design and interpretation separately, this chapter will bring these two fields together and delineate interpretation design as a specific form of design practice. Interpretation design within Australia has emerged as a specialist field of design during the 1980s and 1990s alongside an increase in visitation to sites of natural and cultural heritage significance. From the 1990s onwards, museums worldwide have experienced a huge increase in popularity. Falk and Dierking (2000) note that museum-going is rapidly becoming the single most popular, out of home family activity in America. In Australia there has been a similar rise in interest in museums with a number of significant new museums opening from the 1990s onwards (Healy and Whitcomb 2003). Tim Flannery, previously director of the South Australian Museum, comments that this trend is counter intuitive given competition from other forms of recreation and media:

You would have thought that in competition with all the other media that modern museums—being an antiquated 19th Century invention—would be fading, but they are not, not by any means. The opposite is the case (Sexton 2000).

Interpretation design in place-based interpretive and visitor centres has also ‘surfaced’ since the early 1980s as a specialised area of design activity focused on presenting natural and cultural heritage to audiences in visitor settings. Interpretation design has accompanied the expansion of communication generated by tourism, land management and conservation activities. In Australia, impetus for the promotion of places of natural and cultural significance followed the signing of the UNESCO World Heritage Convention in 1974, bringing with it a greater awareness of environmental, heritage and conservation issues.

Where interpretation originates from a background of spoken language, narrative and storytelling, communication design has origins in visual language, using graphics, images and text. Designers transform interpretation from intangible spoken form to visible, tangible form. Where professional interpreters develop overall strategies for interpretation, communication designers develop the visual, designed interface. Michael Ettema, former curator of the Henry Ford Museum in Michigan highlights the potential of design to create powerful communication in interpretive settings:

If you talk to educators who deal with learning styles they will tell you the most deeply effective learning, the most remembered learning, is learning that employs the senses and particularly the emotions, and that's what design does particularly well. The historian and curator can lay out the story and can communicate it using words and emotion, but what intensifies the emotional effectiveness, the sensory effectiveness, and therefore the educational value and the learning potential of the story, is the manipulation of the design elements (Ettema 1997, 197).

Examining interpretation design from the perspective of practice, adds practical definition to the conceptual framework for interpretation design, distinguishes it as a specialist form of design.

6.1 Features of interpretation design

In Chapter 4, I proposed that the emergence of interpretation design as a sub-field of design, reflects postmodernist tendencies that are evident in the wider contemporary design practice during the historical time frame of 1980 – 2006. As a hybrid design field, interpretation design has characteristics of contemporary design practice, whereby projects are large-scale, complex and interdisciplinary. The expertise of a range of specialists working in clusters and teams is harnessed and diverse media platforms communicate complex messages that educate, raise awareness and provide experiences and entertainment for visitors. Interpretation design takes a holistic approach to designing the visitor's total experience, through a human-centred, multi-sensory approach. Interpretation design extends the visitor experience beyond the confines of a gallery or museum and the design of displays and exhibits, and is linked to more expansive systems of knowledge, experience and concerns about natural and cultural heritage. Distinctive features of interpretation design include collaborative problem solving, diverse media platforms, a focus on human-centred approaches and a combination of information design and interpretive strategies.

6.1.1 Collaborative and complex

Design for interpretive settings encompasses a wide range of activities that range from producing engaging and robust exhibits to strategies that educate visitors about natural and cultural heritage. In this context, design artefacts includes both tangible (e.g. exhibits, publications, signs, websites), and non-tangible (e.g. strategies to educate, guide, entertain and protect visitors) outcomes. Interpretation design projects, because of their scale and complexity, involve more complex problems than the simple, linear solutions of traditional design approaches. Interpretation projects harness the expertise of teams of people from a range of professions including historians, writers, educators, scientists, architects, fabricators and artists. The designer's task is to give visual form to information that may already exist as ideas, words, concepts, photographs, artefacts, documents and objects. Interpretation and interpretation design however, entail more than choices of media. Lorraine Edmunds explains the breadth of a professional interpreter's role, writing:

To a practitioner, interpretation means so much more: meanings agreed and contested, audiences existing and potential, constraints political and economic, as well as media according to sites and resources (Edmunds 2004, 5).

In response to the interpretation brief, designers devise a communication strategy including recommendations about the most appropriate media to convey a given message. Alongside traditional print-based media, designers now use a range of communicative media described variously as 3-D, time-based, digital, screen-based, audio, multi-media

and web-based media. Appropriate communication solutions, systems and formats are recommended and a communication strategy is developed.

6.1.2 Human-centred approach

A human-centred perspective is crucial for any discussion of interpretation design, where the focus on audience behaviour, attitudes and action in heritage settings, takes precedence over visual style or aesthetics. Human-centred approaches emphasise the social dimension of design, positioning communication design as a significant activity capable of influencing social behaviour and attitudes (Frascara 1995). In heritage settings communicative effectiveness and behavioural change is paramount; where the aims of communicating messages about natural and cultural heritage, as well as safety and regulatory information have priority over the production of visually pleasing objects. This approach, not only acknowledges the audience, but also regards the receiver as an active participant in the interpretation and construction of meaning (Tyler 1995). A human-centred perspective focuses on the importance of the audience in receiving and interpreting meaning in preparation for action, where visitor safety, experience and attitudes towards the natural environment hinge on effective communication. Therefore design in natural heritage settings frequently targets the moment preceding action. For instance, the safety of a visitor planning a walking expedition in a national park rests on gathering information prior to setting off about everything from weather conditions, camping, wildlife, navigation and regulations to an appreciation of the natural and cultural aspects of the place.

6.1.3 Integration of interpretation and information

Tilden's (1977, 8 – 9) principles of interpretation treat interpretation and information as two separate attributes:

Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However all interpretation includes information (Tilden 1977).

This distinction between information and interpretation is echoed in Parks Victoria's Communication Strategy, stating that information is objective, neutral and doesn't involve feelings or attitudes, whereas interpretation communicates ideas, feelings and values (Parks Victoria 2003). Such distinctions, between information and interpretation, reflect what Coyne and Snodgrass (1991) refer to as a 'dual knowledge thesis', a position that regards there are two ways of thinking; logical, analytical, rational and objective on the one hand and subjective, idiosyncratic and irrational on the other. From the perspective of interpretation practice, interpretation is associated with affective communication, and information is associated with a more neutral rational approach.

The oppositions of interpretation and information are also present in the field of communication design but are manifest differently. In communication design 'information design', has emerged as a distinct design approach which produces timetables, manuals, wayfinding systems, maps, instructions, manuals, and has an

emphasis on the needs of the audience and communication. Its knowledge base comes from the behavioural sciences, especially cognitive psychology, ergonomics and environmental psychology (Passini 1999, 87). Information design is often perceived to be free of the rhetoric of the more expressive aesthetic of graphic design derived from 20th Century art movements such as Art Deco, Dada and Modernism, and found in forms of design such as illustration, advertising publishing and packaging. Bonsiepe (1965), Kinross (1989) and Robertson (2003), argue that there is no such thing as ‘pure information’ expressed as neutral or value free design, and that every symbol and design decision expresses a myriad of values (Robertson 2003, 8). Drawing from both fields of interpretation and communication design, interpretation design includes both expressive, interpretive and information design approaches.

The quality of the designed interface determines the capacity to communicate either powerfully, clearly and convincingly, or poorly and ineffectively. The tone and manner of the communication is an affective component which is recognised by Parks Victoria as being an important dimension of the ‘friendliness’ of the design:

Information can be given in a friendly or unfriendly, or even hostile manner. A sign can be well designed and show respect for the site and the reader, or poorly presented suggesting indifference and lack of respect (PV 2003 1.1, 3)

Instead of being treated as oppositions, Tyler (1995) argues that human-centred design values both information and interpretation, and that both approaches are essential to effective communication:

The valuing of emotions and ideas by interpretation over the neutral quality of information is antithetical to the philosophy of human centred design approaches which incorporates both qualities. Human centred approaches acknowledge that good communication will always require audience interpretation, judgement and analysis while clarity of information is also valued (Tyler 1995).

Tyler’s comments are particularly relevant for interpretation design, which balances both information and interpretation. Interpretation about the natural environment will most often be expressed via a focussed thematic format centred on the site and its immediate environment. Content includes both scientific data and information as well as expressive ideas about history, culture, ecology and conservation, reflecting Romantic and hermeneutic influences on the professional practice of interpretation. Site interpretation, with its emphasis on first-hand experience, which is provided by the immediate tangible qualities of place does not exclude design strategies which integrate and include ‘information’. Interpretation designers therefore, are also part of the interpretive process, balancing the designer’s voice, and the client’s messages with the audience’s needs. This is a more complex approach, than communicating from a purely expressive or information based perspective.

6.2 Issues in Australian interpretation design

The interpretation of issues such as heritage ownership, environmental impacts and historical events are complex and open to contestation, particularly from within a

postmodernist paradigm. The literature review highlights several important issues for Australian interpreters including; (1) indigenous and heritage contested histories, (2) interpreting emotive issues and (3) the rise of ecotourism and environmental issues. Here these issues are examined further from design perspective highlighting their implications for interpretation designers.

6.2.1 *Indigenous heritage and contested histories*

The interpretation profession supports the Iga Warta statement ‘that Aboriginal people should control the representation and interpretation of their own culture and country’ (IAA 2003, 3). This resolution was adopted by the Interpretation Australia Association in the Flinders Ranges in 2002 and guidelines for interpreting Australian Aboriginal and Torres Strait Islander culture have since been developed (IAA 2006). Designers and interpreters make indigenous culture visible, however this requires being aware of and working within protocols regarding written and visual resources, and working with communities and artists to ensure intellectual property rights and copyright of stories and images are safeguarded. In supporting the Iga Warta statement, interpretation designers must ‘collaborate with indigenous people on the design and production of brochures, fact sheets, fliers, booklets, educational materials, websites, park notes, videos, photographs, motifs, clothing, advertisements, oral recordings and music’ (IAA 2006, 9). In doing so interpretation designers need to refer to guidelines developed by interpretation Australia, governing the use of publications, and interpretive material;

- Language must be accurate, based on research, and culturally sensitive.
- Ensure Aboriginal custodianship and culture is referred to in the present tense, unless the community wants it otherwise.
- Develop a glossary of words to be avoided.
- Use the present tense when discussing people and country.
- The whole design process is subject to community approval: lay out, colour, use of symbols and images.
- Ensure correct use of symbols, motifs and logos.
- Consider using Aboriginal names as the norm, with colonial names as secondary.
- All signage located in natural and cultural sites should acknowledge the local Aboriginal people in accordance with their wishes (IAA 2006, 9).

Waite and Figueroa (2008, 297) argue that since much of indigenous culture is invisible to European settlers, what needs to occur is as ‘a shift in consciousness, whereby the invisible and embodied qualities of indigenous country, myth and ethnicity are made present’.

By contributing with respect to the process of reconciliation,—both at a personal and at a public level, there is much can designers to do to make indigenous culture visible.

Designer David Lancashire leads the field of interpretation design in his commitment to telling Aboriginal people’s stories, history and culture. When interviewed for this research he explained the necessity for indigenous people to control the representation of their own culture and country:

With dealing with indigenous culture that's a whole different ball game again, because you have to remain transparent...I can't experience black fella's angst because they were really worked over, they are carrying baggage...We talk to the right people, and that is half the secret, well its not a secret, you *have* to talk to the right people....if you don't you've got all sorts of problems through lack of knowledge. Being a white person interpreting a black person's history, that is changing, there's black people telling their own history and so they should. Even so, I can feel there's this reserve from white people, of not really getting in balls and all, they back off from real issues, I think you *should* actually confront real issues whether they are distasteful or not. That's a problem when it's a Disneyland view of the world (Woodward 2007b, 17).

Case studies which use design strategies that deal with contested histories and emotive issues, include the Lake St Clair visitor centre and cultural heritage walk in central Tasmania p142 and the Strahan visitor centre p151. These are examples of a site being inscribed with several contested histories and how an interpretation program attempts to represent these stories. David Lancashire's projects, the Bowali Visitor Centre at Kakadu National Park p135 and Bunjilaka Aboriginal Centre Melbourne Museum p137 both represent best practice of working with indigenous people.

6.2.2 *Emotive issues and 'hot' interpretation*

The issue of interpreting controversial topics and events, also referred to as 'hot' interpretation, poses challenges for interpretation designers. Interpreters dealing with controversial issues can be accused of being either too neutral and passive – risking sanitising an issue, or, at the other extreme, playing a more active, confronting role that may lead to conflict and polarisation and accusations of bias (Ballantyne and Uzzell 1999). Designed artefacts are not 'neutral' or free of rhetoric (Kinross 1989, Roberston 2003). In communicating about any issue, designers, through the designed interface, are employing strategies to convince, persuade, and communicate. Designing with the awareness and recognition that the designed artefact is the visual manifestation of the interpretive message, (whether 'cold', 'neutral' or 'hot') gives significant power and responsibility to interpreters and designers. This however is not an unproblematic process, bringing with it unintended interpretations and consequences as Ballantyne and Uzzell highlight in discussing a postmodernist interpretive approach:

It is contended that postmodern museums such as The Museum of Sydney fall into this category, where the goal is allegedly to get away from, the 'master narrative' and allow the visitor to construct meaning from the bricolage of artefacts that provides the vestigial evidence of the past. For some, though, such an approach in which it seems that information is deliberately 'hidden' only serves to obscure the past, making the creation of meaning by visitors difficult (Ballantyne and Uzzell 1999, 64).

For designers, presenting controversial issues means being aware of and navigating tensions and challenges arising from conflicted views, balanced with the needs of both the client and audience. This is a complex process, which challenges a designer's ideological stance and commitment to communicate responsibly and ethically about

difficult issues. It also presents opportunities to contribute to public discussion and debate, on topics such as indigenous culture, environmental issues and immigration.

6.2.3 Ecotourism and environmental issues

Ecotourism projects raise complex ethical, social and environmental considerations for interpreters and designers. The ‘green’ messages of ecotourism are not neutral or free of the rhetoric of the commissioning agent. Ballantyne and Uzzell (1999) urge caution over the motivations underlying ecotourism operators, a consideration that designers and all team members need to take into account:

Should interpretive messages be designed to suit (a) the purposes of the provider whose bottom line usually relates to considerations of profit or land management objectives; (b) the visitor, whose reason for visiting may be recreation, entertainment or education; (c) the site/habitat itself that needs to be protected and conserved; or (d) the needs of the wider society for greater environmental awareness? A further challenge lies in the dilemma that visitation may contribute to the destruction of the site/habitat on which the experience depends (Ballantyne and Uzzell 1999, 62).

As interpretation becomes a ‘mainstream’ tool for ecotourism, the content and design of messages for ecotourism warrant careful research and evaluation by interpreters and designers. Before undertaking such projects team members need to be aware of the intended, and potentially unintended, consequences of the communication and this awareness forms the foundation for designer’s professional and ethical code of conduct.

6.3 The practice of interpretation design

This section provides an overview of the practice of interpretation design. The discussion is informed by my professional experience as a communication designer and information contributed by a number of designers I interviewed during the research process. These designers provided comments through surveys, public discourse, documents and materials relating to interpretation design. Combined together, this section aims to build a background of some of the working processes and conditions of designers working in this field.

Within the context of communication design practice, interpretation projects are generally complex, lengthy and large scale. They involve multiple stakeholders, are usually high budget, include multiple media communication formats, are information-based and are commonly housed in a dedicated or purpose-built environment such as a visitor centre, or museum. Interpretation projects typify the contemporary evolution of communication design into a practice that works across media, with a significant management component, involving teams of professionals outside of design, and with diverse interdisciplinary content. While interpretation projects will vary in scale, duration and complexity, there are some stages and processes common to all projects.

6.3.1 Design stages

Designers are usually engaged on interpretation projects either as individual contractors or as part of a collaborative team, responding to an interpretation brief through a tendering process. Prior to the involvement of a designer or team, is the development of a brief for a particular interpretation program and the preparation of an interpretation plan. All aspects of the interpretation project are guided by the interpretation policy of the client organisation, which provides a general philosophical framework for action in managing heritage assets. Interpreters or interpretation consultants are engaged to write interpretation plans, and it is the role of the designer to translate the plans of an interpreter into a tangible physical reality (National Trust of Australia (WA) 2007, 26 – 27). Once a comprehensive plan has been written, specific projects with their own design brief will be developed. The National Trust of Australia (WA) and Museums Australia (WA) outline three stages for an interpretation project and although designers are generally engaged at stage 3 in this scheme, they may be also involved at earlier stages.

Interpretation Project Stages
Step 1 Background tasks
Interpretation Plan Set objectives and priorities Form steering committee Identify and consult stakeholders Research Themes and stories, including key messages Identify target audiences and test plans
Step 2 Planning
Develop brief, containing interpretation approach, key themes and storylines, target audience, learning objectives, scope of work Appointment of consultants(s) Production timetable/costing Preparation of grant application
Step 3 Implementation
Design Preparation of stories, text writing Copying of pictures maps and diagrams Permissions and copyright clearance Fabrication installation Presentation to audiences Evaluation

Table 4: Interpretation Project Stages. Source: (National Trust of Australia WA 2007, 29).

Depending on the scale of their business, some specialist interpretation designers will have in-house researchers, designers and writers. Others will align themselves with specialist contractors and consultants in response to a particular project, and form a team to respond to a particular brief or tender document. Designers may also be contracted individually by a particular agency such as a national parks authority and will go on to collaborate with a team selected by that agency. Commonly, teams of consultants including designers, writers, researchers and architects respond to interpretation briefs via

a competitive tendering process. The following proposal synopsis comes from a team which included a graphic designer, a writer, an architect, and a furniture designer and an interpretive consultant. It introduces the team's response to an interpretation project brief for the Strahan Visitor Centre (now called the Strahan Wharf Centre) on Tasmania's West Coast. The synopsis highlights the team's philosophy of integrating disciplines and a collaborative approach:

This submission is a response to the request for the development of a concept for the interpretation component of the Strahan Visitor Centre, and also associated with this concept, there is an overall architectural submission as we are of the belief that the two are completely inter-related, and developing a solution to one should involve resolving the other. This submission proposes to create a unique visitor centre for Strahan utilising the diverse skills of a wide range of Tasmania's finest artists and craftsmen, working in collaboration with some of Tasmania's most acclaimed architects to produce a total environment with a 'spirit of place' worthy of the importance of the project. The basis is the idea of creating an initially small but comprehensive design team to evoke a detailed brief and subsequently prepare a preliminary schematic solution for the project in conjunction with the Forestry Commission and Department of Parks, Wildlife and Heritage. (K. Perkins, Personal Communication 1999).

6.3.2 Design process

The management of a design project is guided by a professionally recognised 'design process', a structure which enhances quality control. The design process is a staged project progression through which the client's communication needs are met. The Australian Graphic Design Association (AGDA) outlines the stages in a typical design project acknowledging that 'no single document could possibly encompass all the permutations and unique details that each graphic design project generates during its development and implementation' (AGDA 1996, 3). To envisage the stages in an interpretation design project I have adapted the AGDA print-based graphic design process map, to illustrate the flow of interpretation design projects incorporating diverse media, and a 3D environment.

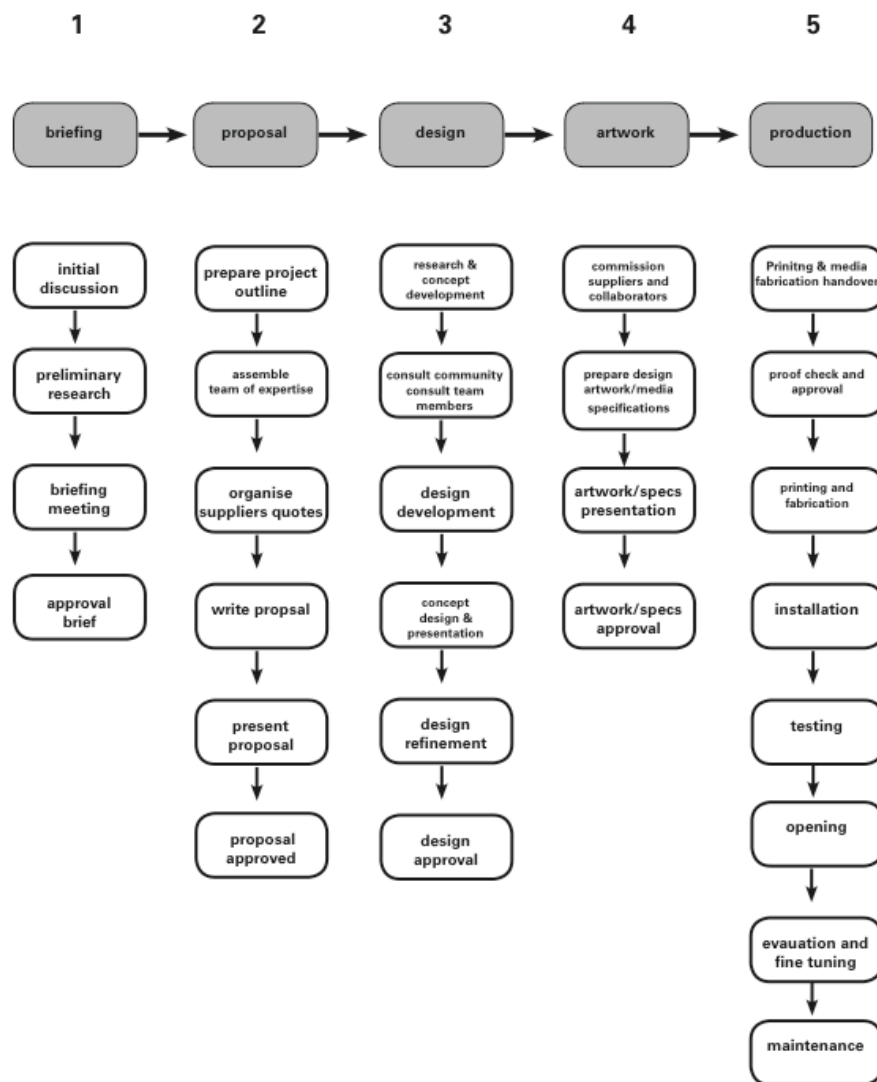


Figure 7: Interpretation Design Process Map.

Adapted from Australian Graphic Design Association (AGDA Graphic Design Process map).

The complexity of interpretation projects with their multiple media outcomes, has led to a multi-staged process, with production no longer limited to print, but expanded to include 3-dimensional, screen-based, exhibition, sound and lighting design. This multi-faceted approach necessitates the inclusion of 3-dimensional and exhibition design considerations. From a visitor studies perspective, Knudson et al (2003) list aspects to consider in planning exhibition design:

- the interpretive messages, facts and their sequence
- the media for presenting the messages — print, audio, artefacts, interactive methods
- writing style and organisation that focuses on the artefacts
- the visitors, their behaviour, their interests, their comfort, their interaction
- visitor vision and line of sight

- lighting and audio design
 - the use of touch, sound, odour, kinetics, maybe even taste, to communicate
 - visitor traffic flow accounting for variable rates of movement
 - the aesthetics of interior design and colour
 - the harmony of exhibits working as a group — sizes, colours typography content.
- (Knudson et al 2003, 219).

Following the initial briefing and discussion between client and designer, the designer prepares a written proposal, sometimes also called a return brief. This is the opportunity for the designer to demonstrate their understanding of the brief, and to move beyond simply reflecting and servicing the client's needs, and instead, include dimensions that reflect the designer's values and philosophy. Designers may for example make recommendations that take into account, sustainable practices, materials and productions. The return brief is also the opportunity for the designer to communicate their understanding of the complexities of the brief, cultural sensitivities and issues of representation. An awareness of these issues forms part of a designer's professional practice and code of conduct.

Typically a return brief and proposal will include; communication objectives, design and production fees, timetable, terms and conditions of engagement including copyright assignment. This stage may also include procuring subcontractor quotes from writers, researchers, fabricators, manufacturers, and architects. Samples of proposals, submissions, design plans and strategy documents in response to interpretation briefs, have been offered by some designers as a contribution to this research; however, much of the project developmental material was covered by confidentiality agreements and unavailable for scrutiny. Past tenders for specific projects were also sought from State and Federal government departments and institutions but as the tendering period had lapsed many of these were no longer publicly accessible. Current documents open for tender give an indication of the level of detail of an interpretation project brief.

6.3.3 Interpretation designer's workplace





Typically, an interpretation design project would involve designers liaising with multiple stakeholders and suppliers. For many designers working on natural heritage interpretation projects, work is conducted both in a studio environment and on-site, often in remote locations. Initial research and consultation with communities, supervising installation, building and co-ordinating site-specific art works, may involve designers working at the project site. One designer working on a visitor centre project communicating Australian indigenous culture described how in order to gather stories and understand the project he and his family spent some months living in the local indigenous community in order to present their culture genuinely.

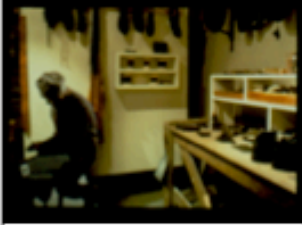
6.4 Summary interpretation design


After examining the literature for the background, history, status and research traditions of both design and interpretation, it is possible at this point to add to the conceptual thematic framework the following features of Australian interpretation design:


- Interpretation design sits at the intersection of visual and spoken languages and is a hybrid of the communication patterns of interpretation and design.
- Designed artefacts are non-media specific, utilizing 3-D, time-based, digital, screen-based, audio, multi-media and web-based media.
- The design focus responds is site-specific, experiential, educative and multi-sensory rather than object or product-centred.
- Interpretation design projects engage designers and other specialist team members in collaborative modes of working.
- Projects engage designers with more complex and challenging content, ethical issues and technical problem solving than traditional design projects.


A selection of interpretation projects are examined in depth in Chapter 10 – Interpretation design: site visits and case studies, and also in Chapter 13 – Interpretation design pattern language. A selection of sites and interpretation design projects visited or discussed in this research are summarised in the following pages. Having built a picture of interpretation design, as a specialised field within design, the next chapter examines tourism as the third and final professional context for interpretation design.


1 	Bowali Visitor Centre	Site Bowali Visitor Centre, Kakadu National Park, Northern Territory	Management/ Ownership Parks Australia	Resource/ Theme – Indigenous and natural history
		Interpretative Elements – Sequence of spaces depicting different natural habitats	Designer/ Architect – David Lancashire Design – Troppo Architects	Date 1992
2 	Federation Tapestry, Melbourne Museum	Site Federation Tapestry Melbourne Museum	Management/ Ownership Commissioned by Government of Australia, Museum of Victoria	Resource/ Theme – Centenary of Australian Federation/ national identity
		Interpretative Elements – Tapestry as interpretive device	Designer/ Architect – Designer: Murray Walker – Weavers: Victorian Tapestry Workshop – Artists: Martin Sharp, Bruce Petty, Ron Tandberg, Celia Rosser, Mirka Mora Charlotte Walker, Students of Malvern Central School and Echaca Primary School, Students from primary schools in Echaca, Cape Barren Island and Bathurst Island, William Barak and Tommy McRae (Yakadana), Reg Mombassa, Ginger Riley Mandurwalwala	Date 2001
3A 	Leeawaleena, Lake St Clair Visitor Centre	Site Leeawaleena Lake St Clair Visitor Centre, Lake St Clair Tasmania	Management/ Ownership Tasmanian Parks and Wildlife Service	Resource/ Theme – World heritage area – Geology and glaciation – Flora and fauna – Aboriginal history – European history – Recreation – Issues and management – Timeline
		Interpretative Elements – Touch screens – Geological timeline – Hologram – Stereoscopic photographs – Sculpture	Designer/ Architect – ECP Design Associates	Date 1995
3B 	Larmairremener tabelti	Site Larmairremener tabelti Cultural Walk, Lake St Clair Tasmania	Management/ Ownership Tasmanian Parks and Wildlife Service, Tasmanian Aboriginal Land Council	Resource/ Theme – Continuous Tasmanian indigenous connection to country
		Interpretative Elements – Fibre Sculpture Cultural Walk	Designer/ Architect – Designer Julie Hawkins – Artists: Muriel Maynard, Lola Greeno and Vicki West, Julie Gough	Date 2001

4A 	Port Arthur Historic Site Visitor Centre	Site Port Arthur Historic Site Visitor Centre, Port Arthur, Tasmania	Management/ Ownership Port Arthur Management Authority	Resource/ Theme – Australian Convict site Convict history 1830 – 1870
		Interpretative Elements – Visitor centre – Interactive displays – Lottery of life card game	Designer/ Architect – Phillip Lighton Architects – Roar Three Design	Date 1999


4B 	The Port Arthur project	Site The Port Arthur Project, Port Arthur, Tasmania	Management/ Ownership Ten Days on the Island Festival	Resource/ Theme – Australian Convict site Convict history 1830 – 1870
		Interpretative Elements – Site-specific art exhibition	Designer/ Architect – Curated By Julia Clark and Noel Frankham	Date 2007

5 	Cataract Gorge and Cliff Grounds	Site Cataract Gorge and Cliff Grounds, Launceston, Tasmania	Management/ Ownership Launceston City Council	Resource/ Theme – Local history – Recreation
		Interpretative Elements – Interpretive panels in Victorian era rotunda	Designer/ Architect – Root projects Australia	Date 2004

6 	Strahan Visitor Centre	Site Strahan Visitor Centre, Tasmania	Management/ Ownership Tasmanian Government	Resource/ Theme – Southwest Tasmania World Heritage Area – Ecology with particular emphasis on the Strahan area from 50 000 years ago to the present time.
		Interpretative Elements – Substitute rainforest interpretive experience – Sculptural installations	Designer/ Architect – Architect: Robert Morris-Nunn – Writer: Richard Flanagan, – Furniture designer: Kevin Perkins – Graphic designers: Lynda Warner and Stephen Goddard.	Date 1992

7	Twelve Apostles Visitor Centre 	Site	Management/ Ownership	Resource/ Theme
		Twelve Apostles Visitor Centre, Port Campbell National Park, Great Ocean Road	Parks Victoria	– Great Ocean Road – Shipwrecks
		Interpretative Elements	Designer/ Architect	Date
		– Poetry – Sails – Recycled Timber	– David Lancashire Design – Greg Burgess Architects – Tract landscape Architects	2001

8		Site	Management/ Ownership	Resource/ Theme
		Interpretative Elements	Designer/ Architect	Date

9	Bunjilaka Aboriginal Centre 	Site	Management/ Ownership	Resource/ Theme
		Bunjilaka Aboriginal Centre Melbourne Museum	Museum of Victoria	– Indigenous history and culture – European contact – Aboriginal law and knowledge – Indigenous relationships to the land
		Interpretative Elements	Designer/ Architect	Date
		– Interpreting objects from museum's collection – Signage – Video – Lighting	– David Lancashire Design	2001

More case studies/site visits to be inserted here

Chapter 7 – The professional context – tourism

7.0 Introduction

The construction and marketing of places of natural and cultural significance as destinations through the activities of tourism is the third professional context that informs the work of interpretation designers. Having described the core attributes of interpretation design in the previous chapter, this chapter will examine concepts and themes from the field of tourism that are relevant to both interpretation and design.

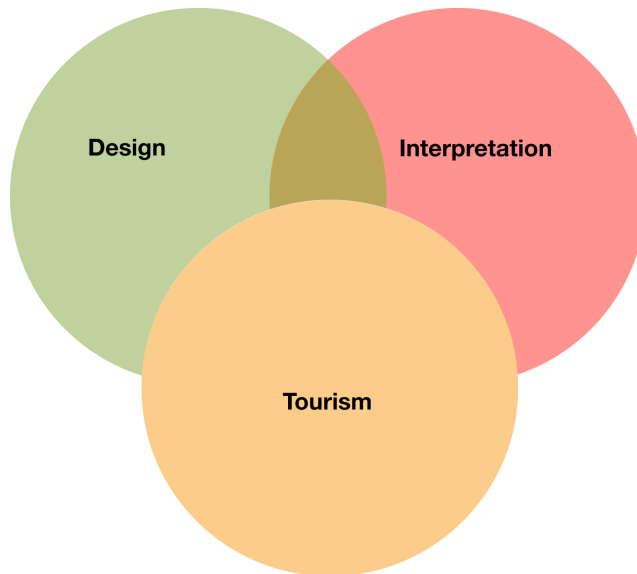


Figure 8: The professional context – tourism.

The fields of tourism and communication design intersect where there is a need to communicate with visitors through place and destination marketing. According to Hughes (1998, 18), the success of constructing and describing a place as a ‘destination’ is dependent on being able to ‘contrive geographical distinctiveness’, and to be able to represent a ‘diverse range of geographical locations to potential visitors and thereby translate those locations into tourist destinations’. Ringer (1991) proposes that the representation of places as highly desirable tourist destinations, hinges on the successful construction of places as destinations through the production of tourist images and messages:

Tourism, perhaps more than any other business, is based on the production, re-production and re-enforcement of images (Oakes 1993). These images serve to project the attractiveness and uniqueness of the ‘other’ into lives of consumers and, if successful, assist in the construction of a network of attractions referred to as a destination (Ringer 1991, 10).

With a focus on its unique natural heritage nature-based tourism, Australia has been marketed as a tourist destination to both locals and visitors since the advent of the organised tour in the 1840s. Designers play a central role in constructing projected and imagined images of places as tourist destinations, and the following discussion will focus on the intersection between interpretation, communication design and tourism.

7.1 Tourism research

Tourism has a well established body of research and literature from a range of theoretical perspectives, including anthropology, psychology, economics, sociology, geography, history, management, politics and planning. Significant for this investigation into interpretation design is research that examines and analyses tourism's cultural representations – the 'tourist signs' (Urry 1990, 127), 'tourist markers' (MacCannell 1999, 41), and the myths and visual descriptions that form part of tourist consumption and meaning. A literature survey reveals that textual analysis of tourism artefacts has been undertaken on ephemera including; advertisements, (Thurot and Thurot, 1983, Urbain 1983, Papson 1981, Britton 1979, and Lent 1978) brochures (Dann 1996), commercial souvenirs (Ichaporia 1983, Stewart 1993), postcards (Edwards 1989, Albers and James 1983), and photography (Nadel-Klein 1989, Franklin 2005).

While the international journals *Annals of Tourism Research*, and *Tourism Management*, publish Australian research on sustainable tourism, nature-based tourism and natural heritage interpretation, the nexus between design, tourism and interpretation is not well represented in academic research. However, historic material such as travel posters and tourist ephemera also provide a primary source of material for examining the visual representations of tourism and travel (Whitehouse 2007, State Library of Victoria, 2001). State Library collections including the State Library of Victoria and the State Library of Tasmania, as well as tourism authorities such as Tourism Tasmania also hold collections of tourist ephemera. The National Library of Australia has a collection of travel posters, many produced by The Australian National Travel Association (ANTA). In the absence of published research into design and tourism, researching these collections gives insights into both the way design contributes to representations of place as destination as well as how these representations shift over time.

7.2 Tourism – theoretical concepts

The discourse on tourism is valuable for this research as it offers key themes and concepts which overlap with the practice of interpretation design. In particular, tourism discourse adds a sociological and historical perspective to this research, helping to explain where contemporary interpretation fits into the spectrum of tourist activities. Tourism provides several valuable theoretical constructs useful for understanding the relationship of interpretation in the matrix of tourism activities. Sociologist Dean MacCannell (1999) first presented several significant concepts in tourism studies in his seminal work, *The Tourist: A New Theory of the Leisure Class* in 1976. While MacCannell's ideas have been expanded and critiqued in the academic field of tourism research and tourism studies (Graburn 1983, Cohen 1989 and Selwyn 1996), his concepts of authenticity, ritual, commodity, mythology and tourist markers are valuable constructs for giving clarity to interpretation design. In the following discussion I examine key concepts from tourism and also propose that design plays a crucial role in constructing and communicating the activity of tourism.

7.2.1 *The tourist gaze*

The visual sense is central to both the marketing of tourism and the field of interpretation. Sociologist John Urry developed the concept of the ‘tourist gaze’, whereby the visual sense is privileged over the other senses in the tourist experience. In *The Tourist Gaze* (2002) Urry identifies 1840 as the year in which a number of key factors catalysed to contribute to the ‘tourist gaze,’ including the invention of photography in 1840 by Louis Daguerre in 1839 and Fox Talbot in 1840, and the first organised package tour in 1841 by Thomas Cook. Urry writes of the significance of this historical moment:

1840 then is one of those remarkable moments when the world seems to shift and a new patterning of relationships becomes irreversibly established. This is the moment when the ‘tourist gaze’, that peculiar combining together of the means of collective travel, the desire for travel and the techniques of photographic reproduction, becomes a core component of western modernity (Urry 2002, 148).

Urry argues that travel, tourism and photography led to a prioritising of the visual sense and a separation from the other senses of touch, smell and hearing. Photography and other new technologies allowed the gaze to be reproduced and circulated via postcards, guidebooks, photographs, arcades, dioramas, mirrors and plate-glass windows (Urry 2002, 148). A particular type of tourist gaze is the ‘Romantic gaze’, which Urry describes as having an emphasis upon solitude, privacy and a personal, semi-spiritual relationship with the object of the gaze (Urry 1997, 137). Urry argues that the Romantic gaze is a key strategy in tourism advertising:

The romantic gaze involves further quests for new objects of the solitary gaze, the deserted beach, the empty hilltop, the uninhabited forest, the uncontaminated mountain stream and so on. Notions of the romantic gaze are endlessly used in marketing and advertising tourist sites especially within the ‘west’ (Urry 2002, 150).

The Romantic gaze, which is linked with 19th Century Romanticism, where the urban and industrial landscape was rejected in favour of the sublime experiences offered by wild and natural places, is important in understanding origins of nature-based interpretation. Case studies which discuss and further develop Romanticism in interpretive and interpretation design approaches include, Cataract Gorge and Cliff Grounds, Launceston, Tasmania, p148 and Port Arthur Historic Site, Tasmania, p144 in Chapter 10.

7.2.2 *Myth*

Tourism operates within themes of escape and contrast, breaking with monotony and the routine of work, and projecting the attractiveness and uniqueness of the ‘other’. MacCannell (1976) argues that tourism operates by creating myths, whereby tourists desire to recover ‘mythologically’ senses of wholeness and structure, absent from everyday contemporary life. This can be encountered in the course of a holiday—in a world which is in some way more whole, structured and authentic than the everyday world tourists inhabit most of the year. The desire for wholeness is a motivation for those

seeking nature-based experiences and is evident in comments from tourists on value of wilderness experiences in Tasmania:

These are the experiences that we need to enrich our lives. It is a spiritual thing, especially when you are away from the crowds. It's part of relaxing, a renewal of your life (Tourism Tasmania 2000).

Myths are captured, created and communicated by the advertising industry, by art directors and designers. Paul Carter notes that myths manifest themselves in concrete forms as stories, but they may also emerge through dance, graphic design and rituals (Carter 2005, 12 – 13). I am proposing that MacCannell's concept of myth can be extended to include communication designed for tourist audiences. Artefacts of tourism such as brochures, websites and advertisements create images of places that tap into the desire for mythic wholeness. These myths operate by projecting a sense of otherness, both in anticipation of the product, and again in the immediate experience of tourism. Specific myths and metaphors have developed around particular places in response to the activities of tourism. Elsewhere, I have argued that myths generated by tourist artefacts and advertising influence how both tourists and locals perceive and experience place (Woodward 2008). Myths specific to particular places can be revealed by analysing the designed artefacts of tourism. Chapter 9 contains a detailed analysis of selected tourism artefacts and a discussion of the myths they draw on and perpetuate.

7.2.3 Authenticity

Authenticity is another concept that has relevance for design in tourism contexts. In the search for wholeness, MacCannell (1976) argues that tourists are seeking authentic experiences which they hope to find beyond the spatial and temporal constraints of their everyday 'inauthentic' lives. He maintains that their quest for authenticity encourages the host destinations to enhance the appeal and profitability of their place, to 'stage the authenticity' of local attractions; and in doing so they construct a contrived 'tourist space' (Cohen 1989, 31). MacCannell distinguishes between 'substantive staging' which includes a performative element such as a dance, ritual or story; and 'communicative staging', which takes place through brochures and advertising. Designers participate in both substantive and communicative staging by constructing and fabricating 'authentic' experiences through communication artefacts including large scale and complex tourist spaces and experiences. As Australia is now a draw-card for tourists seeking nature-based experiences, audiences are likely to be more educated, travel-wise and seeking something more than MacCannell's 1970s notions of authenticity.

7.3 Tourist profiles

7.3.1 The 'post-tourist'

In discussing design for tourism, Julier (2000) proposes three different categories; travellers, tourists and post-tourists. Julier defines *travellers* as seeking a measure of self-realisation through hardship, physical and emotional challenge that results in the reward of personal growth or education. This resonates with the descriptions of ecotourists who, as well travelling to natural settings, are also seeking educative experiences. Julier further

contends that because the activities of tourism dispense with the hardship of travel; *tourists* are much more concerned with leisure, pleasure and the search for the authentic experience. For the *post-tourist*, a term coined by Maxine Feifer (1985) the quest for authenticity is abandoned, and instead a more playful attitude to the contrivances of tourism is held. According to Wood (2005, 315), post-tourists may be known by three qualities: they are freed from traditional tourist locales; they can experience multiple perceptions of tourism; and they are self-reflexive about their roles in the co-construction of tourist sites

7.3.2 *Ecotourists and nature-based tourism*

In Australia, the relatively recent interest of nature-based tourism, ecotourism, sustainable tourism and environmental tourism sees these forms of cultural tourism being delivered by both public and private providers, ranging from visitor centre staff to tour guides, operators, activity leaders and customer service staff. As nature-based tourism and ecotourism are of growing importance in Australia, the Australian Bureau of Statistics and Tourism Tasmania collect and analyse visitor information in order to profile and understand this segment of the market. Surveys by Tourism Tasmania, specifically about backpacker visitors reports the following characteristics:

Backpackers visiting Australia are predominantly less than 35 years of age. A large percentage comes from the United Kingdom and continental Europe. The major draw cards of Australia for international backpackers are its natural attractions and its lifestyle. Backpackers are often interested in experiencing a different culture, enjoy social and adventure activities, and tend to travel independently or with a companion. While in Australia, their travel decisions are often influenced by factors such as natural attractions, scenery, climate and the cost of transport. Backpackers are cost-conscious, staying in lower cost accommodation and using lower cost transport in order to afford the higher cost of activities and entertainment. They place a high value on social interaction during their trip but also value the physical environment they find themselves in or choose to visit (Tourism Tasmania 2004).

A later report by Tourism Tasmania (2006) summarises key elements of the backpacker culture, include: experiencing a destination at ground level; getting off the beaten track; having a flexible itinerary; traveling inexpensively and partaking in outdoor activities. The report *Nature-based tourism in Tasmania* (2000), indicates that that nature-based tourism appeals to all age groups, but to women rather more than to men, and to those at the upper end of the socio-economic spectrum. The report also notes that in terms of marketing, it is important that it be promoted as a shared experience and that attention should be paid to ensuring that the content of promotional material reflects these demographic factors.

Seeking a nature-based experience is a major factor in attracting tourists to Australia. The 2004 National Visitor Survey reported that 1.8 million people, or 64% of Australia's international tourists, visited a national park at least once over the course of their time in Australia (Tourism Australia 2005). In Tasmania in the same year, nine out of the top ten most visited destinations were natural attractions (Tourism Tasmania 2004). According to

Weiler (2002) ecotourism is a subset of nature-based tourism that is managed to be sustainable, that benefits host communities, and that contributes to visitors' as well as residents' awareness and understanding of natural and cultural heritage. The Australian Bureau of Tourism Research (BTR) defines ecotourism as having three main dimensions: it is nature-based, environmentally educative, and sustainably managed (Blamey 1995, 1). Blamey describes ecotourism experience as:

An ecotourism experience is one in which an individual travels to a relatively undisturbed natural area that is more than 40km from home, the primary intention being to study, admire or appreciate the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas (Blamey 1997, 125).

7.4 Tourism and interpretation design

While interpretation may form the experience of some tourists, not all tourists are seeking, or come into contact with interpretation. Having summarised some of the more general concepts from tourism that have a bearing on this research, I will now look more closely at the connections between tourism and interpretation design.

7.4.1 Tourist markers and artefacts of tourism

MacCannell's concept of a 'tourist marker' is useful for considering the role and function of the artefacts of design and interpretation design. A tourist marker is defined as information that is attached to or posted alongside a specific sight (or site). MacCannell extends that concept to cover;

... any information about a sight, including that found in travel books, museum guides, stories about persons who have visited it, art history texts and lectures, 'dissertations' and so forth. This extension is forced, in part by the easy portability of information. Tourists carry descriptive brochures to and from the sights they visit (MacCannell 1999, 110).

MacCannell's description of the marker encompasses items found at the tourist site itself (such as plaques, signs and interpretive panels), as well as items that are portable and independent of the site and become representations of place (postcards, books, brochures, websites). Visitor centres can be described as complex tourists markers associated with places of natural and cultural significance. For visitors arriving at a new destination, visitor centres are places tourists expect to find information, facilities and orientation, and thus have become signs in the cultural landscape of tourism. Such designed artefacts are referred to by anthropologist Nelson Graburn 'as the matrix of symbols and meanings by which tourism structures and affects the rest of life' (Graburn 1983, 27), or what other cultural anthropologists call the social semantics of tourism (Thurot and Thurot 1983). Tourist markers, both site-specific—in the case of visitor centres, and portable in the case of brochures, maps and guidebooks—contribute to the construction of the 'portable (and competing) mythologies of place' (Morris 1988, 169–170). Further discussion on the role of tourist ephemera in constructing mythologies of place is in Chapter 9 – Tourism ephemera.

7.4.2 *Interpretation and the tourist gaze*

Tourism, with its reliance on the photographic image and artefacts of communication such as postcards, guidebooks, panoramas, and maps, has much in common with interpretation. In a number of ways interpretation relies on and perpetuates characteristics of Urry's 'Romantic tourist gaze' in order to communicate with audiences. The majority of communication in interpretative settings relies on the visual sense, encouraging visitors to capture aspects of place through photography, and through purchasing publications, postcards and souvenirs. In a Romantic fashion, interpretation draws attention to the special and extraordinary features of a place, often by highlighting the contrast between urban and natural places, encouraging lingering and contemplation through revelation, provocation and questioning (Tilden 1997, 8); and also mindfulness, quiet fascination, flow and restoration (Moscardo 1996, Kaplan and Kaplan 1998, Falk and Dierking 1992). Museum studies research has found that in interpretive settings, as well as learning, people have aesthetic, spiritual and 'flow' experiences (Hein 2000). It can be argued that there is a synergistic relationship between the tourist gaze and interpretation. Where the tourist gaze fosters a 'greater sensitivity to visual elements of landscape or townscape than normally found in everyday life' (Urry 2002, 3), interpretation also aims to foster a heightened perceptual sensitivity to landscapes and place, and to educate and encourage visitors towards a protective attitude. Through the activities of tourism and interpretation, and especially through the artefacts of design, the gaze is then visually objectified or captured as photographs, postcards, films, models and so on—which allows the gaze to be endlessly recaptured and reproduced in tourist merchandising.

Despite these similarities there are also aspects of site interpretation that operate contrary to the tourist gaze. With its emphasis on first-hand experience of place and objects, interpretation deliberately encourages multi-sensory engagement, particularly in natural places. Designers work with interpreters to connect visitors with their surroundings, using sense of touch, smell, sound and taste to encourage a sensitivity to place. Research in museum studies has found that multi-sensory exhibits produce longer viewing times (Bitgood and Paterson 1998), lead to learning (Perry 1992) and permit greater access to information (Hein 2000). Pocock (2008) argues that tourists' experience the Great Barrier Reef, Queensland, in a diminished way now that they are no longer encouraged to touch the fragile environment. She writes:

Through touch we understand the nature of other forms of life and understand them as living moving bodies like our own. Because in touching we are touched. It is this immediacy of reciprocal touch that has been lost. Tourists no longer reach out to touch the reef and it no longer touches them as it did in the past (Pocock 2008, 83).

Examples of multi-sensory approaches in national parks include guided walks (especially night walks where visibility is reduced), touching exhibits and objects, listening to the local soundscape or audio presentations and tasting and smelling plants. The use of arts-based approaches in interpretation also offers multi-sensory ways of understanding places. This multi-sensory engagement with place means that tourists are engaging with

place in a richer and deeper way than proposed by Urry's tourist gaze. Where the tourist gaze encourages a visual aestheticising of the world that distances the tourist, interpretation that deliberately engages its audience in an experiential or multi-sensory way strives to engage people with issues and ideas not just camera superficiality.

7.4.3 Representations and substitutions of place

The currency of the tourist industry deals in representations of place—how places are imaged and imagined; where the focus is on the tourist *markers*, the representations of place rather than the places themselves. Dann (1996) argues that tourism is not a product since it cannot be sampled in advance. Instead the first contact a tourist usually has with a sight is not the sight itself but with some form of representation; a brochure, website or travel article. These representations will frequently have the effect of instilling a desire in readers to see the sight for themselves, referred to by Rojek as the 'Saint Thomas' effect (Rojek 1991, 34). Dann argues that there is a significant connection between tourism and representation through images, writing:

The images [of tourism] define what is beautiful, what should be experienced and with whom one should interact. Understanding the people of tourism is thus, above all else an analysis of images (Dann 1996, 9).

Dann's comment is an important one, as it points to how the interface of communication design helps to envisage destinations as imagined projections. While Dann describes this process as something that happens in advance – an off-site projection of what is to come, site interpretation happens on-site when tourists have arrived at their destination. In the context of tourism, both off-site marketing and on-site interpretation are important; one helps to attract people to destinations, the other makes sense of the place once they are there.

In interpretation, representations may also take the form of substitutions for place; a strategy used frequently when the actual environment is inaccessible, endangered or extinct. Extreme representations of nature are now utilised through the hyper-real interfaces of virtual reality technology that simulates vision, smell, hearing and touch to create 'virtual nature'. In virtual nature people can experience highly stimulating and spectacular environments, but they are designed fabrications. Levi and Kocher (1999) argue that these technologies misrepresent the natural world and that virtual nature may contribute to a disconnection from and a lack of concern about less spectacular environments. Other substitutions for place include souvenirs, which, Stewart describes as partial, incomplete and impoverished versions of the real experience (1993, 137). Baudrillard (1988) uses the concepts of *hyperreality* and *simulacra* to describe a world that has constructed itself to be more 'real' than real, and where those inhabiting it are obsessed with timelessness and perfection. Baudrillard maintains that nowhere is this more obvious than in tourist situations such as Disneyland, where authenticity has been replaced by substitutes or 'simulacra' in which those engaged in the illusion are incapable of seeing.

An awareness of the role of simulacra, hyperreality and substitution in tourism and interpretation is critical for designers. Feifer (1985), suggests we are now in the age of the ‘post-tourist’, who have abandoned the search for authenticity and engage more playfully and ironically in the tourist world of fakes and substitutions. Julier summarises Feifer’s category of post tourist writing:

Maxine Feifer (1985) suggests we are now in the age of the ‘post-tourist’. Here the quest for ‘authenticity’ is abandoned. Instead of expecting to see ‘real’ locals performing folkloric dance as if it were part of their everyday life, the post-tourist knows that such events may be put on precisely for the holiday season. The post-tourist is not disappointed by this: after all it is the quality of the show that counts. And if it is a show, it needn’t even be *in situ*. The post-tourist might enjoy such experiences through other channels; through the television or in a theme park. It is the quality of the experience that counts not how authentic it might be. The post-tourist is also able to appreciate the irony of this and treat it playfully. If leisure involves divesting oneself of the seriousness and posturing of working life, then the post-tourist is unlikely to make these demands. Furthermore the post-tourist is accepting of or even delighted by the overlapping of various levels of experience. Souvenir shops, for example, sell kitschy models of replicas of an historic site just visited that are appreciated as an integral part of the post-tourist visit as a whole. Various levels of consumption in leisure are therefore de-differentiated: high and popular culture overlap or even trade places (Julier 2000, 150–151).

The characteristics of the post-tourist and the phenomenon of virtual nature, pose many challenges for interpretation and interpretation designers. The shift away from the requirement for authenticity, or even place, has deep implications for a profession whose practice is built on a first hand sensory experience of place. If the post-tourist and virtual nature are an inevitable by-product of technology and postmodernist tendencies in society, then design and interpretation will need to develop adaptable, flexible and innovative capacities in order to respond to the changing patterns of leisure, holiday and travel.

7.5 Summary – Tourism

Tourism, is a significant industry in Australia. Strategies used in creating campaigns to communicate Australia’s unique sense of place hinge on the successful promotion of places as destinations. Research and knowledge from the field of tourism makes available to designers a more nuanced understanding of the factors that motivate tourist choices, motivations and preferences. Understanding the contemporary tourist’s motivations and attitudes, entails the need for designers to acquire a sophisticated understanding of tourist experience, expectations and backgrounds. It also brings to designers new and more specialised opportunities to communicate to a discerning market that looks beyond the contrivances of ‘staging’ that may have sufficed in the past. The extent to which designers understand and acknowledge the characteristics and desires of their tourist audiences will determine the design of the tourist spaces they create. Balancing the need to satisfy the desire for authenticity, combined with an understanding of the profile of contemporary audiences will challenge interpretation designers to present experiences which sit within the activities of tourism, but which are distinctive, credible and

memorable for the discerning contemporary tourist. Concepts from tourism that contribute to the interpretation design conceptual framework include:

- The 'tourist gaze'
- Authenticity
- Myth
- The post-tourist
- Ecotourism

Chapter 8 – The conceptual context

8.0 Introduction

This chapter provides a conceptual perspective to the field of interpretation design. Ideas and assumptions that underlie professional practice and the designed artefacts in heritage, tourism and interpretation sectors are interrogated in this chapter. Thus far the conceptual framework for interpretation design I have developed has been built using practice-based aspects from the professions of interpretation and design. Interpretation has also been examined in the context of commercial tourism, adding both the characteristics and motivations of tourists, plus the construction of places as destinations to the framework to be considered by interpretation designers. Since this research focuses on the interpretation of natural and cultural heritage, site-specific conceptual constructs need also to be developed for interpretation designers. As this knowledge is beyond the scope of designers tacit concerns, this chapter examines concepts which originate from larger fields of knowledge outside design, such as geography, environmental philosophy and landscape architecture. Concepts of nature, natural heritage, wilderness, landscape and place are examined as central to individual and collective understandings about the natural environment.

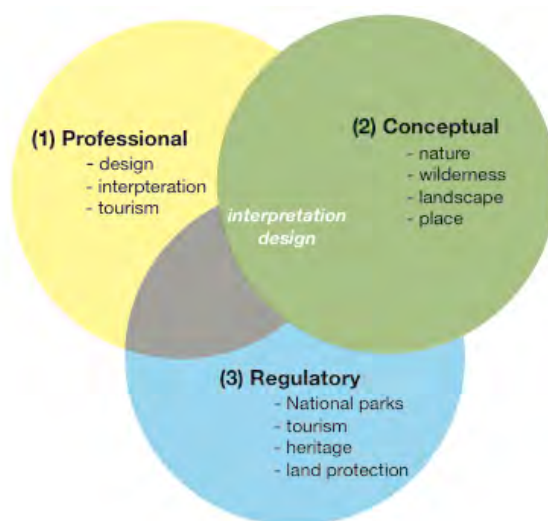


Figure 9: The conceptual context of interpretation design for natural heritage.

This research focuses on communication about natural places – national parks, reserves, conservation areas, and the interpretation of these sites. Concepts of nature, wilderness, landscape and place are intertwined in the language and themes underpinning current tourism and heritage management, and are evident in the artefacts of communication design. In bringing these concepts to the framework for interpretation design, definitions will be outlined along with historical and philosophical backgrounds of nature, wilderness landscape and place.

8.1 Nature

8.1.1 Definitions

According to Raymond Williams (1983), in his book *Keywords: a vocabulary of culture and society*, the word *nature* is perhaps the most complex word in the English language. He describes three areas of meaning:

- (i) the essential quality and character of something
- (ii) the inherent force that directs either the world or human beings or both
- (iii) the material world itself, taken as including or not including human beings

He warns that we need to be aware of the word's difficulty as 'precise meanings are variable and at times even opposed' (Williams 1983, 239). George Seddon, writer, academic and commentator on Australia's natural and cultural heritage, in his essay *The Nature of Nature*, takes up these difficulties when he describes the 'ambiguities of our attitudes towards nature' (Seddon 1998, xviii). By examining some of the philosophical, religious and historical origins of the word, Seddon identifies ideas that contribute to contemporary notions of nature, some of which are contradictory and many of which can be identified in popular culture and language today. The first is the 'divinity of nature', the idea that 'nature does nothing in vain because it fulfils God's purposes, which are wholly focussed on Man' (Seddon 1998, 8). This idea also appeared in 19th Century Romanticism, where the urban and industrial landscape was rejected in favour of the sublime experiences offered by wild and natural place. Ideas associated with Romanticism provided the foundation for the contemporary idea of *wilderness* and the establishment of national parks, as discussed later in this chapter.

A second view identified by Seddon is 'Nature as enemy', a co-existing but opposing view of nature, where nature is regarded as a force that could easily overwhelm humans unless attempts are made to control, tame or harness it. Expressions in language that reflect this view include 'taming Nature', or 'harnessing a natural resource'. Seddon's third view of nature is 'Nature as the non-human world', which corresponds with Williams' third definition. This perspective allows distinctions to be made between 'man-made' and 'natural', and to speak of the 'conservation of nature' and 'natural systems'. These attitudes extend into how landscapes are regarded and described (e.g. wilderness, untouched, natural), and are problematic. For example, to describe or classify areas as 'wilderness', that is, untouched by humans, ignores the fact that land has been occupied and modified for thousands of years by indigenous people. For the purpose of this research, while many places will be described as 'natural' it is acknowledged that this is a language construct which is predicated on the inclusion rather than exclusion of human activity. In the context of this thesis 'nature' is most closely aligned with Williams' third definition, 'the material world itself, taken as including or not including human beings'.

Natural and cultural heritage

Culture is also described by Williams as ‘one of the two or three most complicated words in the English language’ (Williams 1983, 87). Like nature, the term culture is problematic as it depends on its opposite ‘nature’ for comprehension. In an Australian context from the perspective of indigenous people it is also problematic as ‘there is no ‘natural’ place in Australia that is not indigenous country, no place which is not a cultural landscape’ (IAA 2006). Heritage is another contested concept, and while commonly used in interpretation and throughout this thesis, also requires definition and clarification. A very broad definition of heritage was formulated at the National Heritage Conference in the UK in 1983 as:

... that which a past generation has preserved and handed down to the present and which a significant group of population wishes to hand on to the future (Herbert 1995, 8).

Most definitions of heritage refer to built culture, and yet a more expanded definition which includes intangible and non-material elements such as beliefs, is necessary when referring to natural environments and indigenous Australia. Interpretation Australia’s *Guidelines for Interpreting Australian Aboriginal and Torres Strait Islander Culture and Country* outline the problematic issues with defining heritage for indigenous Australians:

The whole continent of Australia, land and sea, is an Aboriginal cultural site, occupied by many different Aboriginal communities for well over 40,000 years. It is not just one country, but many countries...The separate categories *natural*, *cultural* and *Indigenous* to describe particular kinds of heritage may still be useful in certain circumstances, but for Aboriginal Australians they are inseparable. Heritage is the unity, the continuum and the connectivity of natural and cultural, from earliest times, through the history of contact and up to the present moment (IAA 2006).

While acknowledging the problematic and contested nature of definitions such as natural and cultural heritage, these concepts form the basis of legally binding criteria for international and national conventions and agreements for protecting areas of natural and cultural significance. World Heritage status is given to sites of outstanding natural and cultural value to humanity and such sites are protected by the UNESCO World Heritage Convention (1972), to ensure their preservation. Australia is signatory to several international conventions concerning the protecting of natural and cultural heritage, including the UNESCO World Heritage Convention (1972) the Biodiversity Convention (1993) and the Australia ICOMOS Charter for the Conservation of places of Cultural Significance (The Burra Charter 2008). These conventions, some legally binding, entail certain responsibilities to maintain, protect and educate about places that are deemed to be of global, natural and cultural significance, not just to Australian citizens. The UNESCO World Heritage Convention (1972), to which Australia is a signatory, defines natural heritage as:

- Natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view.

- Geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation.
- Natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Cultural heritage is defined as:

- monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science.
- groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science.
- sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.
(UNESCO World Heritage Convention 1972).

Australia has 17 sites inscribed as having World Heritage status, of which 11 are inscribed under natural criteria, 2 under cultural criteria and 4 for both natural and cultural significance.

As previously discussed the categories of natural and cultural are problematic, and the ideas surrounding these distinctions have shifted since the World Heritage Convention.

Rachel Faggetter comments on these shifts:

As the inscription process developed people realised that the separation of culture and nature was neither possible nor desirable. Since 1992 significant interactions between people and the natural environment have been recognized as cultural landscapes. It is a landscape of relationship, and the relationship is between nature and culture, dynamic and changing (Faggetter 2005).

All four Australian sites which are inscribed for both cultural and natural criteria recognise the significance of indigenous habitation and beliefs. The 'mixed' sites and their dates of inscription are sites are: Kakadu National Park inscribed in 1981, Tasmanian Wilderness inscribed in 1982, Uluru-Kata Tjuta National Park inscribed in 1987 and Willandra Lakes Region inscribed in 1981. In New Zealand Tongariro National Park became the first property to be inscribed on the World Heritage List under the revised criteria describing cultural landscapes (Faggetter 2005).

8.1.2 Deconstructing nature and culture

Lupton and Miller (1996) suggest that the postmodernist tool of deconstruction is useful to identify and dismantle binary oppositions such as nature and culture. They write:

The idea of 'nature' depends on the idea of 'culture' in order to be understood, and yet culture is embedded in nature. It is delusionary to conceive of the non-human environment as a pristine setting untouched by the products of human endeavour— cities, roads, farms, landfills. The fact that Western societies have produced a concept of 'nature' in opposition to 'culture' reflects our alienation from the ecological systems that civilisation depletes and transforms (Lupton and Miller 1996, 4).

The process of deconstruction can be used to analyse how language not only expresses attitudes to concepts such as nature but also frames the communication of these concepts to others. By paying careful attention to the language used to describe nature and natural places, different assumptions and attitudes are revealed. Australian ‘lexical cartographer’ Jay Arthur collects language about particular places to create language ‘maps’. By deconstructing tourist brochures, magazine articles, newspaper reports, speeches and government documents, she gathers words that have accumulated around particular places, arguing that different maps can be created depending on the lexicon used to describe a place. Two contrasting word maps from her essay *Natural Beauty, Man Made*, are quoted below. Both are about the Ord River in North Western Australia. The first describes the river before it was dammed for irrigation in the 1960s and 1970s, and the second, after the dam was built. The italicised words are those collected from tourist literature and other published sources.

The Deficient Landscape

The pre-dam landscape is *stony* and *sparse*, a *lonely, empty* place of *silence, dust* and *flies*, where the silence is broken only by the *haunting cry of wild geese* and the *drumming, droning, crooning* supposedly made by local Aboriginal people. It is a place of *wasted water* where the river *only flows* in the Wet and is *reduced to a chain of pools* in the Dry. Geographically it is a *remote* place of *sheer isolation*. At the same time as constructing a remote, ‘undeveloped’ place, this map implicitly recognises the presence of the pastoral industry where mismanagement of land has left a *ruined, desolate, baking* wasteland. It is a landscape of deficiency and loss.

The Completed Landscape

After the dam, the place is re-imagined. The post-dam landscape is full of light and movement, *shiny, shimmering* and *bright*, a place of *innovation* that has been *opened up*. It is a landscape of *energy*, but in contrast to the destructive, anarchic energy of the earlier constructions this will *increase rainfall* and *moderate heat*. The wild river is *harnessed*; it *quietened* and *grew fat*. Terms of deficiency are replaced by those of fertility — *ample bosom, larder, reaps, progeny*. The water is now *permanent*. The future which was absent from the previous constructions, is present here as a *bright future, a promise, a dream come true*. It is not only the future but a good future, and one that was not accidental but intended — a *destiny*. The place has also been relocated. It is no longer *remote* but the *hub of the universe to be*. From being old and far away, it has now become new and central (Arthur 2003, 193 – 195).

‘Reading’ these maps through text, demonstrates the power of language to construct and present the same natural landscape using contradictory descriptions. In an exhibit titled *Tangled Destinies* in the National Museum of Australia in Canberra, Arthur created a lexical map showing Lake Pedder in words; through the eyes of developers, conservationists and bushwalkers and the Tasmanian Hydro-electric commission. By analysing publications from the 1960s about the debate over the flooding of Lake Pedder in South West Tasmania, Arthur shows how the same piece of land was represented differently, by creating a ‘map’ from a range of descriptions and phrases. In the following

Dr. Bob Brown was the director of the Wilderness Society during the Franklin River Campaign. He was elected to the Tasmanian parliament in 1983, and was later elected to represent Tasmania as a member of political party The Greens in the Senate in Australia's Federal parliament—a position he still retains.



Image 2: Peter Dombrovskis, Rock Island Bend, Franklin River, South West Tasmania.

Image Source: National Library of Australia.

The use of the image *Rock Island Bend, Franklin River* in a political campaign to activate emotions, change voting behaviour and educate an audience about a little known corner of the country, clearly demonstrates the impact that an image in combination with words can have on the social and political awareness of an audience. However Roslynn Haynes notes the limitations of single paintings and photographs to be able to create persuasive political campaigns and communicate the complex environmental issues surrounding the Southwest wilderness in the early 1980s. Haynes notes the capacity of film to capture multiple perspectives, time and sound. She writes:

Wilderness films too, were carefully crafted as propaganda. As the focus of the conservationists moved from a lake to a tumultuous river, it was clear that painting could no longer be the main recording medium. Even still photography was limited in its effect. It was the turn of the movie film to capture both the wonder and the exhilaration of the rafting trip (Haynes 2006, 298).

8.2 Wilderness

The concept of 'wilderness' governs many assumptions about how natural places are imagined, represented and managed. This research discusses many places described as 'wilderness'. Although this term is problematic, it is used throughout this research in accordance with the current descriptions and management practice by national parks authorities. It is relevant here however, to examine the philosophical and historical base of this concept and recognise its extension into the visual language of communication about place.

The concept of wilderness appears in many contemporary communication and marketing artefacts connected with natural places including paintings, scientific reports, corporate literature, political advertisements, visitor centres and outdoor recreation goods. Like nature, the use of the term wilderness has complex origins and can vary according to different philosophical standpoints and purposes of study. Originating from biblical texts it was thought of as a disordered and frightening place or situation. Cultural geographer Nicholas Gill notes that wilderness, in its western origins had negative connotations, frequently including a social or spiritual dimension (Gill 1999). Poet and conservationist Judith Wright, documents the history of the word from biblical times through to contemporary usage, including its emotional connotations. Writing in 1980 she concluded that:

the word Wilderness has undergone, or is undergoing a...change – from meaning something alien to the human ambience, and hostile to human life, it is becoming a sign of value, of something itself dear and threatened (Wright 1980, 28).

The shift to a more positive value of wilderness also has origins with the Romantic movement, which despite being historically defined during the period 1798 – 1832, its influence can be traced as extending well beyond this period into the later half of the 19th Century, affecting many areas of the arts and thought in Europe and America. The Romantic movement emphasised poetic mystery, emotional intensity and individual hedonistic expression (Urry 2002, 20). This emotional intensity extended to the natural world, and an appreciation for impressive scenery and for nature developed. Nature was regarded as not only providing refuge from industrialisation and urbanisation but, was seen as having intrinsic value independent of human use (Mendel 1999, 276). According to sociologist John Urry, Romanticism was responsible for the development of scenic tourism where nature of all sorts came to be widely regarded as scenery, views, and perceptual sensation, including giving rise to a more positive attitude towards 'wilderness' (Urry 2002, 20).

Positive views of wilderness have also been advocated through the emergence of national parks and an awareness of conservation and environmental issues. Yellowstone National Park located in Wyoming, United States was declared the world's first national park in 1872. Highly aesthetic natural landscapes including scenic features such as mountains, waterfalls and coastlines were early motivations for national parks and reserves. Scenic amenity, which derives from the picturesque aesthetic of depicting natural landscapes,

was closely connected with economic arguments for reserving land for its tourist and recreational potential. Artists played a crucial role in advocating for the establishment of early national parks in America as outlined here:

Since the late 1860s, when a handful of artists accompanied early expeditions to the region, art has played an important role in articulating Yellowstone's otherworldly appeal. The rough artists' sketches of this region where mud boiled and geysers spewed superheated water into the air prompted a young painter named Thomas Moran to join the famous Hayden expedition of 1871. The delicate, gem-like watercolors Moran produced on this trip were not only crucial in persuading Congress to set Yellowstone aside as the world's first national park but also became the first works in a long legacy of the representing Yellowstone as an American icon (The Autry National Centre).

Similarly in Tasmania, artists, photographers and writers have played a crucial role in communicating ideas about nature and wilderness which is comprehensively critiqued by Haynes in her book *Tasmanian Visions* (Haynes 2006). The images of early photographers such as J.W. Beattie were instrumental in developing a tourist industry in Tasmania as well as preserving scenic landmarks. High scenic value and the potential economic worth of tourism dominated the establishment of national parks until relatively recent times. In Tasmania, the Scenery Preservation Board administered Tasmanian national parks up until 1971. Louise Mendel in her doctoral thesis *Scenery to Wilderness*, argues that in Tasmania there has been a shift in emphasis in the motivations for creating national parks. Where early motivations for the development of national parks included scenic value, tourism and recreation, more recently the emphasis has changed towards conservation of wilderness and nature conservation (Mendel 1999). The threat to and decline in natural areas from competing interests such as mining, forestry and hydro-electricity, has resulted in a concern to protect ecosystems and biological diversity. Competition for natural resources has been marked by conflict and debate. Tasmania, since the 1970s, has seen both the revocation of reserved areas for economic use of natural resources as well as the expansion of protected areas, such as the Tasmanian World Heritage Wilderness Area. As Mendel argues:

Competing interests continue to give rise to major conflicts between conservationists and developers in Tasmania. While the development ethos is strongly entrenched in the State, Tasmania has also been the birth place of some major conservation oriented groups and a testing ground for their actions. This has had a significant impact on environmental debates and outcomes in the broader Australian context (Mendel 1999, 300).

8.2.1 Wilderness – contemporary definitions

In contemporary Australian usage the term wilderness is 'a natural area, free from disturbance by non-indigenous peoples' (Mendel 1999, 277). From an indigenous perspective, wilderness is seen 'not as an empty, untouched place, but as an Aboriginal landscape with an ancient but vital history' (Parks and Wildlife Service Tasmania 1999, 95). Gill argues that the act of declaring land as wilderness can homogenise a place that previously may have contained a mosaic of meanings (Gill 1999). These definitions highlight the dependence on binary oppositions such as nature/culture, colonial/indigenous, civilised/savage, and inhabited/uninhabited to describe and define

wilderness. As with nature, wilderness is a construct, and a European-centred one. Seddon (1998) argues that the concepts of wilderness, and *terra nullius* are justifications for colonisation. The cultural landscape of the colonised people is re-defined as 'wild-nature', and then transformed into national parks 'for a special and privileged form of recreation' (Seddon 1998, 23). Australian Aboriginal leader Marcia Langton argues that from an Aboriginal perspective, there is no wilderness. In the article *The European Construction of Wilderness*, Langton highlights some of the difficulties and contradictions underlying the term wilderness writing:

The popular definition of "wilderness" excludes all human interaction within allegedly pristine 'natural' areas, even though they are and have been inhabited and used by indigenous people for thousands of years...Just as *terra nullius* was a lie, so was this European fantasy of 'wilderness'. There is no wilderness, but there are cultural landscapes: those of the environmentalists who depict a theological version of nature in posters; and those of Aboriginal people, present and past, whose relationships with the environment shaped even the reproductive mechanisms of forests (Langton 1995, 16 – 17).

Like Langton, Roslynn Haynes maintains that the concept of wilderness is a cultural construct not created by nature but existing only when it becomes culturally enshrined in literature and art (Haynes 2006, 302). She speaks of a 'semiotics of wilderness' whereby the term epitomises and represents a range of natural and cultural definitions:

... natural beauty, adventure, self reliance and a psychological escape from a synthetic, technologically-dependent lifestyle that produces increasing levels of stress. Wilderness has also been endowed with a universalist spiritual dimension, a secular equivalent of the biblical notion of wilderness as a place of spiritual growth...Lastly, wilderness has almost imperceptibly been reconstructed as a place without people of history...Unfortunately such absence implicitly reinforces the doctrine of *terra nullius*, erasing Indigenous Tasmanians from their own landscape (Haynes 2006, 272).

If we accept Haynes' concept of the semiotics of wilderness, the artefacts that represent nature and wilderness can be read as signs or tourist markers that signify 'wilderness' in the way it has evolved in the late part of the 20th Century. The Tasmanian context is a particularly rich one to analyse and track this evolution as it has been the site of a shifting and contested set of interpretation of wilderness, which can be traced largely through the designed artefacts of tourism, political campaigns and government corporate literature. Chapter 9 contains an analysis of tourism artefacts.

8.3 Landscape

The concept of *landscape* is another human construct that provides a framework to enable the interpretation and communication of place and an understanding of its background clarifies how the idea of landscape is present in practices of interpretation and tourism. Both Seddon (1998) and Tuan (1979) emphasise that landscape is a by-product of human perception and use the presence of human regard to distinguish between landscape and environment. Seddon explains this difference by saying:

An environment becomes a landscape only when it is so regarded people, and especially when they begin to shape it in accord with their tastes and needs. Nature may offer the raw material

of scenery unaided, but to transform it into landscape demands the powers of the seeing human eye and the loving human hand (Seddon 1998, 111).

Human geographer, Yi-Fu Tuan similarly makes the distinction between landscape and environment, as involving the human dimension of cognition. He writes:

I have stressed the fact that landscape is not a given, a piece of reality that is simply there. What is given is an environment to which we respond in automatic and subconscious ways. It is important to distinguish between environment and landscape. Whereas environmental psychology can be the study of how human beings react more or less unthinkingly to the stimuli around them, landscape psychology must primarily be a study of human learning and cognition (Tuan 1979, 100).

The contemporary idea of landscape has both aesthetic and scientific origins. The word landscape originates from the Dutch word *landschap*, which signified a unit of human occupation on an estate or a domain (Schama 1996, 10, Tuan 1979, 90). In English, this was translated as *landskip*, which then became the word landscape (Seddon 1998, 97). The aesthetic meaning of landscape has now become synonymous with a genre of art, the depiction of views through painting and photography. Landscape became linked with art as early as 1612, with the appearance of instructions on how to compose a picture, not simply a two-dimensional representation of the environment, but an image which was a representation or interpretation of a 'poetic arcadia', constructed to communicate the benevolence of the creator (Schama 1996, 10).

The discipline of geography uses the concept of landscape as a functional way to describe geographical terrain, which records not just topographical or ecological information but also the effects of human interaction. The concepts of cultural landscapes and vernacular landscapes are used by cultural geographers to acknowledge the fact that landscape is a perceptual construct as much as a physical one. Richard Baker defines the *cultural landscape* as follows:

The landscape is a mental construct as much as a physical reality. It is the result of how people both see and influence the world around them. In so far as much of this view is culturally determined, the landscape needs to be seen as a cultural construct (Baker 1999, 33).

Significant scholars in the study of landscape in the 20th Century are W.G. Hoskins in Britain and J.B. Jackson in the United States. Both regard the landscape as a significant historical artefact able to be 'read'. The term 'vernacular landscape' was coined by J.B. Jackson to describe the landscape which is neither ecological nor aesthetic, but that of the everyday, the ordinary and mundane. This was partly in reaction to the American enthusiasm for wilderness. Use of the metaphor of the landscape as text, is central to the views of the 'new' cultural geographers. Cultural geography originated in America in the 1920s with the founder Carl Sauer, whose work dominated North American cultural geography. Sauer considered that the cultural landscape was the 'product of the relationship between the medium of the natural landscape and the agency of culture that occupied it' (Stratford 1999, 4). Sauer advocated an inductive study of the morphology of the land to be able to generate conclusions about how cultural activity occurred. This view of the cultural landscape has been challenged by the practices of the 'new' cultural geography, stemming from shifts in humanities and social sciences from a positivist,

inductive analysis to a more interpretive outlook. Stratford summarises the differences in the ‘new’ approaches to cultural geography by saying:

...concepts such as the cultural landscape have also shifted from being seen as a real place emerging from a natural environment through the actions of people. Now, cultural landscapes are not merely viewed as uncomplicated material sites that can be accessed using observation and induction. Certainly the particularity of landscapes is still important, but now we recognise that such terrains are interpretive sites — sites which can be read as texts, and not simply by cultural geographers (a claim often made by critics) (Stratford 1999, 5).

8.3.1 *Landscape and interpretation*

This notion of landscape as a structure used to both describe and understand or ‘read’ particular places and environments, makes the perception of landscape an ‘interpretive’ activity. Whether this interpretation occurs via an aesthetic use of the word landscape (through images paintings, photographs, film), or via the more geographic sense of the word (to classify landforms, human activity and ecological patterns), both are attempting to understand and communicate place. There are obvious similarities to note between cultural geography practices and the enterprise of site interpretation (used in the tourism and heritage management sense), that is, the aim to communicate about and understand place. There is a synchronicity between the act of reading the landscape as a text, and the act of ‘reading’ interpretive information via signs, texts, displays and so on. The landscape is immediate and tangible and can be regarded as an artefact or record, to be read, in order to understand, learn and gain meaning from a place. W.G. Hoskins in his book, *The Making of the English Landscape*, wrote ‘The English landscape itself, to those who know how to read it alright, is the richest historical record we possess’ (Hoskins 1955, 14).

In site interpretation (communication about place), the landscape itself is either overtly or tacitly included in the reading of a place. Understanding the natural environment is culturally driven, and the concept of a landscape is very much a cultural construct based on perception. Interpretation officer Iain Copp explains that when people are visiting natural places, what they are seeing is culturally framed. He writes:

Visitors to national parks are mainly attracted by the array of natural environments on offer. What they see, though, is not an environment of natural features, but a landscape — *an environment perceived*. This cultural construct is the result of the interaction between the environment and the viewer. It is heavily biased by many cultural factors, including evolutionary inheritance, indigenous beliefs, personal histories, and land-use motivations (Copp 2005).

Landscape is a cultural construct that fuses an aesthetic/poetic view with a geographical/ecological one making it a useful unit of analysis and presentation of the natural environment. Landscape is also a fundamental concept used to communicate about natural places. Many places discussed in this research are already designated according to topographical landscape classifications, for example, natural landscapes are described as; coastal reserves, glacial landscapes, limestone caves, wilderness areas and so on. Cultural landscapes described as; historic sites, Aboriginal sacred sites, heritage

towns, industrial sites etc. Such categorisation of landscapes and places, and the associated maps, language, symbols and interpretations form codes of communication about those places.

The communication about natural places is usually found in situ, i.e. in the place itself, in a visitor centre, or on a walking or driving trail. Understanding the landscape then becomes a combination of the communication artefacts mentioned above used to describe and interpret the place, plus the landscape itself. Often the interpretation material found in such places already uses the constructs of natural and cultural landscape to communicate, either overtly or unconsciously. A national parks brochure from the Nambung National Park in Western Australia uses a blend of aesthetic/poetic and scientific/geographic language as follows:

Nambung National Park, on the Swan Coastal Plain 245 km north of Perth, contains one of Australia's most fascinating landscapes – the Pinnacles desert. Out of the shifting yellow sands rise thousands of huge limestone pillars, standing in stark contrast to the surrounding low heathlands typical of this coast. The most popular attraction of the Park is the Pinnacles Desert. Thousands of limestone pillars, up to four metres tall, rise out of the stark landscape of yellow sand. Some are jagged, sharp-edged columns, rising to a point; others resemble tombstones. What exactly are the pinnacles? What natural processes have created these odd and spectacular structures? (Department of Conservation and Land Management n.d.)

These passages demonstrate how the language and conceptual constructs of landscape—both in the aesthetic (beautiful beaches, shifting yellow sands), and scientific sense (heathlands, coastal dune systems), are commonly interwoven. It also demonstrates that this construct of landscape is a familiar and actively used code in the arena of communication.



Image 3: Nambung National Park – Pinnacles Desert, Western Australia.

This discussion of landscape raises some important issues for designers aiming to communicate about place. Landscape is regarded by cultural geographers as a text which can be read, providing a useful construct for communicating about place. This approach, can also be extended into a visual form by designers in order to communicate effectively about place. In doing so, designers can communicate using both aesthetic/poetic codes of landscape as well as the scientific ecological codes. The semiotics of landscape can be provide as a foundation of a 'lexicon of place' and incorporated into the visual language of designers as a tool for communication.

8.3.2 *Semiotics and landscape*

Interpretation and its designed interface, participates in generating and constructing the 'signs' and markers of tourism. In Australia, many such signs are found in the interpretation of Australian national parks and natural places. Using Moles' notion of the designer as a person who works with symbols and signs to orient the individual and make the world legible (Moles 1989, 129), it is the interpretation designer's task to make the landscape and its elements visible and intelligible. This happens through orienting the individual in landscapes by using symbols and signs, and in doing so increases the legibility of the place. In this way designers are participating in what Urry calls the semiotics of tourism by constructing the 'signs' and markers of tourism. For Urry, implicit in the tourist gaze is an understanding of these signs, he goes on to describe tourists as semioticians who read the landscape for signifiers of certain pre-established notions or signs about travel and tourism.

Now that national parks and protected areas are charged with preserving biodiversity and remnants of particular landscapes and ecosystems and because it is impossible to preserve all such ecosystems, the national park itself becomes a sign typical of a larger geographical area. Using Urry's s concept of semiotics it is possible to identify how natural destinations and nature-based activities have become icons of tourism. Using text from the Nambung National Park brochure example again illustrates this:

The Pinnacles often feature in tourist guides but they are only one part of the 17,491 ha National Park. Beautiful beaches, coastal dune systems and trees and flowering plants typical of the northern coastal plain are all part of this park... (Department of Conservation and Land Management n.d.)

The brochure then goes onto describe in detail, the flora, fauna and geology one should expect to encounter in this specific ecosystem, the 'signs' which confirm that you are visiting a typical northern coastal plain ecosystem. However, it is actually the distinctive geological feature of Pinnacles that become the tourist 'sign'. Looking at other examples, Cradle Mountain-Lake St Clair National Park is regarded as an iconic national park, with Cradle Mountain signifying the scenic beauty of Tasmania's wilderness and the park's famous Overland Track symbolising physical challenge and endurance. Other natural signs that have reached icon status in Australia are Uluru, The Great Barrier Reef, Kakadu, The Franklin River, Lake Pedder (pre-flooding), many of which have a symbolic significance beyond the actual physical environment. Uluru, for example represents

indigenous Australia or ‘the outback’, the Franklin River a conservation battle, or the ‘last wild river’. Interpretation designers draw on this semiotic language of landscape as one strategy to communicate about place through a visual language.

8.4 Place

The concept of place is fundamental to interpretation of natural and cultural heritage and has been researched from a number of different perspectives including, geography and environmental psychology. Place, like landscape has a spatial dimension, but as a concept it includes symbolic dimensions—that of meaning. According to sociologist, Frank Vanclay (2008, 3) ‘place’ is generally conceived as being ‘space’ imbued with meaning, and is more to do with the meanings than the physical characteristics of a location. This symbolic dimension of place however does not exclude the physical aspects, because as already discussed, people develop strong attachments to landmarks and landscapes, with some becoming icons imbued with much significance. Less spectacular landscapes and localities as well as urban locations will also hold significant meanings for people, such as shopping malls, cafes, parks, lookouts or a favourite seat or route home. Vanclay sums up the dimensions of place by writing:

Place, therefore, is the coming together of the biophysical, social and spiritual worlds. Simply put, place is space that is special to someone. The personal meanings that turn space into ‘place’ become embedded in people’s memories and in community stories. They can be associated with both positive and negative feelings (Vanclay 2008, 3).

Place, therefore has both tangible and intangible aspects. The resurrected Romantic phrase ‘sense of place’ has gained currency in recent discussions of landscape and conservation. This phrase comes from the term ‘spirit of place’ (*Genius loci*) referring to spiritual guardians of place in ancient Greek times. Sense of place, although used frequently in interpretive settings, is difficult to define as it refers to the person not the place. Geographer Yi-Fu Tuan, who has made significant contributions to the discussion of place, coined the term ‘topophilia’ in the 1970s to describe the strong human sentiment ‘love of place’ (Tuan 1974, 92). Tuan describes topophilia in inclusive terms as follows:

The word ‘topophilia’ is a neologism, useful in that it can be defined broadly to include all of the human being’s affective ties with the material environment. These differ greatly in intensity, subtlety, and mode of expression. The response to environment may be primarily aesthetic; it may then vary from the fleeting pleasure one gets from a view to the equally fleeting but far more intense sense of beauty that is suddenly revealed. The response may be tactile, a delight in the feel of air, water, earth. More permanent and less easy to express are feelings that one has toward a place because it is home, the locus of memories, and the means of gaining a livelihood (Tuan 1974, 93).

Place gives significance to memory, imagination and the subjective connections one has with locations, and is a significant concept to the field of interpretation, which values the subjective and intangible connections with objects and places. The concept of place attachment is significant for the discussion of interpretation, and current thinking on place suggests that people can form strong attachments to many places, where they live and

work, where they grew up and importantly for this research, where they holiday. Stewart et al (1998) discuss notions of ‘field of care’ and stewardship of a particular place, linking sense of place with interpretation at Mt Cook in New Zealand. Their findings establish that good interpretation can lead to a better awareness of and care for a particular place.

8.5 Summary – The conceptual context

The concept of place, is one which is central to many important aspects of this research. As place and sense of place are both large and complex concepts that require detailed discussion to cover adequately, here I will comment on two aspects significant to this research. Firstly, the characteristics of place being both physical and symbolic, makes communication a key process in how ideas of places are formed, materially and symbolically. Cultural geographer Elaine Stratford makes reference to this when she writes place is:

linked both to our conceptions and constructions of real geographies — material sites and terrains—and to our creation and understanding of imaginative geographies (Stratford 1999, 2).

Already in this thesis, I have looked at place-marketing, especially in relation to places becoming destinations and the cultural mechanisms that turn these places into significant cultural icons, symbolically as signs in the semiotics of tourism. If interpretation is important in creating relationships of stewardship with places, then the communication which contributes to people’s experience and understanding of place, is a critical component for building people’s attachment to place. The second aspect of place that is significant to this research, is the capacity of interpretation design to contribute to shifting and evolving symbolic perceptions of place. The designed artefacts, ‘tourist signs’ and semiotics of tourism are shaped by designers, who are significant agents in imbuing places with meaning and place making. The tourism artefacts and sites discussed in Chapters 9 and 10 demonstrate how perceptions of place and experience of place can change over time and highlight the way the interface of design frames, shapes and uses the lexicon of place.

This chapter surveys complex and contested concepts relating to communication about place. In contributing to the conceptual framework for interpretation design the following concepts are significant:

- Concepts of nature, wilderness, landscape and place are embedded in the language of interpretation design and tourism and, although problematic, are cultural constructs which form a lexicon to communicate and describe place.
- These constructs make up a semiotics of place which have an expression in tourist markers, the designed artefacts of interpretation and tourism.
- Concepts of nature, wilderness, landscape and place are used both to describe and read places, and provide communication designers with a powerful lexicon (albeit one developed in other disciplines such as geography) for communicating in natural places.

PART THREE

Part Three of the thesis investigates interpretation design through the practice-based aspects of interpretation design. Artefacts associated with the field, including the designed artefacts produced by interpretation designers are presented and analysed. The following chapters on tourism ephemera (Chapter 9) interpretation sites (Chapter 10) and the designers' perspective (Chapter 11) will illustrate from a practical perspective, concepts and constructs already developed in the conceptual thematic framework developed in Chapters 4 – 8. Data presented in Part Three is referred to throughout the thesis and also in the Interpretation Design Pattern Language.

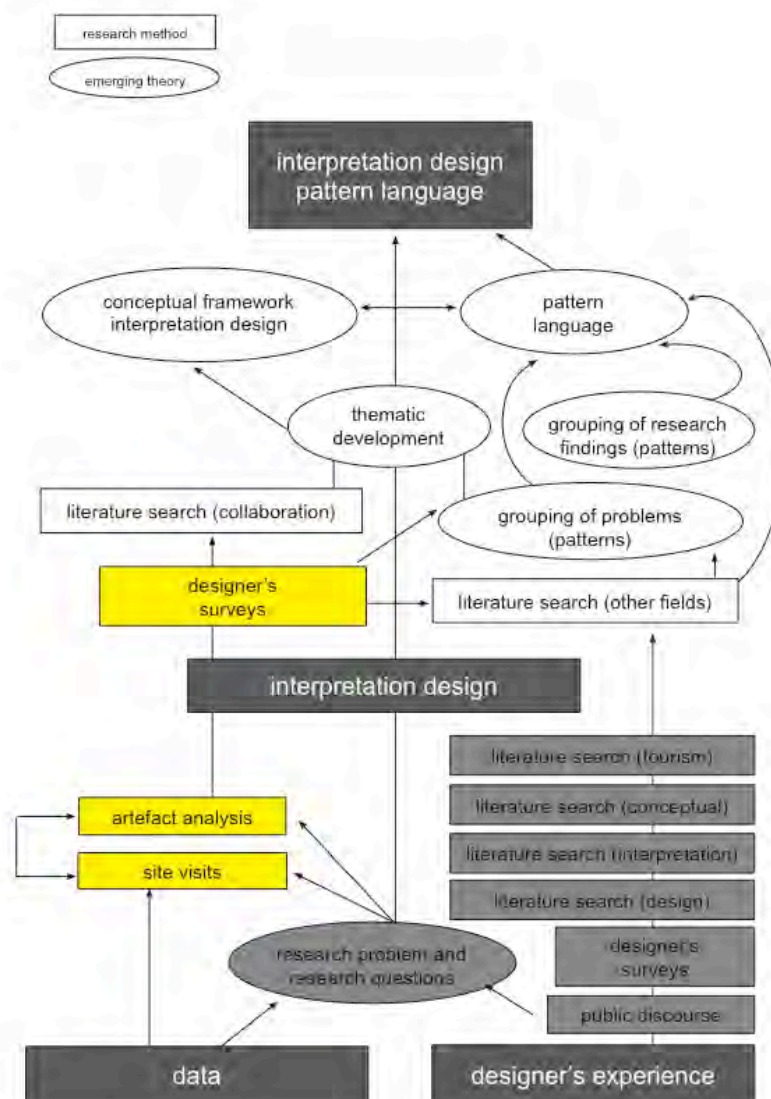


Figure 10: Part three – research process

Chapter 9 – Tourism ephemera

9.0 Introduction

The process of how interpretation design as a specialised field within design has integrated two approaches to communication has been addressed in Chapters 3 and 4. This chapter is dedicated to further developing this process through the designed artefacts of tourist ephemera.

9.1 Tourism artefact analysis

In order to understand the role of design and designers in communicating about natural heritage, examples of commercially designed tourism publications were sought. This material was sought out for examination to address the lack of available published material about representations of nature by design and designers. Prior to the existence of national parks and conservation areas, ideas of nature were represented through the designed artefacts of tourism rather than site-specific visitor centres. In order to understand the interpretation sites presented later as case studies, the tourism material presented here gives an historical context to the emergence of the field of interpretation design and how ideas of nature have shifted over time. This part of the research was conducted in The Tasmaniana Library of the State Library of Tasmania during a research fellowship in May 2006. The theoretical perspective and the methodology for analysing and documenting this work is described in Chapter 2 – Theoretical perspectives and research methods. The research in the Tasmaniana Library addressed the questions:

- What are the dominant design metaphors and myths used to construct ideas about nature in Tasmania?
- How have these dominant design metaphors and myths changed over time?

After looking at a diverse range of tourist material which included maps, postcards, photographs and souvenirs, I narrowed the focus, deciding to look only at the official guides published by the predecessor's of Tourism Tasmania, the State Government's tourism department. The majority of the material was produced by the agencies of the Tasmanian Government (The Tasmanian Government Railways, The Tasmanian Tourist Bureau and the Travel League of Tasmania). In the absence of available government publications, *Coming Events* published by the Travel League of Tasmania and *The Examiner* in the 1950s, and *There's No other Country Quite Like Tasmania* published in the 1960s by the *Mirror* newspaper, were also examined.

A deconstructionist approach was used to analyse tourism artefacts to reveal the dominant metaphors representing nature while also noting absences and legitimations. An analysis of texts from the official guides published by the Tasmanian Government's official tourism authority of the time, followed Jay Arthur's approach of 'lexical cartography' whereby words and phrases that cluster around particular places in Australia are collected. This approach has been detailed Chapter 8 section 8.1.2 Deconstructing nature and culture. In response to this research archive material was grouped according to decade from 1900 through to 2006. Of particular note were: design devices and styles;

advertising themes; metaphors for Tasmania; priority given to particular attractions; descriptions of nature; omissions (e.g. indigenous Tasmanians), maps, images, printing specifications and styles of illustration. Selected material accessed in the Tasmaniana Collection was photographed, photocopied and notes were made. Where applicable, international design influences were noted. Images and notes were documented for each decade and are included in the following tables.

Table 5: Tasmaniana Collection **Decade:1900s**


Date	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>1903 Circa 1903 Addenda notice in front November 7 1903</p> 	<p>Tasmanian Government Railways Illustrated Guide to Tasmania, The Holiday Resort of Australia. With the Compliments of the Tasmanian Railway Department</p> <p>Single publication 60pp Hard Cover cloth bound Inclusion of Colour Map indicating railways and ferry and steamer services to mainland and green coloured rivers are “trout streams”. Mines indicated</p> <p>One off publication, generously illustrated on glossy heavy stick and decorative design aesthetic. Caters for the “grand Tour” tourists centred on Railway travel and recreational pursuits.</p>	<p>Wide (panoramic format) Strong “graphic devices” Decorated initial caps with a photographic background. Range of different typefaces, borders, rules, ornaments. Rules with bolded and underlines sections emphasised. Side glosses, images layered and on top of each other, cut outs (influenced Photoshop deep etching processes evident in 90’s?) Use of bolding and Glosses to highlight certain words and headings Images Romantic and Picturesque (framing, ruins) Map indicating railways and ferry and steamer services to mainland and green coloured rivers are “trout streams”. Mines indicated</p>	<p>The Holiday Resort of Australia Cool retreat Garden state Replete with natural wonders Celebrated Favourite tourist resort (port Arthur) Temperate (Justly famous) and (a hot night is absolutely unknown) Home of the cyclist Invigorating Inspiring, Exhilaration, Pretty Pleasant country Smiling fields Natural advantages Attractive drives Cooling breezes</p>	<p>Indigenous people Not mentioned</p>	<p>Designed, Etched, and Printed at the “Examiner” and “Weekly Courier” offices, Patterson St., Launceston Tasmania</p>	<p>Grand tour model, gentleman tourist, fishing, hunting, outings with brush, pencil and camera (p5). Weather moderate, climate healthful and invigorating,</p>	<p>TL Q 919.46 TAS</p>

Table 6: Tasmaniana Collection Decade:1910s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>5th December 1911</p> 	<p>The Tasmanian Tourist: The official organ of the Tasmanian Tourist Association (Working under the Authority and Control of the Tasmanian Government</p>	<p>Formal grid, masthead, rules, columns, Gothic, serif and sans serif type, photographs, use of ellipse photographs' Based on Newspaper, with conventions of advertisements, photos of waterfalls, lakes, railways, tourist bureau building.</p>	<p>Progressive state Grand mountain and river scenery (west coast) Advance Tasmania Island State Tourists resort Chief ocean sea gate Producing centre Progressive state Enterprise and energy varying glories of Nature's handiwork Finest salmon and trout streams Wonderland of apple blossoms Myriad gems of scenery Most entrancing and magnificent sketch of mountain scenery Appleland Succession of Grandeur All pervading picturesqueness</p>	<p>Indigenous people Not mentioned</p>	<p>Printed by Smallhorn and Sons and published by Arnold Wertheimer, for the Tasmanian Tourist Association at 150 Collins Street, Hobart, Tasmania. Images with coarse screens, sometimes framed in ellipse. Repeat stories and articles.</p>	<p>Wealthy globetrotter Pleasant excursion Pleasant day's outing Extensive view Pretty spot Delightful scenery Freshness and novelty</p>	<p>TL Q 919.46 TAS Vol III Nos 4-90 05/12/1911-20/03 1912</p>

Table 7: Tasmaniana Collection Decade:1920s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>1920</p> 	<p>Picturesque Tasmania Tasmanian “Australia’s Playground” Government Tourist Bureau, Hobart, Tasmania</p> <p>A monthly pictorial magazine dealing with Tasmania _ The island state of the Australian Commonwealth.</p> <p>Edited and issued by the Tasmanian Government ... Tourist Bureau, Treasury Buildings, Hobart, Tasmania.</p> <p>Circulated in Australia, in the principal British possessions abroad, and in foreign countries. It consists, at its genesis, of eight pages only, but the baby will grow, and it is expected that the size and circulation both will be increased when the post-war conditions of the paper market again approach normal.. “Australia’s Playground”</p>	<p>Art Deco illustration/cover merman with hair holding map of Tasmania. Locates Tas. in relation to Australia Beattie Photos More streamlined, borders and flourishes, more white space than 1920’s, wider leading and spacing, dispensed with columns, more like book and less like newspaper Larger images (B&W photos)</p> <p>1922: Art Deco, floral sinuous borders framing a photograph, printed in single colour Dark Blue/ orange More images More articles than in 1920 Multiple destinations mentioned</p>	<p>Picturesque Tasmania Australia’s playground Tourist resort A scenic paradise Renowned for scenery and climate A home for the settler; a pleasure ground for the tourist The Switzerland of Australia Tasmania as a tourist resort Tasmania as a permanent residence</p> <p>Tasmania, the manufacturers’ Mecca, the England of the Southern Hemisphere, offers facilities such as harbours, minerals and timbers, equalled by few and surpassed by no other country in the World. “Tight little island” The anglers paradise Cheap electric power “Tight little island” from previous issue later becomes “Bright little island”.</p>	<p>The aboriginal people History starts with 1642 – 24 November Discovery of VDL by Abel Tasman.</p>	<p>Printed at Labor Papers Limited Collins Street Hobart B399/20</p> <p>1922: Printed by “The World” Printery, Collins Street, Hobart, Tasmania C1919/21</p> <p>Design/Illustration L.F. Reynold Printed by the daily telegraph, Launceston</p>	<p>Home for the settler; a Pleasure ground for the tourist</p>	<p>TL Q 919.46 TAS</p>

Table 8: Tasmaniana Collection Decade:1930s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>January 1937</p> 	<p>Tasmania the Jewel of the Commonwealth An Illustrated account of the Island State of Tasmania, its natural resources and advantages, its activities and enterprises and the opportunities it affords, thanks to its wonderful Hydro-Electric System, for the establishment of Secondary Industries. January 1937 Critchley Parker Published with the authority of the Tasmanian Government</p>	<p>Soft cover 3 colour 148 pp Formal symmetrical layout, 2 column, generously scaled images, some with decorative borders</p>	<p>The jewel of the Commonwealth The air-conditioned state This precious stone set in the silver sea The state that will renew you</p> <p>Blessed by nature with wonderful scenic attractions The Tourists Paradise p8 Mountains and forests Valley of the Derwent West Coast Forests The National parks Winter Sports Historical Interest Interesting Flora Limestone Caves World-Famed Climate A 'Mediterranean' Climate Interesting Physical Characteristics Remarkable Gorge 3000 feet deep Alpine suburbs Plants Build Platforms Rainfall and Topography Remarkable Mountain system Minerals From wilderness Snow-capped mountains Relics of Ancient Animal Life Marsupial wolf and Devil Remarkable Pillar of Rock Cirques, tarns and Lakes</p>	<p>Indigenous Tasmaniana</p>	<p>Printed at Labor Papers Limited Collins Street Hobart B399/20</p>	<p>Beautiful beaches free from the menace of sharks, bracing summer climate, surf bathing for children, and unsurpassed trout fishing Motor roads to mountain tops A land of beauty and Romance</p> <p>Coupled with these attractions are the splendid travelling facilities afforded by the Australian shipping companies and British overseas liners operating from every state, and the new mode of travel afforded by air liners. Internally there are splendid transport facilities on motor highways and by rail As will be seen... the railways are being brought up-to-date, and the new rolling stock is among the most modern in Australia.</p>	<p>Tasmaniana reference T.C. Q 919.46 PAR</p> <p>The new steel carriages are fitted with windows larger than those in any railway carriages in Australia. Provision is being made to deaden the sound of the undercarriage. Grades and curves are being modified on the railway tracks and it is calculated that railway travelling in Tasmania during this summer will be a surprise to visitors. An additional amenity that will be appreciated by visitors this year is the linking up of Tasmania with the telephone network of the world. P7</p>

Table 9: Tasmaniana Collection Decade:1940s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>1949 – 50</p> 	<p>This is Tasmania c 1949-50 Photocopy taken of publication Tasmanian Government Tourist and Immigration Department</p>	<p>Full bleed photos ((B&W). 2 colour back cover plus pp Blue and black, Full colour front cover, folded stapled publication.. Mostly 2 column text. Block serif typeface. Casually placed images as if from photo album and bordered in blue brushstrokes. Map of Tasmania divided into B&W scenes. Painted scene (Water colour?) on front cover, composite of apples, gum trees, beach, jetty and mountain, boats and single man, Looks like its on the cusp of modernism.</p>	<p>Island of infinite scenic variety Scintillating gem of sheer scenic loveliness Island of Mountains This other England Island State Land of haunting loveliness Spectacular nature Wild rugged nature Relaxation in health giving environment</p>	<p>Indigenous Tasmanians</p>		<p>Likeness to England Scenery Apples - Galaxy of blossoms Tourist roads (mention of road constructed to summit of Mt Wellington) Mining</p>	<p>Tasmaniana</p>

Table 10: Tasmaniana Collection Decade:1950s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>May 1957</p> 	<p>Coming Events in Tasmania Volume 1 February 1957 Official Journal Travel League of Tasmania This quarterly journal is printed and published by 'The Examiner' in the interests of Tasmania. "Coming Events" is the official organ of the Travel League of Tasmania, Launceston.</p>	<p>Combination of newspaper and magazine style (2 column text). Modernist graphics, streamlined, communicated through the advertisements</p>	<p>All year round attraction This treasure filled island</p>		<p>2 colour cover Black and white text</p>	<p>Many fields of entertainment Tasmania has to offer. Tourism a modern sophisticated enterprise Touring, drive yourself Air travel Speed, progress, automation, cars petrol, racing (Longford), driving, international flavour, efficiency Articles about destinations, historic places, power in the mountains, angling, caravans and camping, State's first Luxury Motel, Saving time, faster and easier</p> <p>Visitors from interstate and overseas rarely left Tasmania without expressing pleasure at the beauty of the scenery, the charm of the countryside and the friendly spirit of the Tasmanians. Yet a vast range of mainlanders not to mention people from overseas, regarded Tasmania as purely a Summer holiday</p>	

Table 11: Tasmaniana Collection Decade:1960s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>1960s</p> 	<p>This is Tasmania Tasmanian Government</p> <p>No other country in the world is quite like Tasmania Mirror newspaper</p>	<p>Modernist Helvetica typefaces, evidence of Swiss style, in advertisements.</p> <p>Early sixties still looks like 50s illustrations clichés of American and European style (No other country in the world is quite like Tasmania) newspaper style design cover 3 spot colour</p>	<p>Apple isle Isle of Mountains A little bit of England Sportsman’s paradise Holiday island For holiday Variety all year round State with everything</p> <p>No other country in the world is quite like Tasmania. For the tourist, Tasmania has everything, that is, except a desert. kaleidoscopic changes of scenery at every turn of the road something unique for everyone. Only 200 miles from the mainland.</p> <p>“Island of mountains” is another soubriquet that is well deserved. Nowhere else in such a small area will one find the wild grandeur, the lakes, the unexplored wilderness, the tumbling waterfalls, as in Tasmania</p>	<p>Indigenous Tasmanians</p>	<p>No other country in the world is quite like Tasmania newspaper style design cover 3 spot colour</p> <p>From: No other country in the world is quite like Tasmania early sixties pre 1966, Published by Mirror newspaper and sponsored by the Tasmanian tourist promotion council. TL PQ 919.46</p>	<p>Industrial Development in Tasmania National Parks and reserves (Image of Cradle Mountain) and Dove Lake with person) Power in the mountains (image of Tarraleah Power station) Trout Fishing (2 fishermen) Game Fishing Saltwater and Estuary fishing Beaches and Surfing (image of surfer) Fauna control and Game laws (Shooter with Deer) Winter Sports (Downhill skier) The sport of Kings (Horse racing) Caravanning Motoring information Golf Bowls Locations</p>	<p>TL PQ 919.46</p>

Table 12: Tasmaniana Collection Decade:1970s


Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>1970s</p> 	<p>This is Tasmanian Tasmanian Government Tourist bureau</p>	<p>Monochrome or duotone printing Images of architecture (historic), casino, Recreation -people playing tennis, fishing Nature presented through Hand drawing, Maps, photos of icons such as cradle mountain, cartoon patchwork like quilt Photos coarse screened. Text, lists of destinations like a timetable, not much attention to typesetting, low budget, sometimes typewritten DIY feel</p>	<p>Tasmania, Friendly Holiday Isle Island state Emerald Isle Apple isle Scenerama Holidays Tasummer holidays Tasconomy Tascaravan Tasmobile Holiday Home Window to the South west (Hartz mountains) Holiday in history Not tied to a schedule Taspectacular Tasdevil Tasroyal Freewheeling do-it-yourself holidays Take a holiday from the resorts and meet the real Tasmania Free and easy way of life Face to face with wildlife</p>		<p>Full colour, glossy stock 32 pp</p>	<p>History Mining Hydro power Panoramic view Picturesque mountain country Camping/caravanning Casino Caves Hydro electric schemes Driving holidays bridges</p> <p>Wilderness Tours 1976-77 Enjoy an adventure holiday in Tasmania's fabulous south west, Mention of the words 'remote', natural environment, wilderness Denison Star Launch Cruises The beauty of the Gordon lies in its untouched shores which rise steeply from the water in most parts, the whole of the banks being clothed in thick rainforest. The flora on the banks is unique and a paradise for the botanist.</p> <p>Also reference to Truganninni Park, Tasmania's last full blooded aborigine</p>	

Table 13: Tasmaniana Collection Decade:1980s

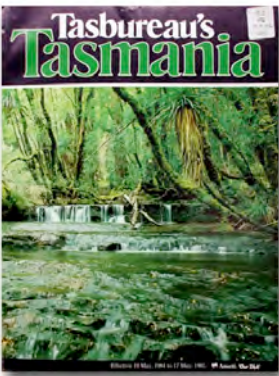
Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
1986? 	Tasmania (1986?) The Tasmanian Tourist Bureau	Full Colour, generous photos, full colour double spread of Franklin/Gordon? River – wild river in centre. Brown background full bleed, Display Type with very tight spacing. #D axonometric maps of Tasmania with a section highlighted. Huge proliferation of tourist brochures Tasmanian Devil character part of a major advertising campaign	Wilderness Tasbureau Outdoors as specialised brand The last wilderness Lakeland Magic Living History Home of the last temperate rainforests, convict ruins and colonial elegance, and the warmest welcome in the world. 'Top spot' for tourism (1986) Getaway	Mention of Aboriginal 'Man' Abel Tasman's famous voyage of 1642 presaged the end of isolation and sounded the death knoll of the full blooded Tasmanian Aborigines...Settlers came too. The land was opened up but it was the beginning of the end for the full blooded Tasmanian Aborigines who were hunted down and shot on sight. Their tale of tragedy and despair is without parallel. The 44 who survived transportation to Flinders Island were finally resettled at Oyster Cove in 1847. "King Billy" and Truganini the last full-blooded male and female of this truly ancient race died in 1869 and 1876, less than 75 years after the arrival of western civilisation.		Outdoors as specialised brand 'Top spot' for tourism (1986) Get away Tasmania be tempted (campaign)	TL PQ 919.46 TAS Box New Ephemera

Table 14: Tasmaniana Collection Decade:1990s

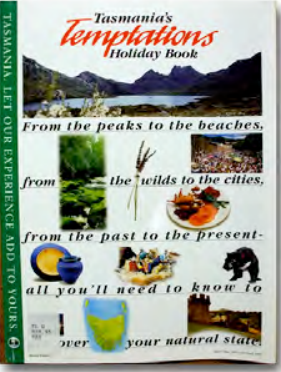
Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>1998</p> 		<p>Photography full colour Maps illustrations not include activities like rafting Photographs in same tradition as wilderness photographers People present in boats and on walkways People photographing Logos, identities Marketing Regional areas, central, east coast, Spring Bay Marketing for particular interests and audiences (e.g. corporate world) . Photographs from “wilderness” photographers Rob Blakers, Richard Bennet, Grant Dixon, Alan Moul, Chris Bell</p>	<p>Tasmania the first bite - Tasmania be tempted Tranquil beauty Unique Splendour Majestic silence Unique wilderness experience A chance to take in rare beauty in majestic silence Unspoilt uncluttered Famous wilderness Pockets of untouched wilderness Wilderness right in the city Launceston’s own piece of wilderness Unspoiled Uncomplicated lifestyle Tasmania Discover your natural state Freycinet Lodge – A World of natural activities Tasmania –All wrapped up Awesome beauty Idyllic off shore retreat Tasmania’s temptations Ultimate wilderness experience Unforgettable wilderness destinations The perfect package naturally Ulcer free zone Natural environment Fiercely beautiful World’s last temperate wilderness area\ Tasmania the cultural experience</p>		<p>Photography full colour Standard formats of brochures, range of stocks. More expensive stock, photography, copywriting, identities</p>	<p>Food (all grown in this Remarkably clean and unspoiled environment) Adventure Views Panorama Indulgence Tasmania offers a unique combination of wild and spectacular scenery and boundless opportunities for adventure Contents listed Bushwalking River Sports Climbing Camping Bicycle touring 4WD touring Adventure touring Horseriding Snow Skiing Caving River Cruising Sail chartering Scuba diving Fishing Wilderness Flights Trout Fishing Photography resources</p>	<p>TL PQ 919.46 TAS Box TCPQ 919.46 TAS MISCELL</p>

Table 15: Tasmaniana Collection Decade: 2000s

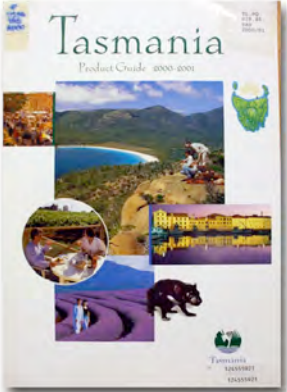
Cover	Publication	Design Devices	Metaphors/ Constructions of nature	Omissions	Production details	Construction of visitor as tourist	Tasmaniana reference
<p>2000/1</p> 	<p>Tasmania product Guide Tourism Tasmania product Guide divides tourist 'products' into 4 groups: Wilderness Heritage Lifestyle Wildlife</p>	<p>4/5 images on cover with people, wining dining, picnicking, Asian tourists at lavender farm Salamanca market, Hunter street) Inside 3/3 images with people Photograph after Geoff Lea, montaged, layered, cut out circles</p>	<p>Tasmania Discover your natural state Wilderness Heritage Lifestyle Wildlife Explore the possibilities Ancient wilderness Clean air cool water</p>			<p>Imagine an island of jagged mountains and ancient wilderness, rare animals and unique plants Imagine a rich colonial heritage, the past just an echo away in sun-warmed sandstone, chipped by convicts chisels. Imagine an island of clean air and cool water, with full flavoured cheeses, the freshest fruit and vegetables, fine wines and superb seafood. But why imagine? In Tasmania, you can experience the reality.</p>	<p>TL.PQ 919.46 TAS 2000/01 Box TCPQ 919.46 TAS MISCELL</p>



Image 4: Tasmanian Tourism wordmap 1900s – 2000

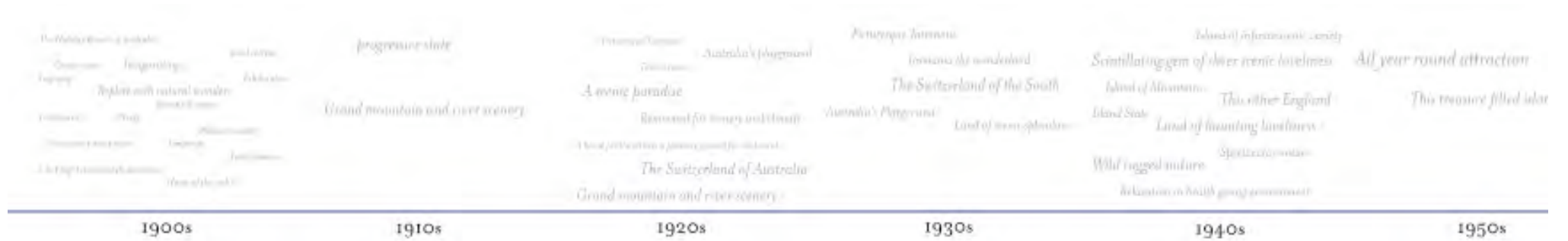


Image 5: Tasmanian Tourism wordmap 1900s – 1950



Image 6: Tasmanian Tourism wordmap 1960s – 2000

9.1.1 Word maps

From this material, I have made observations about the ways in which experiences of tourism and perceptions of nature have been constructed in the past. A collection of descriptive phrases used to describe Tasmania, were gathered as ‘word maps’. This approach is inspired by Jay Arthur’s lexical cartography approach. I have constructed sets of ‘word maps’ about Tasmania, gathered from the official tourist publication of the each decade. Rather than each map belonging discreetly to a particular decade, I was able to make one continuous map laid ‘end to end’ along a time line and used it as an interactive presentation tool to view how the word maps evolved over time (see Images 5 and 6). This then allowed a visual representation of the word maps, identified dominant metaphors, metonyms and myths and where different emphases occurred over time. A detail from the entire word map show the word map produced from designed tourist material during the 1920s and 1930s.



Image 7: Tourism wordmap 1920s – 1930s detail.

The relationship between tourism, design and interpretation has been outlined in Chapters 3 – 7. The following discussion develops theoretical concepts discussed in previous chapters using the designed artefact material I examined.

9.1.2 Tourism artefact design

The tourist ephemera held in the Tasmaniana Collection reveals the history of tourism in the state but is also noted as a collection for its importance and value in preserving a unique archive of design history. Such collections of ephemera provide a rare record of design history, and can be read as artefacts which reveal meaning on many levels including social, political and aesthetic. The material I examined most often mirrored European trends in graphic design and publishing, from the very ornate early 20th Century publications echoing Victorian design aesthetic such as *The Illustrated Guide to Tasmania*, through to the Art Nouveau inspired *Picturesque Tasmania* of the 1920s.

Modernist design featured in the 1950s and 60s with its international style and sans serif typefaces, followed by the psychedelic colour schemes and typefaces of the 1970s.



Image 8: *The Illustrated Guide to Tasmania 1900*. Image source: *State Library of Tasmania*.

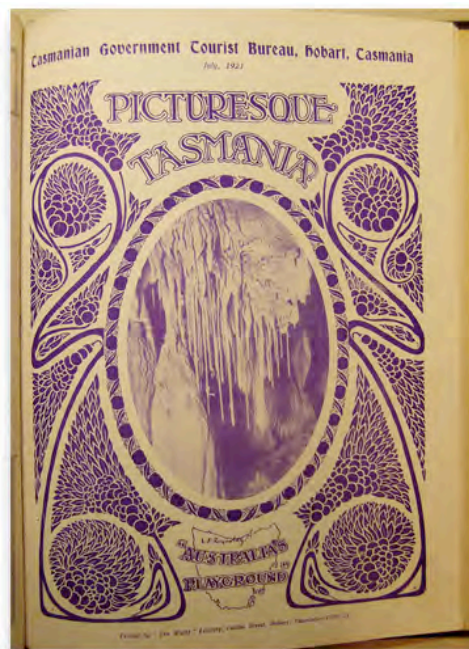


Image 9: (left) *Picturesque Tasmania* July 1921. Image source: *State Library of Tasmania*.



Image 10: (right) *A visitors Guide to Tasmania 1973-74*. Image source: *State Library of Tasmania*

Since the 1980s, graphic design and later, communication design adopted not only the language of conservationists to describe wilderness but also their photographic representation of place. The conventions of ‘wilderness photography’ were clearly co-opted into tourism communication, including photographs by well-known conservationist photographers Rob Blakers, Richard Bennett, Grant Dixon, Alan Moulton and Chris Bell.

Photography in these publications was full colour, printed full bleed and on high quality stock. The absence of humans from these photographs draws on a Romantic aesthetic and connecting with nature and ‘untouched wilderness’.

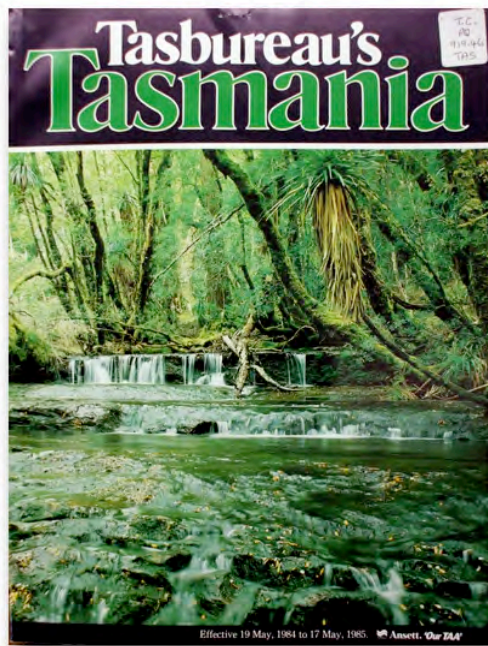


Image 11: *Tasbureau's Tasmania*, Tasmanian Government c1983. Image source: State Library of Tasmania.

The late 1990s and early 2000s have seen a huge increase in the marketing of Tasmania both as a holiday destination and a place to live. The appeal of Tasmania's lifestyle, as well as its scenic attractions are now balanced in promotional material which includes the communication of Tasmanian culture; art, food, wine, heritage, wildlife and natural environment. These are presented visually as a 'smorgasboard' of offerings on the cover of the *Tasmania be Tempted Holiday Book*, from the 1990s. This more diversified imagery is accompanied by references to lifestyle such as 'Uncomplicated lifestyle', 'Tasmania Discover your natural state', 'Idyllic off shore retreat', 'Ulcer free zone', 'Tasmania the cultural experience', trying to appeal to sea changers and escapees from Australia's bigger cities. By the early 2000s, the main tourist publication from Tourism Tasmania is titled *Tasmania-Product Guide*, the booklet as a catalogue of products is divided neatly into four categories; Wilderness, Heritage, Lifestyle and Wildlife – the reputation for these products previously established through advertising in the 1990s. This publication could be described as information design with less space devoted to lavish image-based design, in favour of sets of tables and schedules – specifications of the 'product' for the savvy consumer, who, now used to shopping from catalogues or the web, has access to information previously only available through travel agents. From the decade-by-decade analysis and the dominant metaphors that emerged there are a number of observations that can be made about the shifting constructions of place, nature and the tourist experience.

9.1.3 Scenery to lifestyle

In the early part of the 20th Century the descriptions focused mostly on visual depictions of Tasmania and its scenic amenity. An increasing appreciation and awareness of natural places flowed from the Romantic view of the natural world and the establishment of national parks in America from 1872 onwards. Descriptions including ‘grand mountain and river scenery’, ‘replete with natural wonders’ and ‘a scenic paradise’ are typical of descriptions in the 1900s of Urry’s Romantic tourist gaze. Roughly one hundred years later, the marketing of Tasmania includes a more abstract emphasis towards lifestyle and experience, with tag lines such as ‘Explore the possibilities’, ‘In Tasmania you can experience the reality’, and ‘Tasmania your Natural State’. Here the promise is much more ambiguous, open to an individual interpretation of these slogans and branding of ‘lifestyle’.

9.1.4 Comparisons with elsewhere

In the early to middle years of the 20th Century, in an effort to be taken seriously as a tourist destination, Tasmania was constantly being compared with elsewhere, in particular, to England and the Commonwealth. Descriptions such as ‘The Switzerland of the South’, ‘This Other England’ and ‘A little bit of England’ provided reassuring familiarity to those from Europe considering travelling to, or settling in Tasmania. The following extract comes from the publication *This is Tasmania* (1949 – 50):

One of Tasmania’s charms is it possesses much scenery that is reminiscent of the Mother Country...It is for these and other reasons that Tasmania is frequently referred to as ‘This Other England’ (Tasmanian Government Tourist and Immigration Department c 1949-50).

Along with the strong tendencies to both authenticate and familiarise Tasmania, there is an overwhelming pride in place expressed through superlatives typical of tourist material anywhere, such as ‘Land of scenic splendour’, ‘The jewel of the Commonwealth’ (1930s) and ‘Scintillating gem of sheer scenic loveliness’ (1940s). Specific comparisons with the northern hemisphere were replaced from the 1970s onwards with messages that portrayed Tasmania as every bit as glamorous as international destinations with an exciting nightlife and sporting events, such as:

Throughout the travel world people are inclined to identify Tasmania with history, scenery, a casino, the Sydney-Hobart yacht race and other events of international repute (Australian Tourist Commission Tourism 1983).

9.1.5 Tasmania as a resort

The notion of Tasmania as a tourist resort has also developed and transformed over time. Around the early 1900s, the experience of tourism and expectations of tourists was modelled on the popular idea of the package tour founded by Thomas Cook in England in the 1860s. Cook’s tours involved the regimentation and transportation of tourists through advertised scenic routes. Chris Rojek describes the appeal of Cook’s Tours:

Leaving home and the home country was commonly seen as both an adventure and a hazard. This is why Cook went to such lengths to advertise and organise his tours as guided events. Cooks “popular holidays” offered the tourist the frisson of risk. Critically it was controlled

risk. The “Cookite” could travel abroad secure in the knowledge that professional tour guides had prearranged routes, hotels, foods, excursions and travel tickets (Rojek 1991, 34). The advertisements in tourism material from the early part of the century published by the Tasmanian Government Railways confirms Cook’s model of tourism with advertisements for hotels, clubs, houses, café, railway, massage, steam laundry, luggage, property brokers, insurance, trips by brake drive, rail, coach, steamer, electric tramway, biscuits, souvenirs and umbrellas. Even advertisements for Cook’s tours themselves are published in the daily *Tasmanian Tourist* with the strap line “Cook’s Tickets like the magic carpet in the fables will take you everywhere” (*The Tasmanian Tourist*, December 5, 1911). Today, package tours are still as popular as ever, but tourism has become more diversified to include adventure holidays, semi-independent travel arrangements and more recently nature-based and ecotourism. In analysing the tourist material, advertisements were often a key to tracking these changes. From the 1950s and 60s onwards, advertisements for independent touring, drive yourself holidays and air travel appeared. Speed, progress, automation, cars and petrol, saving time and making travel faster and easier were the messages communicated through design, echoing the modernist fascination with efficiency and function. The late 1980s and 90s saw the emergence of nature-based tourism and the promotion of Tasmania’s national parks and reserves as destinations. Where previously many nature-based activities were informally organised; bushwalking, kayaking and sailing trips by individuals and clubs; the last few decades has seen the ‘packaging’ of these activities as ‘experiences’ with guides, catering and transportation. In many ways these packages now resemble the promise of Cook’s tour with its ‘frisson of controlled risk’.

9.1.6 Wilderness branding

The strong identity of Tasmania’s unique natural environment has emerged since the 1970s. A worldwide environmental awareness, steadily growing since the 1970s, was captured in Tasmania during the campaign to save Lake Pedder, and again during the 1980s for the Franklin River. By this time, the rhetoric of the conservationist movement was firmly incorporated into Tasmania’s tourism promotions. Prior to the 1980s, there is little mention of the terms ‘wilderness’ or ‘natural environment’ in such marketing material; however, descriptions such as ‘Unique wilderness experience’, ‘Famous wilderness’, ‘Pockets of untouched wilderness’ and ‘Wilderness right in the city’ (1980s), are now commonplace. Since Tasmania’s South West Wilderness area was given World Heritage Area status in 1982, the marketing of Tasmania’s natural environment now refers to the global significance of the natural environment, the uniqueness of its biodiversity, and is frequently referred to as the ‘World’s last temperate wilderness area’. Unlike at the beginning of the 20th Century when comparisons held England and Europe as the familiar benchmark, comparisons made now are now on a global level, reflecting trends in communication, tourism and travel patterns. Promotion of national parks and the Tasmanian World Heritage Area dominate most contemporary Tasmanian tourist material.

9.2 Summary

The problematic invisibility of designers' contribution to shaping ideas and beliefs about nature is related to the fact that design enquiry has only relatively recently started to examine how it actively shapes belief (Tyler 1995, 112). By examining the formal devices of design, beliefs and messages referenced in designed artefacts, a more critical understanding of how such materials can inform and shape beliefs, attitudes and behaviours can be gleaned. Edensor (1998, 19) remarks that tourist sites, souvenirs, guidebooks and other tourist paraphernalia epitomise conflicts over spatial representation. Analysing the nature-based material of tourist literature reveals stylistic devices used to define how places are marketed as destinations, and how these definitions can shift with government policy, competing business interests and political motivation. Shifts in representations of nature, including the shift in interpretations of wilderness are evident in artefacts of design presented in this chapter. As the complexity of the communicative milieu has increased, the quality of designed artefacts and their impact has also changed. Contemporary designers employ not only words and images, but also sounds, movement and in some cases scent to communicate and in doing so, actively construct and contribute to ideas about nature and the natural environment. These more complex designed sites and artefacts are examined in the next chapter, Chapter 10 - Interpretation design: site visits and case studies.

Chapter 10 – Interpretation design: site visits and case studies

10.0 Introduction

This chapter examines interpretation sites, highly complex designed artefacts which communicate about Australia's distinctive natural and cultural heritage. In this chapter a selection of interpretation design projects are presented as case studies. Each case study develops and extends concepts, issues and themes already introduced in earlier chapters, illustrated with a detailed discussion of each project. Links are made to practical and theoretical issues which have come to the fore through the development of the conceptual framework of the previous chapters. This chapter is structured so that each case study can be read separately and does not rely on being read in a particular sequence. While the case studies present a cross section of Australian interpretation design projects, in these discussions I have selected to emphasise particular aspects of the projects in order to illustrate theoretical and practical issues raised in earlier chapters. For each case study a summary of the site and interpretation design project data precedes the discussion. Case studies have been cross referenced to in other chapters.

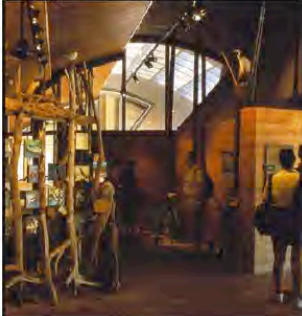
In order to reach an in-depth understanding of the field it was critical to examine the design work – the artefacts and sites, first hand. A fundamental dimension of these projects is visitor experience. The essence and purpose of many of the projects is to create an encounter with place, which depends on the visitor's full engagement, visual and sensory, as well as physical and social. As these places are set apart, protected and regarded as 'significant' sites, they are publicly engaging for many reasons—civic, scientific, cultural and historical. Some dimensions of these visits, will stimulate people differently—being intellectually engaging, physically exhilarating, emotionally confronting or entertaining. There is an affective dimension to these places as well, something that can only be felt first hand. The following case studies, as artefacts, form practice-based evidence for the research.

10.1 Site Visits

Throughout this research, site visits have been conducted and have been archived through photographic images of visitor centres, trails exhibits and the surrounding environment. Each of the sites visited were developed in the period between 1980 – 2006, the time frame I have identified in this research as corresponding to emergence of interpretation design. Further information about particular interpretation sites and projects was sought from both designers and managers of specific sites, either directly or through public discourse. Data was sourced from interviewing designers, obtaining project briefs and tenders and viewing concept and design development documents. The site visits were also integral to developing the Interpretation Design Pattern Language tool as exemplars. Sites referenced in this research are summarised in Chapter 6.

10.2 Case studies

Case study 1 – Bowali Visitor Centre – Kakadu National Park, Northern Territory, Australia

1	Bowali Visitor Centre	Site	Management/ Ownership	Resource/ Theme
		Bowali Visitor Centre, Kakadu National Park, Northern Territory	Parks Australia	– Indigenous and natural history
		Interpretative Elements	Designer/ Architect	Date
		– Sequence of spaces depicting different natural habitats	– David Lancashire Design – Troppo Architects	1992

Every river, mountain or sea, every place, is known and named, sung, valued and incorporated into culture, over thousands of years. The European explorers and white settlers did not name rivers and mountains. They renamed them. They were already part of Country. The separate categories *natural*, *cultural* and *Indigenous* to describe particular kinds of heritage may still be useful in certain circumstances, but for Aboriginal Australians they are inseparable. Heritage is the unity, the continuum and the connectivity of natural and cultural, from earliest times, through the history of contact and up to the present moment (IAA 2006).

Bowali Visitor Centre is an award-winning example of a collaborative interpretation project between architects, designers, builders and local indigenous people. Opened in 1992, the project was developed over a period of three years of professional and community consultation. Designer David Lancashire and partner and anthropologist Di Lancashire spent four months living and consulting with indigenous people in order to authentically represent their natural and cultural heritage values. The project consists of a total of 350 square metres of exhibition and orientation space, with discrete spaces used to depict different habitats.

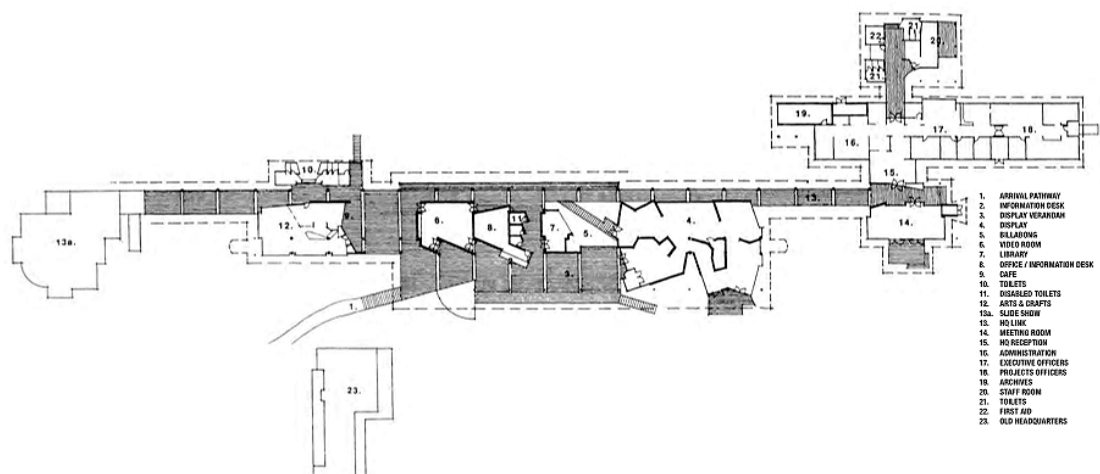


Image 12: Floor Plan Bowali Visitor Centre, Kakadu National Park, Northern Territory, Australia.

Image: Parks Australia, Department of Environment, Water, Heritage and the Arts



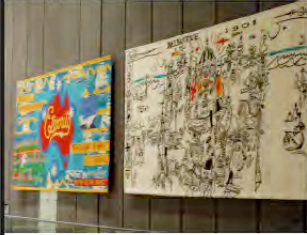
Image13: Bowali Visitor Centre, Kakadu National Park, Northern Territory, Australia.

Image: David Lancashire Design.

David Lancashire Design collaborated with architects Glen Murcutt and Troppo Architects to employ building structures and materials as part of the communication strategy. Aboriginal and natural history interpretations of flora, fauna and the landscape are communicated through culturally and environmentally sensitive signage, using both local indigenous language and English. David Lancashire worked collaboratively with indigenous and non-indigenous artists to fabricate key components of project. The range of stakeholders and consultants included indigenous people, graphic designers, architects, national parks staff, landscape designers, engineers, builders, interior designers, and anthropologists; all requiring a high degree of collaboration and communication between team members.

In the development of interpretation design Bowali Visitor Centre broke new ground, leading the field in Australia projects in a number of ways. From a design perspective, the project was ambitious and innovative in its scale, timeframe and architecture. Combining the skill of indigenous makers and artists with a team of fabricators has resulted in an interactive and engaging interpretive experience. Looking beyond the design treatment, the success of the project is grounded in the social relationships of respect and trust. Through working *with* indigenous people, the communication of history, characters, stories and science is delivered with authenticity and integrity, a fundamental aspect of which was the use of both indigenous and English language. In 1992 The Bowali project was ahead of its time, and a forerunner to the intention of 2003 IAA *Iga Warta* statement which states that ‘Aboriginal people should control the representation and interpretation of their own culture and country’ (IAA 2003, 3).

Case Study 2 – Federation Tapestry – Melbourne Museum, Victoria, Australia

<p>2 Federation Tapestry, Melbourne Museum</p> 	<p>Site</p> <p>Federation Tapestry Melbourne Museum</p>	<p>Management/ Ownership</p> <p>Commissioned by Government of Australia, Museum of Victoria</p>	<p>Resource/ Theme</p> <p>– Centenary of Australian Federation/ national identity</p>
	<p>Interpretative Elements</p> <p>– Tapestry as interpretive device</p>	<p>Designer/ Architect</p> <p>– Designer: Murray Walker – Weavers: Victorian Tapestry Workshop – Artists: Martin Sharp, Bruce Petty, Ron Tandberg, Celia Rosser, Mirka Mora Charlotte Walker, Students of Malvern Central School and Echuca Primary School, Students from primary schools in Echuca, Cape Barren Island and Bathurst Island, William Barak and Tommy McRae (Yakaduna), Reg Mombassa, Ginger Riley Munduwalawala</p>	<p>Date</p> <p>2001</p>

Heritage is an integral part of the concept of nation-building and treasured heritage can become an "instrument" to create a sense of belonging to a common place (Herbert 1995, 13).

Tourist sites, heritage centres and museums, are sites which selectively and exclusively represent national stories, symbols and objects strategically and politically. Designers and the interpretive sites they develop have the potential to dramatically influence the formation national identity, and they also have the potential to enrich and strengthen a distinctive Australian visual language. *The Federation Tapestry* in the Melbourne Museum is an example of how discourse about national identity is formed in a public image space by using an art object as an interpretive device in a public museum.

Inspired by the epic medieval tapestries that communicated and recorded significant moments in social history, *The Federation Tapestry* communicates many non-stereotypical perspectives on Australia’s cultural and natural heritage. Woven between 1999 and 2001 at the Victorian Tapestry Workshop, it was commissioned to mark the centenary of Australia’s federation in 2001. Funded by the Federal Government, the tapestry is woven from wool and consists of ten panels, two metres high and almost forty-one metres in length. This use of art objects as communicative tools recognises that used in interpretive settings, they function both as interpretive or communicating devices, as well as objects that need to be interpreted or explained to an audience. Visitor feedback indicates that while there is admiration for the skill and work in the tapestries, and a positive response towards the tapestry as a communication format, the tapestries also provoke many questions and a need for face-to-face interpretation provided by guides at the Melbourne Museum (A. MacAleer, Personal Communication February 12, 2004). The need for this further interpretation is not surprising, as this work does not represent what Whitehouse calls a typical ‘This is Australia’ story commonly found in tourist brochures, Australiana and events such as the Sydney Olympic games ceremony whereby:

The key trope in these depictions of nationhood is the use of the panoramic narrative and the language of stereotypes to construct an all-encompassing vision of an instantly recognisable and reassuringly familiar Australia. Inherently commercial and propagandistic they give visual form to what it means to be Australian... (Whitehouse 2007, 52).

The final tapestry, rather than being a didactic account of history, culture and events, is in the words of the project's designer and artist, Murray Walker, 'a visual poem'. Walker collaborated with indigenous and non-indigenous artists, children, writers, musicians, poets and cartoonists in order to express the complex themes and issues surrounding the notion of federation and contemporary Australian society. Walker says:

This is not a textbook history, but a series of visual markers that trigger memories and inspire reflection. It can be interpreted on many levels. It is a people's history (Museum Victoria 2001).



Image 14: Reg Mombassa, *Alone in the Bush*, Federation Tapestry, Melbourne Museum.

By involving a diverse range of people to distil complex ideas and events and through visual representation, the result is a critical, reflective, engaging and often humorous interpretation of history. Reg Mombassa, member of the Mambo design group, designed a panel titled *Alone in the Bush*. Mombassa, whose graphic and fashion design practice has become part of Australia's visual culture, is renowned for a humorous and irreverent attitude towards religion, sport, and politics. Instead he elevates alternative cultural icons such as meat pies, thongs and native animals, and by doing so inverts and subverts dominant attitudes and assumptions. Mombassa's panel depicts a Jesus-like shepherd preaching to several Australian animals surrounded by the decorative border inspired by early 19th Century Staffordshire plate brought from Britain to Australia. Mombassa comments that this work:

... depicts the loneliness and alienation that results from placing Northern Europeans in a vast, empty landscape. It has taken time, cultural conditioning, air conditioning and insecticides to help us to appreciate and love the Australian landscape as we now do (Museum Victoria 2001).


Walker’s choice of an alternative depiction of the moment of Australian federation in 1901, by satirical political cartoonist Bruce Petty, challenges the mainstream image of such events as represented through the legacy of historic paintings. Similarly a detail within the design of artist Martin Sharp’s panel, shows a skywritten word ‘sorry’, over Sydney, drawing attention to the refusal of Australia’s Federal Government of the time, to apologise to Australia’s Aboriginal people for a history of mistreatment since colonial contact.



Image 15: Martin Sharp, Celebrations 2001, Federation Tapestry, Melbourne Museum.

The Federation Tapestry raises some significant issues for interpretation design. Firstly, while art objects taken out of gallery contexts, have great potential as non-didactic vehicles for communication, they also need to be ‘interpreted’ to audiences, as Grace Cochrane cautions, ‘Objects only speak for themselves to people who know the language they are speaking’ (Cochrane 2004, 3). Secondly from a design perspective, such projects offer important opportunities for designers to be both contributing to, and drawing upon a lexicon of Australian visual language. In engaging in this process designers have the potential to contribute actively, critically and dynamically to the discourse on Australian national identity in highly visible and visited public image spaces.

Case Study 3 – Leeawaleena – Lake St Clair, Tasmania

3A 	Leeawaleena, Lake St Clair Visitor Centre	Site Leeawaleena Lake St Clair Visitor Centre, Lake St Clair Tasmania	Management/ Ownership Tasmanian Parks and Wildlife Service	Resource/ Theme – World heritage area – Geology and glaciation – Flora and fauna – Aboriginal history – European history – Recreation – Issues and management – Timeline
		Interpretative Elements – Touch screens – Geological timeline – Hologram – Stereoscopic photographs – Sculpture	Designer/ Architect – ECP Design Associates	Date 1995

My work is a way of retelling history from our perspectives—to dispel the myth that we are not here. I use my artwork to celebrate past, present and future through connection to place (Parks and Wildlife Service Tasmania 2001).

Lake St Clair forms the southern part of the Cradle Mountain-Lake St Clair National Park and is located in the Tasmanian Wilderness World Heritage Area. The lake, which in local Palewa aboriginal language is named *Leeawaleena*, sleeping water, has a dramatic backdrop of mountains whose European place names, Olympus, Byron and Solitude echo Romantic influences. According to historian John Williamson this area has seen the playing out of the most central themes in Tasmanian history including; Aboriginal occupation, the heroic explorer journeys into the west and south west, the hegemony of the pastoralists of the Derwent Valley, Hydro Electric development, tourism and conservationist campaigns (J. Williamson Personal Communication 31 July 2005).



Image 16: (left) Leeawaleena – Lake St Clair.



Image 17: (right) Lake St Clair visitor centre.

Lake St Clair visitor centre is the second visitor centre in the park, the first being located at the northern end near Cradle Mountain and the famous Overland Track recreational walk. The Lake St Clair visitor centre was opened in December 1995 with interpretation design undertaken by eCP Design Associates; graphic designer Julie Hawkins, designer manufacturer Tim Williams and writer Chris Viney. The team responded to a set of interpretive themes, researched and developed by heritage interpreter Sarah Waight, for the client, the Tasmanian Parks and Wildlife Service. The design team worked in collaboration with advisors including geologists, botanists, zoologists, archaeologists, interpreters, photogrammetrists, park rangers and track managers. Themes identified in the interpretive plan for the visitor centre include:


- World heritage area
- Geology and glaciation
- Flora and fauna
- Aboriginal history
- European history
- Recreation
- Issues and management
- Timeline

Graphic designer Julie Hawkins describes the way the design approach incorporated this diverse set of themes:

The graphic approach centres on the unique attributes of Lake St Clair itself; the translucence of its elements, snow, mist, ice, water. This is reflected in the design of the centre logo, which takes the form of a stylised lake with an icy surface. There were echoes of this subtlety in each of the themes; the cryptic traces of glaciation discernable in the landscape of today, the elusiveness of the animal presence, the small traces left by the Aboriginal people, and the vanished lifestyles of the early European travellers. We sought a balance between the need to create an individual identity for each theme and the overall coherence of the interpretation centre (J. Hawkins Personal Communication September 1999).

In addressing the communication needs of the visitors, a correspondingly diverse range of communication formats were used. These included a video about glaciation, stereoscopic photographs, an interactive quiz, interactive touchscreen, holographic representation of a thylacine, scrapbooks from early tourist and explorers journeys, and a timeline using 2.5 kilometres of tightly coiled rope to represent 1,000,000,000 years of geological time. At the time of its opening the visitor centre was dedicated to telling a number of narratives; that of the settler, explorer, tourist, adventurer, scientist, using a wide range of interactive media appropriate for the themes and messages in the interpretation plan.

However, noticeably absent at the time of the visitor centre opening, was any interpretation dedicated to Aboriginal culture and history; although part of the original interpretive plan. This was rectified in 2001, with the opening of a nearby cultural heritage walk called *Larmairremener tabelti*, together with a printed brochure and fibre sculpture housed in the visitor centre. Jointly developed by the Tasmanian Aboriginal Land Council and the Tasmanian Parks and Wildlife Service, it arose to address the lack of Aboriginal interpretation in the Tasmanian Wilderness World Heritage Area.

3B Larmairremener tabelti 	Site Larmairremener tabelti Cultural Walk, Lake St Clair Tasmania	Management/ Ownership Tasmanian Parks and Wildlife Service, Tasmanian Aboriginal Land Council	Resource/ Theme – Continuous Tasmanian indigenous connection to country
	Interpretive Elements – Fibre Sculpture Cultural Walk	Designer/ Architect – Designer Julie Hawkins – Artists: Muriel Maynard, Lola Greeno and Vicki West, Julie Gough	Date 2001

The *Larmairremener tabelti* Cultural Walk is a collaboration between designer Julie Hawkins, artist and indigenous interpretation officer Julie Gough and Tasmanian Aboriginal artists Muriel Maynard, Lola Greeno and Vicki West. The project is an interconnected interpretation strategy that includes a fibre sculpture and woven basket, an interpretive bushwalk, a brochure, and text panels. The fibre sculpture, housed in the visitor centre, is the central vehicle for making metaphorical and material connections between inside and outside, past and present, people and land. The following extracts from the artist’s brief summarise the rationale for the sculpture:

The central theme proposed for Lake St Clair Visitor’s Centre is that of indigenous connection to country. This theme strongly recognises and demonstrates the continuing relationship with the land by indigenous Tasmanians over many tens of thousands of years. The basis of our ongoing relationship with the land is that people and land are intertwined together. One means of expressing this physical and spiritual interconnectedness at Lake St Clair Visitor Centre is through the hands of fibre artists (J. Gough personal communication March 15, 2000).



Image 18: (left).The fibre sculpture, Lake St Clair Visitor Centre, artists: Muriel Maynard, Lola Greeno and Vicki West

Image 19: (right) Larmairremener tabelti cultural walk.

The three indigenous artists made the work in response to a residency at *Leeawaleena* in 2000. The woven sculpture pays respect to the nine Aboriginal Nations of Tasmania, and physically affirms the continuation of indigenous culture – in spite of the persistent version of history that describes Tasmanian Aboriginal culture as having disappeared with the death of Truganini in 1876. Vicki West speaks of how she as an artist responds to place and history:

My work is a way of retelling history from our perspectives – to dispel the myth that we are not here. I use my artwork to celebrate past, present and future through connection to place (Parks and Wildlife Service Tasmania 2001).


Audience attention is drawn to the thoughts and commentary of the indigenous artists, documented in the brochure and the panel text, bringing their involvement and process to the fore. This project deliberately (and literally) weaves the information held inside the visitor centre with the natural environment outside, encouraging visitors to make that connection with the land themselves, and reinforce the message of the indigenous connection with country.


Richard Hale, Visitor Services Ranger at *Leeawaleena-Lake St Clair*, describes the project as the only interpretative project that people have talked to him about on a deeply emotional level; and how people talked about crying when they had been along the walk. While he observes that some visitors do not understand or are not interested in the project, there are others who are very aware of the absence of Aboriginal interpretation in Tasmania:

There [are] a group of visitors who are already open to and perhaps even searching for indigenous cultural experiences when they arrive at the lake. They are likely to be more aware of indigenous issues and the history of black-white contact in Tasmania than the general population. They are often surprised and pleased to find *Larmairremener tabelti* because they haven't accessed anything else like this on their trip in Tasmania. They often express their wish that there was more indigenous interpretation here and in other places. I think these people are likely to make the connection between the fibrewalk as a response to the land but I don't know if anyone often does this consciously at all until they read it in the brochure or on the signs in the visitor centre or along the walk where the connection is made explicitly. Maybe that's just because of our conditioning as white people – perhaps it's different for indigenous people (R. Hale personal communication February 11, 2004).

This project illustrates a number of significant points. The initial omission of the interpretation of Aboriginal history brings into focus the problem of designating places as 'wilderness', and while fulfilling conservation and bio-diversity intentions, perpetuates the negation of contemporary Aboriginal culture in Tasmania. Augmenting the visitor centre's European narrative with the *Larmairremener tabelti* walk, reinforces that that interpretation has the potential to be a dynamic, process, that responds to shifts in political policy, cultural revisions and reinterpretations. The involvement of artists responding to the place, using locally found plant materials, communicates on a very personal level, ideas about connecting past and present and people with the land. The fact that it is located outside the visitor centre also encourages people to connect with the place itself rather than them finding refuge in the comfort of the visitor centre.

Case Study 4 – Port Arthur Historic Site – Tasmania, Australia

4A Port Arthur Historic Site Visitor Centre 	Site Port Arthur Historic Site Visitor Centre, Port Arthur, Tasmania	Management/ Ownership Port Arthur Management Authority	Resource/ Theme – Australian Convict site Convict history 1830 – 1870
	Interpretative Elements – Visitor centre – Interactive displays – Lottery of life card game	Designer/ Architect – Phillip Lighton Architects – Roar Three Design	Date 1999

4B The Port Arthur project 	Site The Port Arthur Project, Port Arthur, Tasmania	Management/ Ownership Ten Days on the Island Festival	Resource/ Theme – Australian Convict site Convict history 1830 – 1870
	Interpretative Elements – Site-specific art exhibition	Designer/ Architect – Curated By Julia Clark and Noel Frankham	Date 2007

We believe that there is much, too much, that is tragically familiar. We still wrestle with the same questions about the nature of crime and criminality, about how to achieve both punishment and reform. We still arrive at the same facile, punitive solutions. We still build prisons that warp and torture and break those unlucky enough to be fed into the machine. And saddest of all, those fed into the maw of Port Arthur's machine are essentially the same people as find themselves behind bars today – the poor, the uneducated, the mentally ill, the losers in any society, whether it is 19th Century or 21st Century (Clark 2004).

The Port Arthur Historic Site in Tasmania, has a conflicted and layered history; and as a highly visited and commercial tourist attraction, it is a complex site to interpret. While it has a visitor centre that provides visitor orientation opportunities to learn about convict history, using a number of interactive and engaging displays, it is interpretive strategies found outside of the visitor centre that are of interest here. The question of authenticity is an issue for both staff and visitors.

The Port Arthur Historic Site (PAHS) is located on Tasmania's Tasman Peninsula, and is a site of national and international heritage significance having been nominated in 2008 for World Heritage listing as part of Australia's Convict Sites. The sense of place is strong and pervasive; constructed around a history of incarceration and a Romantic landscape. The physical setting of the site is described in the Port Arthur Management Authority's Draft Management Plan as:

The Port Arthur Historic Site is an assembly of remnant convict settlement, cultural landscape features (including Aboriginal heritage), township fabric and 20th-Century tourism

development. The natural landforms have been modified over time, resulting in a low maintenance parkland character, with remaining buildings and structures set within broad expanses of lawns and gardens (PAHS 2007).

Despite many phases of indigenous and non-indigenous patterns of history and settlement, Port Arthur as a tourist attraction remains most well known for its period as a convict settlement between 1830 – 1877. It is a culturally significant site in Australian colonial history, with convicts serving out 12,000 prison sentences during the 47 year period as a convict settlement. Tasmania’s premier tourist attraction, Port Arthur is highly visited with 38.7% of tourists to Tasmania visiting Port Arthur in 2005. Port Arthur remains a site with a disturbing and confronting history evoking strong emotional responses from visitors, heightened more recently when 35 visitors and staff were killed at the site in a shooting massacre in 1996. Roslyn Haynes in her book *Tasmanian Visions* notes that Port Arthur’s Gothic and picturesque landscapes have long been a drawcard for tourists. She writes:

When the church was ravaged by a bush fire in 1884 and its roofless walls subsequently acquired a thick covering of ivy, Port Arthur could exhibit a classical ruin of the kind required for picturesque landscapes in the style of Claude, or the Gothic atmosphere beloved of the Romantics. The ruined church, as seen by John Watt Beattie’s widely reproduced photograph, proved far more of a tourist icon than when it had been roofed and operational (Haynes 2006, 169).

Port Arthur is a challenging site for visitors and interpreters. Whether this triggers reactions of curiosity, shame, horror, contempt or indifference, is largely determined by the nature of the communication that reveals this seemingly tranquil setting. Communicating stories that encompass Australia’s political, economic, religious and moral heritage, in an accessible way and using historical perspectives that have shifted through time, all within the span of a day visit to a diverse audience is not a straightforward task. The site, combining tangible architectural remains and picturesque setting with intangible stories and memories, has a strong and troubling impact.



Image 20: (left) Tourists in front of the penitentiary building, Port Arthur Historic Site, Tasmania.

Image 21: (right) Tourists outside church, Port Arthur Historic Site, Tasmania.

The issue of authenticity arises in catering for the contemporary tourist's experience at Port Arthur. In some aspects there is a strong commitment to heritage authenticity. Port Arthur Historic Site staff are not dressed in costume as some tourists expect. This is explained on the (PAHS) website:

Many visitors have enjoyed this style of presentation at other sites and say that they would like to see it at Port Arthur Historic Site. But Port Arthur is not a theme park. It is a real place with a dark and difficult history. Dressing staff up in convict and other costumes would turn the experiences of those who were imprisoned here into light entertainment, which is not consistent with our commitment to authenticity and integrity (PAHS website accessed May13, 2008).

In other contexts, the site offers 'staged' evening Ghost Tours, which are a legacy of a sensationalised fascination with Port Arthur's 'Gothic' past. Julia Clark, Interpretations and Collections Manager at Port Arthur, uses interpretive strategies that encourage people to engage at a different level of authenticity; such as the use of experiential and the non-text based formats, and the use of visual and performing arts. Lynda Warner, designer for the Strahan Visitor Centre, speaks of the benefits in using artists in such projects:

Most obviously the role of an artist can lead to a different level of interpretation where another stimulus of thought can operate. Evoking a visitor into another way of 'reading' in conjunction with the more conventional approach of the written word can add an exciting dimension to a project (L. Warner personal communication 2003).



Image 22: (left) Anne Ferran, 'In the ground, on the air', 2006, Port Arthur Project 2007.

Image 23: (right) Lola Greeno and Vicki West, 'Premaydena', Port Arthur Project 2007.

Port Arthur also carries an imprint of a Romantic perspective. Through the interpretation at Port Arthur, we see an emphasis not only on the built fabric of the site, but also on the site's intangible fabric. Personal stories are kept alive through narration, performance and interaction. Visitors are encouraged to follow the plight of an individual convict through the visitor centre, being presented on arrival, a card describing the personal history of a given convict; encouraging empathy for and interest in this convict's story. The geography of the site itself has solitary lookouts and picturesque opportunities to encourage the 'Romantic gaze' through contemplation of history and nature against a backdrop of Gothic ruins. Despite the tangible and intangible connections with Romanticism at Port Arthur, Julia Clark's approach of using visual art as an interpretive tool presents a postmodern, pluralist perspective. In the recent *Port Arthur Project*, Julia

Clark and Professor Noel Frankham, from the Tasmanian School of Art, curated an exhibition of artists who responded to the Port Arthur Historic Site; its history, stories and memories; and in doing so brought out minority and marginalised voices, that are often overpowered by mainstream accounts of history. Artists were encouraged and subsequently chose to reveal concealed histories, including Aboriginal history, women's lives and the often short lives of their children, and love and intimacy between male convicts. Artists working in collaboration with interpreters and designers offer strategies that engage sense, emotion and imagination to understand places. Utilising arts approaches in interpretation also offers multi-sensory ways of understanding places. Jan Dungey writes:

The enquiring body and the enquiring senses are as important as the enquiring mind, and the arts offer different ways of developing the enquiring senses; different approaches to looking, listening to, touching and knowing places. Arts approaches encourage different ways of 'sensing' places and understanding sensory information (Dungey 1989, 230).


Multi-sensory interpretation allows tourists to engage with place in a richer and deeper way than that proposed by Urry's tourist gaze. Where the tourist gaze creates a visual aestheticising of the world, distancing the tourist, interpretation that deliberately engages its audience in an experiential or multi-sensory way strives to engage people with issues and ideas, not just camera superficiality. Cultural geographer Phillip Crang comments on the need to shift away from the oppositions of the real and authentic at heritage sites and instead, to interact with the place, its resources and staff:

For the need to move away from viewing heritage tourism as a static object, to be evaluated as either real/authentic or ideological, and towards seeing it as an (inter)active process, a 'spinning of experience from the past' as tourists engage in dialogues with the resources at heritage sites (including employees) (Crang 2000, 142).

Interpretive strategies at Port Arthur Historic Site are driven by the need balance the preservation of Port Arthur's authentic historical fabric with the necessity to attract more visitors and market more products and services (PAHS 2007). What has developed at Port Arthur is an eclectic range of tourist experiences highly appropriate for the 'post-tourist'; ranging from ghost tours, a visitor centre which privileges the convict period of history, to art works that reflect multiple perspectives of history. Such diverse interpretive strategies, influenced by both Romantic and postmodernist perspectives, have the capacity to reveal subtle and alternative meanings and readings of a complex site.

Case Study 5

Cataract Gorge and Cliff Grounds, – Launceston, Tasmania, Australia

5 Cataract Gorge and Cliff Grounds 	Site Cataract Gorge and Cliff Grounds, Launceston, Tasmania	Management/ Ownership Launceston City Council	Resource/ Theme – Local history – Recreation
	Interpretative Elements – Interpretive panels in Victorian era rotunda	Designer/ Architect – Root projects Australia	Date 2004

In all available nooks have been placed rustic seats, and where there has been space on the path or perched up on risky heights, reached by rough stone steps, are rustic retreats much appreciated in the heat of summer. (*The Cyclopaedia of Tasmania* 1900, 53 – 54).

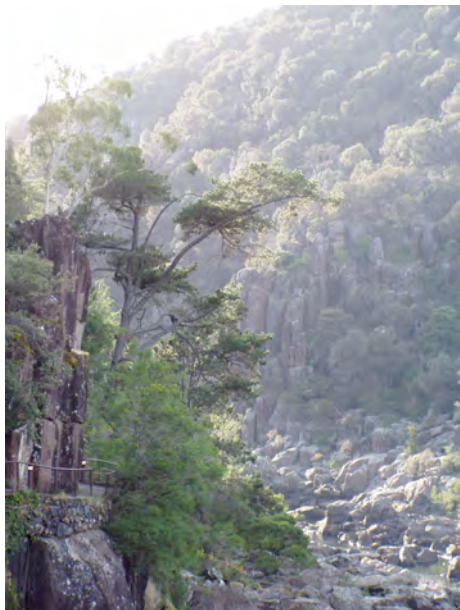


Image 24: (left) Cataract Gorge, Launceston, Tasmania



Image 25: (right) Cliff Grounds, Launceston Tasmania

Cataract Gorge was developed in the 19th Century as a recreation place for the residents of Launceston. The interpretation design at the Gorge is modest in its scale, media and design. It comprises traditional panels of text and photographs housed in an existing Victorian era rotunda, previously used for concerts. Taken as a whole what is significant about the site is how the interpretation sits with a number of other elements, unintentionally perhaps, to communicate messages about a particular Romantic view of nature. With its awesome cliffs, a Victorian teahouse (complete with peacocks), winding paths, bridges and lookouts positioned for solitary vistas and personal reflection, the

entire landscape can also be ‘read’ as a cultural artefact, preserved intact from an era when the influence of Romanticism was widespread.

The Gorge represents Romanticism’s visual counterpart, the aesthetic code of the ‘picturesque’ devised by William Gilpin (1724 – 1804). Gilpin used the term ‘picturesque’ to mean ‘expressive of a peculiar kind of beauty which is agreeable in a picture’. Gilpin’s ideas arose from an increased interest in the natural world during the 18th Century, especially as part of recreational and educational travel, and represented the convergence of travel and artistic recreation. Gilpin’s series of illustrated tour books in the 1790s codified picturesque landscape as irregular in line, rough and rugged in texture, intricate in detail, and sharply contrasting in light and shadow. At the Gorge the contemplation of nature is available from a distance without having to clamber along the river rocks and get wet or dirty, with paths set and lookout built into the ‘wilderness’ of the river gorge.

The Romantic sentiments and ideals that underpin the design of the Gorge as a recreation space have been reinforced and perpetuated by the language used to describe the site. A text written in 1900 for *The Cyclopaedia of Tasmania* envisages the future value of the Gorge as a tourist site, and is expressed in Romantic terms:

All along the path every available gully and nook has been planted with tree ferns, natives and other shrubs. In all available nooks have been placed rustic seats, and where there has been space on the path or perched up on risky heights, reached by rough stone steps, are rustic retreats much appreciated in the heat of summer. The park itself is beautifully laid out, and there is an extensive lawn from which hundreds are enabled to listen to sweet music from the bands which play in the pavilion close by during the summer months...The Cataract Cliff Grounds were handed over to the Launceston Municipal council on 1st March 1898, and they are doing what they can to make them, if possible more attractive still. The opening up of the Cataract Gorge has already done much to attract tourists to Launceston, and if well looked after and made popular will prove a veritable mine of wealth to the city (*The Cyclopaedia of Tasmania* 1900, 53 – 54).

More than one hundred years later, the contemporary text forming part of the current interpretive display at the Gorge echoes a similar Romantic perspective:

Welcome to the Cataract Gorge Reserve, a place filled with stories and memories of our recent and distant past. Here nature and beauty combines with examples of engineering resourcefulness and community vision to create a place of drama, romance and respite. The First Basin on the Southern Side is an open area, surrounded by bushland. It is Launceston’s ‘beach’. In contrast, the shady northern side named the Cliff Grounds is a Victorian Garden where wilderness is exaggerated with ferns and exotic plants where ‘nature is enhanced by art’.

References to Romantic themes and Urry’s notion of the ‘Romantic gaze’ can be found in both texts, such as; the theme of nature providing a respite from the city; identification with the subjective moods of nature; and the opportunity for solitary reflection. The Gorge texts are an example of how ideas about place are communicated and transmitted through language constructs used over and over again, even in the most recent site interpretation. This particular Romantic vision, also reinforced through the design of the interpretation panels at the Gorge, similarly finds expression in other forms of design. For

example, the label on the export beer produced by the local J. Boag & Son Brewery features a vista of the Gorge, typical of Urry's 'Romantic gaze'. The image, an aged 19th Century illustration with a solitary view, sells beer and markets the local tourist site while perpetuating an essentially Romantic vision of nature.



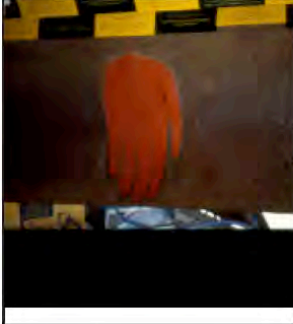
Image 26: (left) James Boag's beer packaging.

Image 27: (right) Cataract Gorge, Launceston, Tasmania.

The interpretation at the Gorge is low-key, not highly designed nor reliant on multi-media technology, but when read in conjunction with other tourist markers is an example of how culture is inscribed on a 'natural' landscape. The design artefacts of landscape architecture (seats, bridges, rotundas, lookouts and pathways), images, signs and advertising ephemera make up a network of elements including interpretation that perpetuate a particular 'myth' of place, one that is linked here to 19th Century notions of 'nature'.

Case Study 6

Strahan Wharf Centre – Strahan, Tasmania, Australia

6 Strahan Visitor Centre 	Site Strahan Visitor Centre, Tasmania	Management/ Ownership Tasmanian Government	Resource/ Theme – Southwest Tasmania World Heritage Area – Ecology with particular emphasis on the Strahan area from 50 000 years ago to the present time.
	Interpretative Elements – Substitute rainforest interpretive experience – Sculptural installations	Designer/ Architect – Architect: Robert Morris-Nunn – Writer: Richard Flanagan, – Furniture designer: Kevin Perkins – Graphic designers: Lynda Warner and Stephen Goddard.	Date 1992

The established boundaries of constructions of the past are being broken, as heritage spaces, especially popular culture spaces, adopt strategies such as juxtaposing different stories and giving the visitor an opportunity to speak. The result is a rich compilation of texts (Garton Smith 1999, 140).

The Strahan Wharf Centre, is situated in the town of Strahan in Tasmania’s West Coast, and acts as an access point for visitors to Tasmania’s Wilderness World Heritage area, which covers 1.38 million hectares and occupying 21% of the State is one of only 23 World Heritage Areas in the world with both natural and cultural values. Tasmania’s West coast has a complex and conflicted past, since European contact, phases of history centred on the convict settlement, mining, timber, ship building hydro-electric development and fishing. During the 1980s Tasmania’s West Coast became the focus for the Franklin River conservation debate and campaign to halt a proposed hydro scheme which would destroy what was known as ‘the last wild river’. This debate, became a national political issue and was won in favour of preserving the river, and the declaration of much of Southwest Tasmania’s wilderness as a World Heritage Area. The Strahan Wharf Centre (previously called the Strahan Visitor Centre) therefore, is a site of contested meanings and perspectives, with current debates about land management still highly charged. Strahan is also now a major centre for eco-tourism which adds another phase to the complex history.



Image 28: Strahan Wharf Centre, Strahan Tasmania.

The Strahan Wharf Centre on Tasmania's West Coast was opened in 1992, and was a collaboration between Architect Robert Morris-Nunn, writer Richard Flanagan, furniture designer Kevin Perkins and graphic designers Lynda Warner and Stephen Goddard. From the team's proposal the teams concept intention was to:

Create a natural landscape representative of the region as a large open space with similar smaller spaces or alcoves opening off or under it. This large space is a glass roofed atrium or conservatory with a large collection of trees, man ferns, etc. growing as a dense vegetation with water cascading through a series of rocky pools and small waterfalls including a large log jam (K. Perkins Personal Communication 1999).

Around the central vegetated atrium in the series of smaller areas the history and stories of the area are presented, starting with geological and Aboriginal history and working through a number of key stories representing local people and history the surrounding land use issues, including, mining forestry, hydro development, bushwalking and fishing.

From a design perspective, the design of both building and the communication can be described as epitomising a postmodernist approach. Historian, Jennifer Garton-Smith argues that the postmodern inclusion of multiple voices and stories in heritage spaces, such as visitor centres, breaks down the authoritarian single point of view and is more focussed on the audience. She writes:

The established boundaries of constructions of the past are being broken, as heritage spaces, especially popular culture spaces, adopt strategies such as juxtaposing different stories and giving the visitor an opportunity to speak. The result is a rich compilation of texts (Garton Smith 1999, 140).

'A rich compilation of texts' is an apt description of the Strahan Wharf Centre. Described as 'an ark with a novel inside' (Robinson 1994, 68), the design of the Visitor Centre and its postmodernist juxtaposition of media, text, stories, images and sculptures reflect the complex debates and competing viewpoints that surround Tasmania's west coast.

Designer Lynda Warner explains:

...the building itself is an expression of the ongoing conflict between that natural and the industrial that is so characteristic of the south west. Its almost violent polarities; steel, wood, rock, glass, corrugated iron, convey a sense that the Centre itself is not seeking to be some New Age touchie feelie building in which one can become at one with the wilderness, but rather a building that is seeking to understand and explore some of the great conflicts that have shaped the area—physically, intellectually, aesthetically. ...Richard [Flanagan] did not want to repeat the old myths, but to provoke and challenge the visitor and get them to rethink all that they normally take for granted. All the major and minor fixtures were all designed to tell a story, so even if a visitor wasn't interested in reading the words they would still understand what they were saying. In other words the interpretation was embedded in the building fabric (L. Warner, personal communication 1999).

Rather than shy away from confronting the master-narratives, which in Tasmania had been dominated by a paradigm of resource development and progress, this multi-disciplinary team deliberately chose to communicate in a way that breaks down the single authoritarian viewpoint and gives voice to multiple stories. Instead of perpetuating the (often passive) tourist gaze, such interpretation design demands that visitors actively confront complex and controversial issues. The team's provocative approach was to

counter the perception that elsewhere the ‘tourism industry fails to acknowledge the State’s complex and bitter past and it presents ‘a cosy’ image of Tasmania (Fallon and Kriwoken 2003, 302). This approach however was not without problems. The sheer amount of information, entailed in representing multiple perspectives is always going to be problematic for interpretation designers, aware of the need to strike a balance between informing and overwhelming audiences. The Strahan Centre is significant for Australian interpretation design in its ambitious approach in representing competing and difficult ‘truths’, however it also highlights the need to consult with the local community in the design development stages in anticipation of fostering ongoing community identification with the centre (Fallon and Kriwoken 2003). Above all it exemplifies the capacity for interpretation design to tackle ‘hot’ interpretation (Ballantyne and Uzzell 1998) and by arousing an emotional response, present visitors with new knowledge, attitudes, values or behaviours which challenge their present understandings. The Strahan project with its inclusive approach highlights the selective and exclusive legitimations of history and heritage in other forms of interpretation.

10.3 Summary – site visits and case studies

Since the early 1980s the appearance of contemporary interpretation sites have become a feature of the cultural landscape. The interpretation sites presented are peculiar to the segment of time from 1980 onwards, and as Edensor argues ‘... tourist sites are themselves not static entities. Their material shape, symbolic importance and the ways in which they are perceived, represented and narrated change over time (Edensor 1998, 8). Therefore the selected case studies represent a particular segment of design and interpretation history whose form will change as of practices of travel, communication, politics, and attitudes to natural and cultural heritage alter. Also revealed is the potential of design to contribute to ideas of national and natural identity. It is through their contribution to interpretation that designers are able to create potent sites within places of natural and cultural significance in Australia. Such sites are public and visible, and communicate to a large and mobile audiences; whilst disseminating ideas and experiences on a local and global level.

The design of these sites and the interpretation design located in and around the sites varies dramatically. Further insights into particular projects have been presented from the designers and other team members adding a practice-based perspective to the sites and revealing the complex nature of the projects. In design, there are no rules that will guarantee effective or even memorable communication, so while it is not possible or desirable to recommend specific design treatments and approaches, what the case studies present is a range of design approaches to the problem of communicating about natural and cultural heritage. Evaluation of individual sites is necessary to gauge the effectiveness of design elements, and this is beyond the scope of the research, but what this selection of case studies encapsulates is a snapshot of what interpretation design entails in the latter decades of the 20th Century.

Going beyond the design treatments and approaches, this discussion of selected case studies creates a link between these sites and aspects of the theoretical discussion so far. Principles and concepts developed from the fields of design, interpretation and tourism in previous chapters have been revisited, using the case studies to illustrate these with tangible examples of interpretation design. Having presented these examples of Australian interpretation design in, the next chapter will add a deeper insight into the nature of interpretation design projects by presenting the interpretation designer's perspective.

Chapter 11 – Perspectives of interpretation designers

11.0 Introduction

The aim of this chapter is to provide an insight into the experience of interpretation design from the designers' practical and professional point of view. This research aims to build a fuller picture of interpretation design, from a number of perspectives, including that of the designer. In order to reach an understanding of the issues, experiences and challenges facing designers working in the field of interpretation design, a number of designers with experience of interpretation projects were surveyed and interviewed between 2003 and 2007. Principally, this chapter reports findings from inside the perspective of these designers. This chapter reports:

- findings from the designer's surveys and interviews about interpretation design professional practice
- a summary of issues raised by designers
- a listing of designer's projects

11.1 Findings from designer's survey

11.1.1 Designer's survey

Designers were surveyed in order to gain an understanding of the professional context of the interpretation designer, and to identify issues specific to interpretation design projects. Designers who had worked on significant interpretation projects located in natural and cultural heritage were approached to respond to this survey. Out of the ten designers approached, six responded to an email survey and one agreed to be interviewed in person. A call for responses to an email survey through the Victorian membership of Interpretation Australia Association yielded two responses, both from designers I had previously contacted. Since interpretation design is a specialised sub-area of design and only a small number of Australian designers gear their practice towards this field, it was felt that the seven respondents represented a wide range of experience within the field. A recent check of the Interpretation Australia Association (IAA) lists twenty-seven consultants who list design amongst their services. It is difficult to ascertain the level of design provided, as some consultants are limited to the design of signage, and others would be likely to engage a designer as part of an entire interpretation consultant process. A copy of the email survey is provided in Appendix 1. The same questions were asked at both email and the personal interview and are listed below:

- List interpretation projects (and dates) you have worked on.
- Given the complexity and scale of interpretation projects, does the role of the designer differ in these projects than on more traditional projects?
- How have you experienced the process of working with a range of other professionals on interpretation project teams? Feel free to comment on both positive and problematic aspects.
- What are the most challenging aspects of working on interpretation projects?
- What would you consider to be the most valuable skill/approach that designers can contribute to interpretation projects?

Chapter 11 – Perspectives of interpretation designers

- What skills or disciplines areas outside of the designer's traditional repertoire would you consider as being useful for working on interpretation projects?
- From a design management perspective, what factors could enhance the design process of interpretation projects?
- Do you have a personal/ideological commitment to working on projects concerned with the management of or preservation of the natural and cultural heritage?

11.1.2 Interpretation designers and their projects

The designers interviewed have worked on a broad cross section of projects including projects for national parks, local councils, interpretive trails, zoos, forestry, private forest industry, sporting organisations, conservation organisations, indigenous heritage and historic sites. The time frame of their interpretation projects spans 1991 to the present. The designer's projects are summarised in the table below.

Designer	Project	Date	Theme	State
A	Tas Timber Promotion Board	1996	Forest products	TAS
	Gunns Limited	1992	Forest products	TAS
	Gunns Limited	1993	Forest products	TAS
	Tas Timber Promo Board	1994	Forest products	TAS
	Tas Timber Promotion Board	1995	Forest products	TAS
	Branding Great Western Tiers	2001	Nat/cultural heritage	TAS
	Tahune Airwalk	2001	Forestry	TAS
	Freycinet Visitor Centre	2002	Nat/cultural heritage	TAS
	Port Arthur Hist. Site Museum	2003	Historic site	TAS
	Port Arthur Historic site convict studies centre	2003	Historic site	TAS
	Dismal Swamp	2004	Forestry/Timber	TAS
	Go Wild Beaumaris	ongoing	Natural/local hist.	TAS
	Designer	Project	Date	Theme
B	Lake St Clair Visitor Centre	1995	National Park	TAS
	Coastcare Whose beach is it?	2000	signage	TAS
	Tamar Island Wetland Centre	2001	Nat/cultural heritage	TAS
	Rocky Cape National Park	2002	Indigenous heritage	TAS
	The Nut	2002	Nat/cultural heritage	TAS
	Leeawaleena cultural trail	2003	Nat. Park/ Indigenous heritage	TAS
	Narawntapu National Park	2003	Indigenous/nat heritage	TAS
	Uluru	2006	Signage	NT
Designer	Project	Date	Theme	State
C	Hobart Sites	1991	Local history	TAS
	Strahan Visitor Centre	1992	Nat/cult heritage indigenous heritage	TAS
	Cascades Female Factory	1994	Cultural heritage	TAS
	Waterworks Reserve	1995	Cultural heritage	TAS
	The Wild Way	1996	Local history	TAS
	Subantarctic House	2000	Nat. heritage & history	TAS
	Royal Tas. Botanical Gardens			
	Beaumaris Zoo	2000	Local History	TAS
Designer	Project	Date	Theme	State
D	Strahan Visitor Centre	1992	Nat/cult heritage indigenous heritage	TAS
	Yarra Ranges National Park	1995	Natural heritage	VIC
	Dandenong Ranges Nat. Park	1996	Natural heritage	VIC
	Golden Pipeline	1999	Cultural heritage	WA
	Volcanoes Discovery	2000	Natural heritage	VIC
	Buchan Caves Visitor Centre	2002	Natural heritage	VIC

Chapter 11 – Perspectives of interpretation designers

Designer	Project	Date	Theme	State
E	Hastings Caves visitor centre	2001	Natural Heritage	TAS
	Freycinet Saddle Walk	1993	Natural Heritage	TAS
	Sarah Island interpretation	1995	Cultural heritage	TAS
	King William Saddle interpretation,	1996		TAS
	George Town Trail	1997	Cultural heritage	
	Geeveston Forest and Heritage Centre	1997	Forestry	TAS
	Huon Trail interpretation	1999 and 2003	Cultural heritage Natural heritage	
	Pipers Brook Vineyard interpretation	2001	Viticulture	TAS
	Ninth Island Cellar Door and Restaurant interpretation	2001	Viticulture	TAS
	Cricket Hall of Fame	2003	Cultural heritage	TAS
	Tasmanian Cricket Museum	2003	History/cultural heritage	TAS
	Jansz Tasmania Wine Room	2004	Viticulture	TAS
	Ulverstone Visitor Centre	2005	Tourism	TAS
Perth Zoo Cockatoo Enclosure	2005	Zoo	WA	
F	Leeawaleena cultural trail	2003	Nat. Park/ Indigenous heritage	TAS
G	Bowali Visitor Centre, Kakadu National Park	1994	Nat. Park/ Indigenous heritage	NT
	Karijini Visitor Centre, Pilbara	2001	Nat. Park/ Indigenous heritage	WA
	Warradjan Cultural Centre, Kakadu	1994	Nat. Park/ Indigenous heritage	NT
	Weipa Visitor Centre	2000	Nat. Park/ Indigenous heritage	NT
	Bunjilaka, Melbourne Museum	2000	Museum/Indigenous heritage	NT
	Greek Treasures, Immigration Museum, Melbourne	2005	Museum/cultural heritage	VIC

Table 16: Designers and interpretation projects.

11.2 Interpretation designers issues

Survey responses were collected, grouped and coded according to the particular issues they raised, the question to which they were responding and the identity of the designer. Patterns emerged from the responses that related to common issues and themes. The responses have been grouped into the following issues for discussion:

- Complexity and the interdisciplinary nature of interpretation projects.
- Experience of collaboration.
- Challenging aspects of interpretation projects.
- Skills needed for interpretation projects.
- Design management and project management.
- Ideological commitment.

The following sections summarise key points from the designer's surveys, and are grouped according to the issues listed above. A selection of comments from respondents are quoted to illustrate the key points raised, along with their coded reference to preserve their anonymity.

11.2.1 Complexity and the interdisciplinary nature of interpretation projects

Designers identified interpretation projects as being technically and spatially more complex in both scale and management, than traditional 'graphic design' projects. One designer described her role in the interpretation projects she worked on as being 'a project manager' rather than a graphic designer, another noting that the role of the designer is 'more demanding and broader' than traditional design projects. The common perception of graphic designers as being limited to producing 'signs' in interpretation projects, is challenged by one designer who responded:

The projects I am designing have nothing to do with graphic panels plonked in the environment in fact they have very little text. They are experiential and linked to remote sites.
(Ref 2/01A)

Designer comments also revealed the interdisciplinary nature of interpretation projects, with this having the potential to enlarge and extend their repertoire. One designer responded:

Also in some cases there is the creative melding of other professions; architects, interior designers, writers and artists into the process that can stimulate and offer another way of viewing which takes it beyond the normal scope of work this designer does in the every day.
(Ref 6/01C)

Indicative of the range of professionals involved in interpretive projects, one respondent listed the project team for a current project as including:

Client
Creative Director
Project Co-ordinator
Production Manager
Multi-Media Designer
Creative Producer
Building Project manager
(Ref 201A)

Builder
Craftspeople
Artists
Fabricators
Graphic designers
Scientists
Researcher

Designers generally held the view that this interdisciplinary input into a project was of a positive benefit to its outcomes. One comment noted that the diversity of professions involved can help expand the level of interpretation:

It can be the spatial qualities the architect or interior designer enclose and shape, to the writer who can challenge the story. Most obviously the role of an artist can lead to a different level interpretation where another stimulus of thought can operate . (Ref 3/02C)

11.2.2 Experience of collaboration

The designers interviewed all recognised the importance of good collaboration in interpretation projects and acknowledged the increased need for good collaborative team work. The positive aspects of working collaboratively were described as stimulating, creative, and ‘achieving an integrated dynamic’. The comments of the following designers sum up the strengths of working collaboratively and highlight the increasingly blurred boundaries between disciplines:

Coming up with the initial concepts as a member of a team has been a great experience of my professional life; I guess if you have the right people together it is a very creative milieu. With the people I was involved with, we didn't stick rigidly to our areas of expertise, and felt able to contribute ideas across the board. It worked very well. (Ref 3/02B)

Generally very beneficial, exciting and inspiring, particularly if approached with an attitude of ‘here’s my ideas – now take them further in your own way’. (Ref 3/02E_E)

Responses also acknowledged the difficulties of collaboration, including working with inexperienced team members, working with people with little business or commission experience, lack of co-ordination between team members, dominating egos, and personality problems. For example:

Problems occur when working with people who have little business or commission experience, who do not understand deadlines, budgets, etc. Best results come from experienced professionals who have been in business for some time. (Ref 3/02E_E)

But after the initial ideas are set up, it can be problematic. After the concepts and writing, the writer often loses interest (and hasn't budgeted sufficient time to stay involved). The person doing the construction/production gets sick of waiting for the material to move through the approvals process, and loses interest. (Ref 3/02B)

Sometimes you find yourself teamed up with a loose cannon, and that is really scary. Ideas have to be able to be realised in practical terms or there's no sense spending time working them through. You do build up experience in what will work, but I often find myself working with clients and team members with very little experience. (Ref 3/02B)

Responses indicated that successful collaboration could not be assumed nor is it unproblematic. It requires skill, patience, good communication and time management.

11.2.3 Challenging aspects of interpretation projects

Responses varied with regard to the most challenging aspects of interpretation projects, some responses related to project management, others to educating clients, and some related to difficulties in liaising and collaboration with other professionals.

In summary the following aspects were mentioned:

- Budgets and financial management.
- Timeframes and project management.
- Altering perceptions that graphic design is limited to 'text panels on the wall'.
- Conveying large amounts of information.
- Striking a balance between educating and 'lecturing at' the audience.
- Problematic subcontractors.
- Clients' expectations eg not understanding project methodology, production process.
- Unwieldy client approval process.

The following comment summarises issues presented by the overall challenge of interpretation projects for contemporary designers:

On the positive side of 'challenging', the very concept of interpretation is challenging. How to convey just a fraction of an area's natural history or cultural heritage without making visitors feel they are being lectured at or 'educated'. It's hard to strike the right tone, and select the right information to give them. I think it's a great privilege to work on these jobs: the work has lasting worth (we hope), and in that sense is less ephemeral than much of the work that graphic designers do. (Ref 4/03B)

11.2.4 Skills needed for interpretation projects

The following list includes useful skills that designers believe they contribute to interpretation projects:

- Envisaging a project in a visual way.
- Developing concepts – written and three dimensional.
- Layering information so audience can select their own level.
- Catching the interest of visitors.
- Shaping the content to reach a particular audience.
- Good communication and research skills.
- Typographic skills.
- Clarity of communication across many levels of information.
- Project management skills including dealing with contracts, building, monitoring and evaluation.
- Business planning and marketing services.

Most of these skills are those which designers would normally expect to bring to any communication design project. However, when asked to list skills outside the designers expected repertoire that would be useful for interpretation project, the suggestions were multi-disciplinary (related to design disciplines), and interdisciplinary (including other disciplines and fields). The list included:

Sculpture and fine art
Interpretation skills
Tourism related knowledge
Cartoon drawing
Contracts and legal and copyright issues
Production and director roles
Multi-media
Lighting design
Hydraulics.
Highly honed presentation skills
Focus group facilitation and evaluation
Knowledge base of learning methods
Human behaviour and psychology
Writing
Architectural and spatial knowledge
Garden art
People skills
Environmental design
Architecture
Landscape design
Business planning
Marketing
Interest in heritage
Interest in people

The following comment captures a sense of the complexity and different layers at work in the development of interpretation projects and also indicates one designer's personal interest in such projects:

You really need to be a person whose interested in a lot of different things...there are so many layers in interpretive working, you can be the person across the whole thing, the big picture person, and you've got to be pulling information in from so many sources or you can just focus in on the graphic design or multi-media elements...just those little elements...it gets richer and richer, deeper and deeper. Anything people are interested in you've got to be interested in (Ref 6/04E_I).

11.2.5 Design management and project management

Respondents recognised that in the process of implementing interpretation design projects, communication designers frequently assume the role of project managers. One respondent said designers often assume a central role 'by default', where the designer:

... steps out of a graphic design role and becomes a project designer, you're about a lot more agendas than just visuals (Ref 2/05E_I) .

Professional designers are accustomed to overseeing and undertaking all stages of the design process, research, concept development, production and implementation, often working with a range of suppliers, contractors and technologies. One designer felt that interpretation design projects didn't differ too much from traditional projects, apart from their scale and complexity, writing:

Probably the co-ordination is more complex because you are dealing with an array of technical processes and you have to consider design more in spatial context (ref 2/05C).

Some designers described their role as a project manager rather than communication designer, but would sub-contract communication designers to carry out the communication design aspects of the project. The following passage presents one designer's experience of shifting from the role of communication designer to a more expanded role, which could be described as design manager:

On large projects, appointing one contact person to be the client, and making that person responsible for controlling the approvals process, which can involve 10 or even 20 'experts' in their fields. Scientists and historians and so on are usually terrible interpreters because they are too close to the subject; however they are generally unaware of this. The typical way of dealing with this is to do some research, write and design something and submit it to say the 'devil expert' for approval. Chances are they will come back with something completely different from what you have done. This is disastrous because each of these experts doesn't see the project in its entirety and (understandably) sees their own subject area as not getting enough coverage or going into enough detail (Ref 7/05B).

A detailed degree of involvement with all stakeholders was also mentioned, where designers take on the role of a mediator between information and interpretation. This is illustrated in the following responses, where designers are talking about their experience of dealing with 'experts':

I go to see these people first, and try to work with them to establish what is going to be covered. I try to get into a position that if they have agreed to something, they can't change their minds and add more later. I haven't had this backfire so far, and I think they appreciate interest being shown in their area. It gives me the opportunity to give them advance warning of what will appear in the interpretation, so that they don't have false expectations about how much we can say. Of course this is more to do with writing, and images, than graphic design, and that's one of the reasons why doing all these aspects of the project works so well (Ref 5/03/B).

You need to understand the big picture, before you can narrow it down into simple words or simple forms of communication, you can't work back the other way. It's more like a funnel, when we talk to real experts we say don't be too complicated or high falutin, just tell us (Ref 3/05G_I).

11.2.6 Ideological commitment

All designers regarded it to be important to have an ideological empathy toward the clients they worked with. Some were extremely committed to working towards the preservation of the natural environment, and conservation and environmental issues. This commitment was evident in comments such as:

Our natural environment is not just for a few, it is not just to see but to participate in and most importantly it is for everyone and we must find ways to facilitate this...it has all the elements I think matter, humans, their interaction with their land – their social habits their past, their presence and their future (Ref 8/06A),

I consider it a privilege to work in this area and a chance to make a difference. As well as the work I do for the Parks and Wildlife Service, I have undertaken projects for Forestry Tasmania

for exactly these reasons, because the more people know about what they do, the more informed debate there can be (Ref 8/06B).

I think it's a great privilege to work on these jobs: the work has lasting worth (we hope), and in that sense is less ephemeral than much of the work that graphic designers do (Ref 8/04B).

Comments such as these indicate more than a superficial involvement with project content, rather a willingness to engage thoughtfully and more deeply with issues, debate and 'interpretation' in its fullest sense. Also evident, was a sense that through working on interpretation projects, designers were given the opportunity to contribute to the ongoing cultural narrative.

11.3 Summary – designer's perspective

Having examined several key contexts (design, interpretation and tourism), this chapter provided a perspective from the designers' practice-based experience. The issues raised by the designer's responses inform the direction of both the theoretical and practical aspects of this research. The survey responses have enabled a more accurate description of the practicalities facing designers working in interpretation design. Responses from designers suggest that interpretation design projects are different in their scale and complexity from previous work. The designers interviewed describe the expansion and differentiation of their role to include that of communication designer, design manager, project manager and project designer. Also expressed by the designers was the desire to be intelligently engaged at a deep level with the issues and themes of interpretation. Interpretation projects, as described by the designers exemplified contemporary communication design practice, as projects which link multiple networks of stakeholders and systems, requiring in-depth research, detailed project management and complex production requirements. These shifts, towards an expansion of roles, the involvement of multiple stakeholders and through increased engagement with content, suggest that designers are continually required to develop professionally in order to be effective in times of rapid change. Increased cross-disciplinarity provides an expanded set of reference points to incorporate into the design process.

Information gathered from the designers suggests that they are working in teams on interpretation design projects in innovative ways, are expanding their own personal work practice and are in turn contributing to the changes taking place in the wider current practice of design. The outward looking nature of design, its high degree of collaboration and imperative to harness theoretical and practical knowledge from other disciplines, suggests that interpretation designers need more than the previously adequate aesthetic and technical skill set of graphic design. A conclusion drawn from this stage of the research is that designers need to look to other disciplines and fields of expertise outside of design. Doing so will enhance their knowledge and skill base, and present further collaborative opportunities. Also apparent is the collective knowledge amassed in the group of designers regarding working on interpretation projects, yet their comments

revealed that there was not a repository for this knowledge nor a forum to develop this specialised knowledge further. A mechanism to share knowledge between disciplines would appear to be necessary for to designers to progress modes of working in a more structured way.

PART FOUR

Part Four of the thesis extends on the thematic framework developed throughout this thesis. Designer's interviews and the literature review highlighted several other fields to investigate beyond the fields of interpretation and design. Patterns and themes relevant for interpretation design highlighted by designers and found in a wider literature search are presented (Chapter 12).

Part Four also presents a conceptual and practical tool designed to apply knowledge from the fields of interpretation and design to interpretation design projects. The Interpretation Design Pattern Language is then developed (Chapter 13) and presented (Chapter 14).

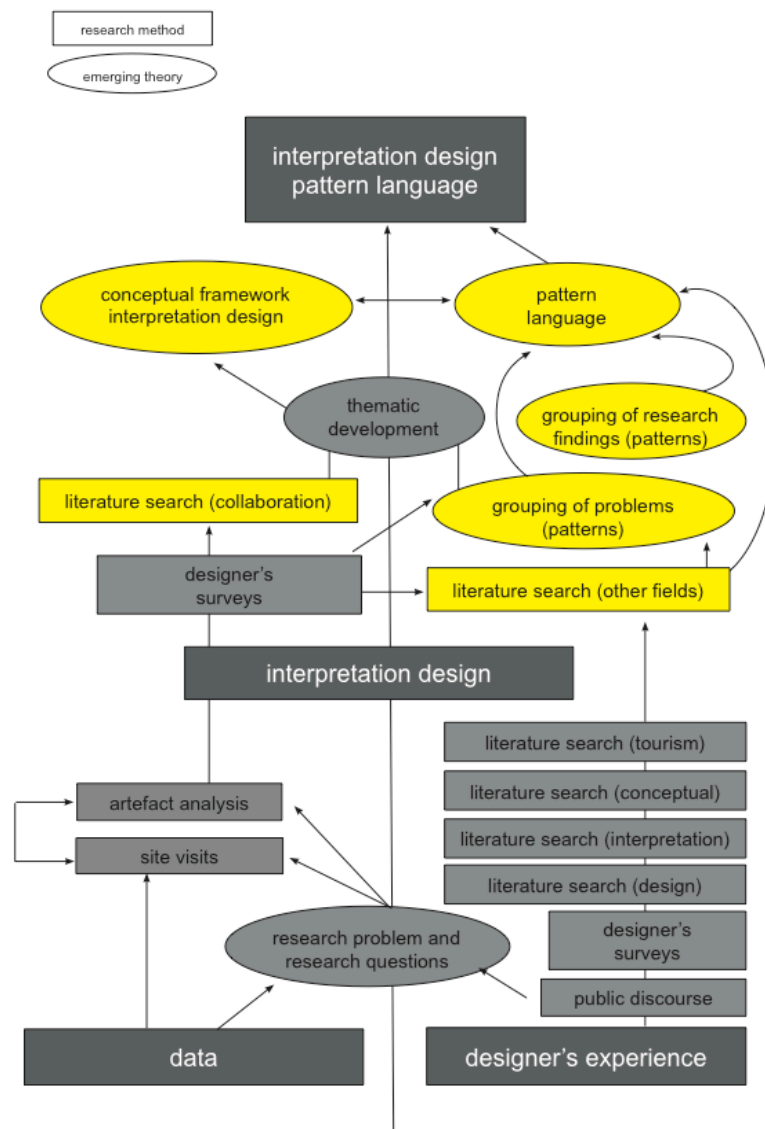


Figure 11: Part four – research process

Chapter 12 – Looking to other disciplines

12.0 Introduction

A Grounded Theory approach conducts literature reviews in several phases, advancing the investigation through further searches. The literature review and designer interviews summarised in previous chapters highlight the need for designers to incorporate knowledge from a wide cross-disciplinary base (Buchanan 1995, Friedman 2000, 2003, 9, and Julier 2000,1 Hall 1987, Moscardo 1996 and Kaplan et al 1998). Literature available on interpretation, design and tourism already reported in Chapters 3 – 7 did not cover areas beyond the immediate concerns of interpretation and design. Designers I interviewed also suggested for investigation a number of highly relevant fields to interpretation design such as human behaviour, psychology, learning methods and environmental design. As the research has developed, it has progressively examined wider spheres of research and professional activities related to interpretation design. The disciplines of visitor studies, psychology and education, emerged as three related fields whose research and approaches are relevant to interpretation design. This chapter examines findings from the literature in these three fields with the intention of extending knowledge of visitor experience in interpretive settings.

12.1 Visitor Studies

Visitor studies grew out of museum practice and the professions associated with museums. Emerging in the 1960s, this field has the potential to provide designers with valuable insights into understanding their audience and the ways in which they behave in interpretive settings. The first museums were private collections, where people were invited to private viewings and were not concerned with educating the public (Falk and Dierking 1992). Over time, the role of the museum has shifted towards becoming a public asset, their collections are valued in terms of cultural heritage as well as monetary value, and a significant part of their mission is public education. As museums have moved into an educative role, the field of visitor studies has grown from the need to evaluate programs to justify further funding.

Benjamin Ives Gilman of the Boston Museum of Fine Arts, was an early contributor the field of visitor studies, when in 1916, he observed the phenomenon of ‘museum fatigue’ – the tendency for visitor attention to drop dramatically as the visit progressed. Once visitors were in this state, museum exits competed with exhibits for visitor attention (Gilman 1916). Early concepts that continue to inform the design and evaluation of exhibits are the concepts of *attracting-power* and *holding-power*. First coined by Robinson (1928), attracting power refers to the extent to which visitors stopped to look at an object. Holding power is the length of time visitors stay looking at an individual exhibit or display. In tracking the expansion of the field of visitor studies in the 20th Century, Hein (2000) comments that the rise in visitor studies is closely associated with the rise in program evaluation in formal education, and notes a dramatic increase in visitor studies since the 1960s:

the increased examination of both visitor behaviours and the meaning visitors make of their museum experiences has resulted in the robust, multi-faceted activities now carried out by academics, museum employees and eager students (Hein 2000, 52).

Evaluation of museum and interpretive exhibits has led to an extensive body of knowledge which has been well documented by Serrell (1996, 1999) whose publications on display and exhibition labels are informed from a visitor behaviour perspective, rather than from communication design. This literature is valuable for designers as it offers perspectives on audience engagement with exhibits. Knudson et al compile visitor studies observations from work by Anderson and Horn (1999), Serrell (1999) and Di Maggio, Useem and Brown (1978) as:

- Visitors enter a display area and tend to turn right, then go around the room counter-clockwise.
- Exhibit position affects the number of viewers.
- Viewers do not study all the pictures in an art show or all the exhibits in an interpretive centre.
- Most visitors do not look at any exhibit for long.
- Viewers read only some of the labels.
- Most visitors don't remain in the exhibit rooms very long.
- Variations in display methods can lengthen interest in specific exhibits.
- Exhibit observation time increases for large, moving, close, and easily visible objects or animals.
- Colours add interest but aren't essential for success.
- Attentiveness fades with time in the exhibit area.

(Knudson et al 2003, 213 – 214).

Moscardo (1996) and Bitgood and Patterson (1988) both present systematic and comprehensive reviews of visitor behaviour and cognition. While Bitgood and Patterson's review is useful for highlighting general issues and characteristics of visitor behaviour, it does not specifically address the visual aspects of interpretation, nor the tangible interface of interpretation design. Moscardo (1996, 392) notes that a framework which integrates interpretation *and* design, *and* theory have not yet been developed.

While such research reviews [Patterson and Bitgood's] are valuable, what is clearly necessary is some integrative theoretical framework to guide both future visitor studies and the design of interpretation (Moscardo 1996, 380).

The field of visitor studies, which researches and documents visitor behaviour, provides evaluation of exhibits and visitor behaviour including; navigation, orientation, visitor comfort, learning and attention spans. Key concepts such as attracting power, holding power and museum fatigue, are valuable for allowing designers to gain insights into audience behaviour. Techniques for evaluating exhibit effectiveness, including the design dimension of exhibits, provides feedback for the ongoing development and modification of exhibits. Visitor studies is closely linked with educational theory and the ways in which visitors learn in interpretive settings.

12.2 Education

The field of education provides another valuable knowledge set for designers working on interpretive projects. Education has an extensive body of knowledge generated by educational practice, theory and research. While education and learning has long been recognised as occurring in museum and interpretive settings, it is important to differentiate this type of education from that which occurs in more traditional settings such as schools. Interpreter and educator Sam Ham (1992, 7) distinguishes between audiences in formal educational settings, such as classrooms, and more informal settings such as parks and museums. He proposes that the two audiences can be described as ‘captive’ in the formal setting and ‘non-captive’ in the informal setting. The characteristics of each audience he lists as follows:

Captive Audiences	Non Captive Audiences
Involuntary audience	Voluntary audience
Time commitment is fixed	Have no time commitment
External rewards important	External rewards not important
Must pay attention	Will switch attention if bored
Will accept a formal academic approach	Expects an informal atmosphere and a non-academic approach
Will make an effort to pay attention even if bored	Do not have to pay attention

Table 17: Differences between captive and non captive audiences (Ham 1992, 7).

While one of the aims of interpretation design is to educate visitors, Ham’s observations suggest that educational strategies for the classroom do not necessarily apply to the museum or visitor centre setting. Educational research, specific to learning in museum and visitor settings, has also been carried out by Falk and Dierking (1992, 1995, 2000) who propose that the museum experience consists of overlapping personal, social and physical contexts (1992). Hein (1995) argues that the way museums organise, design and display their exhibits reflects particular epistemological philosophies and favours the ‘constructivist museum’, where the focus is on the audience or learner rather than the content (Hein 1995, 5). A museum setting which has a constructivist approach would be one that attempts to connect with ideas and knowledge that visitors already have and aims to build on that experience (Russell 1995, 1). In design, a constructivist approach has similarities with user-centred design where the audience is regarded as a participant in the construction of meaning.

Csikszentmihalyi’s (1990) developed the concepts of ‘flow’, which he also relates to experience in museum settings (Csikszentmihalyi and Hermanson 1995). Flow is the term Csikszentmihalyi’s has used to describe the sense of being completely absorbed in an

activity. States of ‘flow’ which are characteristic of audiences in museum settings include:

- A loss of the feeling of self-consciousness, the merging of action and awareness.
- Distorted sense of time, one's subjective experience of time is altered.
- A sense of personal control over the situation or activity.
- The activity is intrinsically rewarding, so there is an effortlessness of action.
- People become absorbed in their activity, and focus of awareness is narrowed down to the activity itself, action awareness merging.

Gardner's concept of multiple intelligences and learning modalities is also significant for museum education and design (Gardner 1983, 1985, 1991). Gardner argues that humans have multiple intelligences and a range of cognitive processes to interpret and organise data. Instead of a single type of intelligence, he argues that there are at least seven types – linguistic, musical, logical-mathematical, spatial, bodily-kinaesthetic, interpersonal and intrapersonal; and that learning experiences should cater for all these intelligences (Gardner 1985). Gardner's research focuses on museums settings that cater for multiple learning styles beyond those usually associated with success in traditional learning settings (Gardner 1991). For interpretation designers, Gardner's theories reinforce the need to design exhibits that engage visitors in multi-sensory ways. His work also highlights the fact that designers are in effect designing not for a single audience but instead, multiple audiences who will self-select their preferred learning media.

12.2.1 Summary of education's relevance for interpretation

The field of education has a significant body of knowledge to extend to designers working in interpretive settings. Educational research has established that people learn in non-conventional settings such as museums and national parks and that these settings have different learning attributes than conventional learning environments. Theories of knowledge and learning identify a wide range of learning styles among audiences. This knowledge informs the interpretation design that encourages different learning styles, making them more accessible to a wider selection of visitors. Scope to align educational theory to fit with particular design approaches exists in interpretive settings, as they provide an informal but memorable learning context.

12.3 Psychology

Psychology is another significant field which provides theoretical approaches that can be applied to understanding visitor behaviour in museum and interpretive settings.

Exhibition designer Margaret Hall, signals the value of psychology to interpretation designers by writing:

The designers and graphic designers may want to do better, and may then turn to the relevant psychological literature. Unless they have received an appropriate education in a related subject to degree standard (as well as their own basic design training) they will be shocked to find that the findings of the psychologists are not expressed in the designer's mother tongue. A whole vocabulary has to be mastered before the designers find out exactly what they do not understand...The designers of today should attempt to familiarise themselves with the work of the psychologists, the designers of the next generation will have to (Hall 1987, 91).

Moscardo uses the field of social cognition, a sub-discipline of psychology, to present a theoretical framework to guide visitor studies and interpretation (Moscardo 1996, 380). By adapting the concepts of ‘mindfulness’ and ‘mindlessness’, developed by Langer (1989a, 1989b, 1993) to visitor behaviour in interpretive settings, Moscardo’s work provides a significant bridge between the disciplines of psychology and design, specifically in interpretive settings. Moscardo proposes that the states of mindlessness and mindfulness can be induced through the design of interpretive exhibits. For example, traditional displays behind glass with repetitive captions, prevent people from engaging or being able to control the information received, and thus creates a state of mindlessness. Moscardo argues that the effective design of interpretation will promote mindfulness in visitors:

Clearly interpretation is trying to produce mindful visitors; visitors who are active, interested, questioning and capable of reassessing the way they view the world. Further, those conditions that Langer proposes should induce mindfulness —activity, control, interaction, novelty and personal interest—have all been found in previous research to be related to more effective interpretation. Repetition, on the other hand, has been found to be related to decreased visitor attention, which can be seen as an indicator of mindlessness (Moscardo 1996, 382).

12.3.1 Environmental psychology

Research from the field of environmental psychology, which investigates the individual’s response to the natural environment is summarised by Wohlwill (1983). Research into aesthetic and affective responses to natural places are discussed by Ulrich (1983), whose theoretical argument that ‘feelings, not thoughts come first in environmental encounters’ (1983, 116) is based on cross-cultural research into people’s preferences to particular landscapes. Despite culturally different backgrounds people’s preferences showed a high degree of similarity. Kaplan et al (1998) examine the influence of natural settings upon people’s functioning and well-being including people’s fears and preferences in natural settings and the way-finding impacts on levels of comfort. Another important aspect of their work in this research is their discussion of natural places as restorative environments ranging in scale from gardens to National Parks (Kaplan et al 1998, 30). They examine the ways in which natural environments provide restorative experiences to counter mental fatigue, and use the concept of quiet fascination to describe a positive state people can encounter in natural settings (Kaplan 1995).

Interpretation frequently uses strategies of simulation and substitution when natural environments are inaccessible or endangered. Levi and Kocher (1999) conclude that the widespread use of virtual nature could reduce support for the preservation of local, natural environments at the expense of the more highly constructed spectacular environments available through ‘virtual’ nature technology. They identify unintended consequences of using such strategies as:

One justification for this devaluing hypothesis relates to arguments made by media critics. These critics believe that repeated commercial media exposure to very beautiful natural

environments causes people to devalue non-spectacular natural environments. (Levi and Kocher 1999, 206).

12.3.2 Summary of psychology's relevance for interpretation

Research in psychology is valuable for interpretation design as it examines the reaction of people in social and natural contexts; including museum settings, natural and wilderness environments and with simulations of nature. The literature from psychology and visitor studies, revealed a number of real and potential barriers to communication. The mental states described in the literature as mindfulness, animation (Krippendorf 1987) and engagement are desirable yet often elusive outcomes in any communication project. Through concepts such as mindlessness, mindfulness (Moscardo 1996, Langer 1993) flow (Csikszentmihalyi 1990, 1997), and quiet fascination (Kaplan et al 1998) psychology offers designers the opportunities to consider how to encourage these states. Research also shows that visitors can feel separated from displays, distanced from the meaning of exhibits, overwhelmed by the amount of information in interpretive settings, and physically disoriented in interpretive and tourist settings. These barriers can lead to negative visitor experiences including passivity (Tyler 1995), fatigue (Gilman 1916, Robinson, 1928), anxiety (Pearce 1988, Pearce and Black 1984), disorientation, mindlessness (Moscardo 1996) insecurity (Kaplan et al 1998) and incompetence (Olds 1990). Research into human behaviour in the natural environment flags consequences of using simulation media that may be at odds with designers and interpreter's aims. Clearly this research offers designers valuable insights that have the potential to be transferred into design practice.

12.4 Summary – interdisciplinary literature review

Bitgood and Patterson's (1988) review of visitor behaviour was the initial starting point for examining material from other disciplines. Synthesised from key findings in visitor studies, their review is useful for highlighting issues from a visitor behaviour perspective, but does not extend to design. Moscardo (1996) also reviews existing research from visitor studies, and extends Bitgood and Patterson's *Principles of Visitor Behaviour* (1988) by bringing concepts from social psychology into the framework.

Insights into to how people experience interpretive settings and their engagement as a visitor or tourist in these environments are highly relevant to bring to user-centred design. Identifying findings from these disciplines as relevant for design is an important step. Integrating these findings into design in a practical way brings cross-disciplinary research to design as an accessible and rich resource. The next section takes findings from visitor studies, education and psychology and groups them according to recurring patterns and themes that can be applied to design.

12.5 Finding patterns

The conclusions and findings from the interdisciplinary literature search are summarised and grouped below according to commonly recurring issues and themes. These recurring themes will be referred to here as ‘patterns’, describing instances of similar findings. of findings have been identified. Seven patterns are discussed broadly in this chapter and will be integrated with design strategies in the next chapter forming a new pattern ‘language’. The patterns are summarised as:

- Control – Visitors need to be given control over their experience.
- Comfort – Visitors need to feel safe in an environmentally comfortable setting.
- Personal connection – Communication needs to connect with visitor’s personal experience.
- Challenge/curiosity – Communication should challenge, intrigue and encourage questions from visitors.
- Participation/interaction – Interactive and participatory experiences and exhibits, lead to high levels of visitor attention and recall.
- Variety/multi-sensory – Communication using multi-sensory attributes has more impact.
- Flow – Interpretive settings can be personally enriching, rewarding and restorative enabling people to have ‘flow’ experiences.

The following tables present the pattern groupings along with the source of their research findings.

12.5.1 Control

Pattern: 1 Control Research findings and conclusion	Authors/ Study
<ul style="list-style-type: none"> • Visitors should be given control over their experience. • Successful museum learning requires visitor's sense of self-determination and control. • Interactive exhibits which give visitors some control over their experiences; result in higher levels of visitor attention. 	<p>Moscardo 1996</p> <p>Perry (1992)</p> <p>Bitgood and Patterson (1988)</p>

Table 18: Pattern 1 Control.

The findings from these studies relate to the degree to which visitors are able to control access to information, its flow and pace of delivery. Findings demonstrate a link with higher levels of attention, learning and positive visitor experience when visitors have control over their experience in exhibitions and museums.

12.5.2 Comfort

Pattern: 2 Comfort Research findings and conclusion	Authors/ Study
<ul style="list-style-type: none"> • Visual access increases confidence. • Familiarity helps people feel more comfortable. • Human sign is often reassuring. • A small number of coherent areas makes a setting easier to understand. • Successful museum learning requires visitor's sense of competence. • Comfort includes orientation, providing amenities, making the museum's agenda clear, and always maximising the possibility that the intended interactions between the content of the museum and the visitor be as positive as possible. • Visibility of exhibit: barriers to visibility reduce viewing times • Object satiation and fatigue: Repetition of content of exhibit style is related to decreased attention. • Proximity of exhibit: The closer visitors can get to exhibits, the longer they stay. • Visitors should be in an environmentally comfortable setting, one which matches the human factor needs for sensory stimulation without aggressive affront to these senses, in the presence of design that works for them. • Visitors need to feel free to move in the space of the museum and the exhibitions, to have their needs met, and to know where they are. • Visitors want to feel safe. 	<p>Kaplan et al (1998)</p> <p>Perry (1992)</p> <p>Hein (2000)</p> <p>Patterson and Bitgood (1998)</p> <p>Olds (1990)</p>

Table 19: Pattern 2 Comfort.

These findings focus on visitor security and comfort and are related to the spatial setting of the exhibit, gallery or visitor centre. While some of these findings are related to physical comfort including; visibility, movement around a space, orientation, way-finding, and sensory stimulation, others refer to psychological comfort such as competence, confidence, familiarity and boredom. When grouped together these findings form a pattern that indicates the combined physical and psychological dimensions of visitor comfort are important consideration for the design of exhibits and spaces. Negative reactions in museum settings in relation to issues of comfort and security include; fatigue (Gilman 1916), exit-oriented behaviour and avoidance (Dean 1996, 24), insecurity (Kaplan et al. 1998), incompetence (Olds 1990), mindlessness (Moscardo 1996) and anxiety (Pearce and Black 1984, Pearce 1988).

12.5.3 Personal connection

Pattern: 3. Personal connection Research findings and conclusions	Authors/ Study
<ul style="list-style-type: none"> • Interpretation needs to make connections to the personal experience of visitors. • Familiarity helps people feel more comfortable. • For visitors to have a positive experience, their interaction with the contents of the museum must allow them to connect what they see, do and feel with what they already know, understand and acknowledge. The new must be able to be incorporated into the old. • Special Interests: Visitors are more likely to select exhibits related to their interests. • In the presence of much that may be unfamiliar, visitors should feel competent, they should not be overwhelmed by so much that is new and incomprehensible that the experience exceeds their adaptive capabilities. 	<p>Moscardo (1996)</p> <p>Kaplan et al (1998)</p> <p>Hein (2000)</p> <p>Patterson and Bitgood (1998)</p> <p>Olds (1990)</p>

<ul style="list-style-type: none"> • Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile. 	Tilden (1977)
<ul style="list-style-type: none"> • Holistic – Interpretation should aim to present a whole rather than a part, and must address itself to the whole person rather than any phase. 	
<ul style="list-style-type: none"> • People incorporate the content of museums into the agendas they bring with them, and their social interactions, attention, fantasies and feelings include, and often focus on, the content of museums. 	Hein (2000)

Table 20: Pattern 3 Personal connection.

Given a sense of personal connection with what they are viewing and experiencing, people make strong connections with objects, information and settings. Each visitor brings to the interpretive setting their own lived experience, education and personal interests. A strong personal connection between the interpretive setting and the visitor enhances levels of comfort, education and memorability of the experience. Falk and Dierking (1992) propose the ‘interactive museum experience’ which consists of overlapping contexts; personal, social and physical. For visitors to have a positive experience, their interaction with the contents of the museum must allow them to connect what they see, do and feel with what they already know, understand and acknowledge. The new must be able to be incorporated into the old (Hein 2000).

Far beyond the entertainment, and far beyond the dissemination of factual information, contemporary interpretation aims to create first and foremost in visitors *meaning*...meanings that allow visitors to put a place, or thing, or time period, or concept into some sort of personal perspective and to identify with it in a way that’s more profound and more enduring than random fact-learning can alone produce...regardless of how fascinating or even mind-boggling those facts are (Ham 2002, 13).

12.5.4 Challenge and curiosity

Pattern: 4 Challenge and curiosity Research Findings	Authors/ Study
<ul style="list-style-type: none"> • Interpretation needs to challenge visitors, to question and encourage them to question. 	Moscardo (1996)
<ul style="list-style-type: none"> • The chief aim of interpretation is not instruction but provocation. 	Tilden (1977)
<ul style="list-style-type: none"> • Museums foster visitor interest and curiosity, inspiring self-confidence and motivation to pursue future learning and life choices. 	Falk and Dierking (1992)
<ul style="list-style-type: none"> • The value of wonder, exploration, expanding the mind, providing new, cognitively dissonant (intellectually shocking), and aesthetic experiences cannot be underestimated. Museums can do this well and these are an integral part of ‘learning’. 	Hein (2000)
<ul style="list-style-type: none"> • Curiosity – The visitor is surprised and intrigued in a successful museum learning experience. 	Perry (1992)
<ul style="list-style-type: none"> • Challenge – The visitor perceives there is something to work towards. 	
<ul style="list-style-type: none"> • Mystery encourages exploration. 	Kaplan et al (1998)

Table 21: Pattern 4 Challenge and curiosity.

Experiences which challenge visitors; those that provoke, arouse curiosity, confront, disconcert, intrigue or surprise are valuable and motivate the visitor to work harder to understand and learn from a situation. Museums and visitor centres may use information in a provocative way, to put forward contested views or conflicting positions and ‘hot’

interpretation of scientific or cultural information (Ballantyne and Uzzell 1999). Where the traditional notion of educational institutions is that they instruct; museum and interpretive settings use strategies of provocation (Tilden 1977), to challenge and allow reflection. However, there should still be scope for the visitor to challenge the institution’s values and not be forced to arrive at the same pre-ordained conclusions as those held by the curators or interpreters (Garton-Smith 1999, 140).

12.5.5 Participation and Interaction

Pattern: 5 Participation/Interaction Research Findings	Authors/ Study
<ul style="list-style-type: none"> • Interactive Factors: Interactive exhibits, which give visitors some control over their experiences, results in higher levels of visitor attention. • Visitor Participation: Visitor participation is associated with greater attention and better recall. • Sensory Competition Exhibit stimuli compete for visitor attention. 	Bitgood and Patterson (1998)

Table 22: Pattern 5 Participation and interaction.

Interactivity, and the ability to interact with something, is a quality that affords the visitor greater control over their experience. In a study undertaken by Pearce, drawing on the evidence of 3000 visitor interviews, interactivity was identified as one attribute of highly successful exhibits (Pearce 1991a). Interactivity is currently widely incorporated by museums and visitors centers in a range of exhibition media. These can vary from the use of computer interactive devices, touch screens and multi-media displays to pushing buttons, lifting panels or touching and participating actively in displays and exhibits. Computers, via on-screen interactivity, allow visitors to select information arranged in multiple levels of complexity. While computers allow visitors to access large amounts of information, an interactive interface allows the visitor to control the amount, flow and depth of information investigated. The more expanded experience of interactivity allows a non-linear unfolding of a narrative or information, where designers use web-like structures rather than linear solutions. Jennifer Garton-Smith writes:

Interactive interpretation must necessarily be at least two-way if not ultimately multiple. It is not interactive in a communication sense if the visitor is directed to arrive at the same meaning as the curator (Garton-Smith 1999, 140).

Interactivity therefore, provides opportunities for the audience to actively participate in the construction of meaning, as well as make a personal and physical connection with the exhibit. Interactivity is also related to the level of control within a given setting as it allows visitors to control the flow and sequence of their experience. Interactivity and participation can be experienced physically by touching or manipulating an object verbally by joining in a discussion, responding to or asking questions, or participating in drama

12.5.6 Variety and multi-sensory

Pattern: 6 Variety/multi-sensory	Authors/ Study
Research Findings	
<ul style="list-style-type: none"> • Sensory factors – Multi-sensory exhibits produce longer viewing times. • Sensory competition – Exhibit stimuli compete for visitor attention. • A successful museum experience leading to learning includes play, whereby the visitor experiences sensory enjoyment and playfulness. • Access is increased by additional resources such as audio label, live interpretation, reference books, CD-ROM computer resources, or demonstrations. 	Bitgood and Patterson (1998) Perry (1992) Hein (2000)

Table 23: Pattern 6 Variety and multi-sensory.

The ability to stimulate multiple senses is crucial to the success of a visitor experience. Multi sensory activities are more successful than those where sight dominates. Many different stimuli together in a single space can also compete with each other, so it is important to cater for different learning styles, which enable people to self-select material and media with which they feel most comfortable.

12.5.7 Flow and quiet fascination

Pattern: 7 Facilitates flow mindfulness, revelation/quiet fascination	Authors/ Study
Research Findings	
<ul style="list-style-type: none"> • Revealing: Information, as such, is not interpretation. Interpretation is revelation based upon information. • Museums must make content and ideas accessible, facilitating intellectual ‘connections’ and bringing together disparate facts, ideas and feelings. • Museums affect how visitors think and approach their worlds, in contrast to what they think. • People have enriching. Stimulating rewarding or restorative experiences in museums. They learn about themselves, the world, and specific concepts; they have aesthetic, spiritual and ‘flow’ experiences. • People make unique, startling connections in museums. • Natural settings can fill the mind and enhance restoration. • Even a small space, if it has extent, can constitute a whole different world. • A successful museum experience leading to learning includes communication, whereby a visitor engages in meaningful social interaction. 	Tilden (1977) Falk and Dierking (1992) Hein (2000) Kaplan et al (1998) Perry (1992)

Table 24: Pattern 7 Flow and quiet fascination.

In natural and cultural heritage settings, such as museums and national parks, several authors have variously described the emotional and psychological dimensions of the experience. Csikszentmihalyi (1990, 1997) calls these ‘flow’ experiences. He describes such states as:

Being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one, like playing jazz. Your whole being is involved, and you're using your skills to the utmost (Geirland 1996).

Kaplan et al refer to a similar experience and in natural environments as states of ‘quiet fascination’. They argue that natural settings can fill the mind and enhance restoration:

What we are calling quiet fascinations do not totally dominate one's thoughts. They permit reflection; they make it possible to find out what is on one's mind. Many natural environments have the capacity to evoke quite fascination. Quiet fascination can come from activities. For example, for some people activities such as gardening and fishing are mind filling. Quiet fascination can also come from the setting itself, from the sound patters, the motion, the intensity of forms and colour (Kaplan et al 1998, 69).

It is well documented that people have moments of fascination, inspiration and aesthetic experiences and that these that are often more related to emotional, rather than intellectual states in outdoor and nature-based settings

12.6 Summary – Finding patterns

This chapter presents a set of commonly occurring themes or 'patterns' from literature – from the fields of visitor studies, education and psychology. As a body of knowledge it is highly relevant for interpretation design, yet it is currently unlikely to be well utilised by designers as it is not visible in design discourse; coming instead from a range of inter-related fields.

This chapter has selectively examined literature from the fields of Education, Visitor Studies and Psychology which specifically relates to interpretation design. From these fields the following concepts and themes have been drawn out for development in the next chapter:

- Control – Visitors need to be given control over their experience.
- Comfort – Visitors need to feel safe in an environmentally comfortable setting.
- Personal connection – Communication needs to connect with visitor's personal experience.
- Challenge/curiosity – Communication should challenge, intrigue and encourage questions from visitors.
- Participation/interaction – Interactive and participatory experiences and exhibits, lead to high levels of visitor attention and recall.
- Variety/multi-sensory – Communication using multi-sensory attributes has more impact.
- Flow – Interpretive settings can be personally enriching, rewarding and restorative enabling people to have 'flow' experiences.

The next chapter presents the practical outcome of this part of the research – The Interpretation Design Pattern Language. This tool is based on the integration of these findings into the field of interpretation design; extending and shaping it into a readily accessible, practical and usable form.

Chapter 13 – Interpretation design pattern language

13.0 Introduction

The potential of a ‘pattern language’ as a conceptual tool for interpretation design lies in its capacity to create a common language or lingua franca between designers, diverse stakeholders and professionals working together on interpretation projects. This part of the research is based on the pattern language approach of Christopher Alexander and his colleagues — a synthesising model, highly suited for bringing together cross-disciplinary knowledge and fostering collaboration between disciplines and professions (Alexander et al 1977). While Alexander advanced his pattern language from a building, architecture and urban planning perspective (Salingaros 1999, 2000, 2004), his methodology has been adopted by many other disciplines including mathematics, interface design (Erickson, 2000b, Tidwell 2003), software development (Griffiths 2004, Lea 2003), environmental psychology (Kaplan 1998), education (Jessop, 2004), management and industrial design (Junestrand 2001). The first part of this chapter provides a detailed discussion of Alexander’s methodology and how it applies to this research. The second part of the chapter describes the Interpretation Design Pattern Language; a tool I have developed for teams collaborating on interpretation design projects.

13.1 Christopher Alexander

Christopher Alexander, mathematician and Professor of Architecture at the University of California at Berkeley since 1963. Alexander developed the idea of a ‘pattern language’ during the 1970s in response to his growing disenchantment with formal methods used in architecture and urban design. Alexander and his colleagues in the seminal book *A pattern language* (Alexander et al 1977) proposed the pattern language methodology to be used by both professionals and lay people interested in architecture, building and urban design. The book embodies the zeitgeist of the 1960s and 70s and expresses a philosophical position critical of buildings that according to Griffiths:

failed to fulfil the real needs of people who lived and worked in them, which failed to adapt to local and physical environments and which people simply did not like (Griffiths 2004).

Expressed throughout his work, a significant motivation in Alexander’s philosophy is capturing what he refers to as a ‘quality without a name’ – an intangible characteristic present in buildings that fulfilled and pleased their occupants; but was difficult to define, formalise or prescribe. Alexander’s work needs to be seen in the context of what William Saunders calls a rebellion against anomie, regimentation, mechanisation and consumerism of the mid 20th Century (Saunders 2002, 2). Alexander developed many of his ideas in Harvard during the late 1950s in an intellectual environment he shared with Walter Gropius, George A Miller, Herbert Simon and Fritz Zwicky. Alexander, labelled by some as a Neo-Romantic (Saunders 2002), was also a structuralist, interested in uncovering the underlying structure, units, codes and combinations of rules that contributed to good architecture. Prior to publishing *A pattern language*, his first book *Notes on the Synthesis of Form* was an influential text for researchers in computer science in the 1960 and 70s (Mehaffy 2007, 41). The respect for Alexander’s work among

architects is polarised and controversial (Saunders 2002), his advocates referring to him as ‘a theoretical iconoclast’ (Mehaffy 2007) while his critics claim he is ‘anti-intellectual, naïve, soft-headed, conservative, and uninterested in architecture as art’ (Saunders 2002, 1). Despite this, Alexander’s work, including *A pattern language* has gained wide popular appeal as it continues to exert a strong influence on those concerned with the design of their environments. There are several significant aspects of Alexander’s work that make it relevant for this research which will be explored throughout this chapter. These include; his sensitivity to place-based projects, the pattern language methodology as providing a *lingua franca* for interpretation teams and stakeholders, and as a conceptual tool which can be adapted to suit locally appropriate solutions.

13.1.1 Pattern language – Background

The design methods movement of the 1960s influenced the development of the pattern language (Jessop 2004). Of particular interest to Alexander, was Fritz Zwicky, a Swiss-American astrophysicist and aerospace scientist based at the Californian Institute of Technology, and his work on morphological analysis of objects (Zwicky, 1967). Morphology, the study of form or pattern, is used in disciplines where the analysis of formal structure is important, such as geology, anatomy or biology. Zwicky developed a structuralist method called ‘morphological analysis’ for identifying and investigating the total set of possible relationships or ‘configurations’ contained in a given problem complex (Ritchie 2003). The Zwicky Box, a conceptual tool often used by designers to generate random property combinations in the early stages of concept development, is a legacy of his work. Zwicky was not only interested the material characteristics of objects (e.g. shape, geometry, texture, size and colour), but also the more abstract structural interrelations among phenomena, concepts and ideas (Zwicky 1967, 34). This approach influenced Alexander in developing a pattern language; his own form of morphological analysis (Jessop 2004, 458). The focus for Alexander was architecture, urban and regional planning; where he sought to present existing examples of best practice solutions to design problems from which he identified and described commonly occurring ‘patterns’. Each pattern consists of a simple description of an observed recurring problem, and a suggestion for its solution. Salinger (2000) describes the pattern language as an approach which has a phenomenological foundation built from observation. Being a mathematician, the way the patterns linked together in systems, and being able to model and represent those systems was important for Alexander. One of his main criticisms of modern urban planning was that it exhibited a hierarchical tree-like structure, whereas instead, he conceived of cities as being more complex systems full of overlaps and ambiguities more like a semi lattice or network than a tree (Mehaffy 2007). His seminal paper ‘A City is Not a Tree’ written in 1965, details what he sees as the failure of that era’s planning (Alexander 1965), and by rejecting hierarchical tree-like structures Alexander searched for a design method to provide an alternative construct. Instead he conceived of a system that saw patterns linking and overlapping with other patterns, thus forming a web of patterns or what Alexander calls ‘a language’

Alexander and his colleagues Sara Ishikawa, Murray Silverstein, Max Jacobson, Ingrid Fiksdahl-King and Shlomo Angel published *A pattern language* in 1977. The book contains 253 patterns presented as solutions to commonly occurring problems, to assist architects and non-architects to design elements of the built environment, from single architectural components of dwellings of at one end of the spectrum up to complex regional urban design systems at the other. Alexander addresses both the detail and the complexity of the physical built environment as well as how that environment is to be lived in. The patterns (which used together form a ‘language’) are presented, each consisting of a problem statement followed by a discussion of the problem supported by an illustration. For example, his book addresses issues as detailed as building a good fireplace [Pattern 181], or shelving [Pattern 200] as well as ideas about providing places for dancing in the streets [Pattern 63] or the locating of industry near residential neighbourhoods [Pattern 42]. The book, much more than a ‘how to’ manual for building, expresses Alexander’s philosophical position against modern soulless architecture, and has become a manifesto used by architects and non-architects alike, such as home builders, furniture designers and landscape architects.

13.1.2 *Pattern language – structure*

Alexander and his co-authors generated the pattern language by capturing patterns that they regarded as archetypal, occurring widely across cultures and time. Each pattern is described in a standard way, reflected in the formal layout of his book. Each pattern is accompanied by a photographic example of its occurrence; drawings to provide further detail; the pattern’s relationship to other patterns of larger and smaller scale; and the pattern's rationale and implementation. The patterns are presented using a particular layout convention which is consistent throughout the publication.

Patterns are named and numbered, for example;

118 ROOF GARDENS
164 STREET WINDOWS
103 SMALL PARKING LOTS

The description and layout of the patterns follows a particular sequence and structure. Pattern number 164 STREET WINDOWS, is used an example to illustrate the detail and structure of one of Alexander’s patterns (Alexander et al 1977, 770 –772).

(1) Firstly an image illustrates what Alexander calls an archetypal example of that pattern, in the case of STREET WINDOWS, a person looking out from a first floor window into a French street, conversing with another person below.

(2) Next, the pattern has an introductory paragraph and links to other patterns. In introducing this pattern Alexander writes:

streets will only come to life if they are helped to do so by the people looking out on them, hanging out of windows, laughing shouting whistling.

(3) Links to larger related patterns are listed as:

GREEN STREETS (51)
SMALL PUBLIC SQUARES (61)
PEDESTRIAN STREETS (100)

BUILDING THOROUGHFARES (101)

(4) The essence of the problem is described in one or two sentences, (this is always written in bold). In this example:

A street without a window is blind and frightening. And it is equally uncomfortable to be in a house which bounds a public street with no window at all on the street.

(5) The longest section follows, discussing the body of the problem, which according to Alexander ‘describes the empirical background of the pattern, the evidence of its validity, the range of ways the pattern can be manifested in a building, and so on’ (Alexander et al 1977, xi).

The validation for **STREET WINDOWS** includes diverse and poetic references, including from Franz Kafka’s stories, mention of the Peruvian *mirador* (the ornamented window gallery which is found in colonial buildings of Lima) and empirical findings from research at his own research department the Centre for Environmental Structure in California. Comments about street window design include:

Street windows are most successful on the second and third floors. Anything higher, and the street becomes a “view” — the vitality of the connection is destroyed...At ground level, street windows are less likely to work. If they are too far back from the street, they don’t really give a view onto the street...If they are too close to the street, they don’t work at all because they get boarded up or curtained to protect the privacy of the rooms inside (Alexander et al 1977, 771).

Incorporated into this discussion are drawings and diagrams to illustrate possible solutions.

(6) After the discussion, comes the solution, also set in bold type. Alexander describes the solution as ‘the heart of the pattern – which describes the field of physical and social relationships which are required to solve the stated problem, in the stated context’ (Alexander et al 1977, xi).

In the **STREET WINDOW** example the solution is described as:

Where buildings run alongside busy streets, build windows with window seats, looking out onto the street. Place them in bedrooms or at some point on the passage or stair, where people keep passing by. On the first floor, keep these windows high enough to be private.

(7) Following the statement of the solution is a diagram indicating a visual representation of the solution.

(8) And finally, links to related smaller patterns are listed ‘to complete the pattern, to embellish it, to fill it out’ (Alexander et al 1977, x-xi).

For **STREET WINDOWS** the smaller patterns are listed as:

Pattern 180 **WINDOW PLACE**

Pattern 236 **WINDOWS WHICH OPEN WIDE**

Pattern 238 **FILTERED LIGHT**

Pattern 246 **CLIMBING PLANTS**

(9) In order for the pattern to become part of a ‘language’, the pattern is to be used or read in conjunction with other suggested patterns. The designer/reader is also encouraged to make up their own ‘language’ by selecting pattern combinations that relate to the local site and specific context of the building or project. In this way the specific project may have a number of patterns selected from the whole group that can be referred to. Different

combinations of the patterns, will yield different languages and in this way are not prescriptive but open-ended with any small list of patterns capable of generating millions of different solutions.

13.1.3 Patterns as a language

Alexander's patterns, taken individually, are intended as a description of the 'essential field of relationships needed to solve a problem' (Alexander et al 1977 xiii). Understood together, Alexander conceived of the patterns not as isolated entities but in relation to each other, writing:

In short, no pattern is an isolated entity. Each pattern can exist in the world, only to the extent that it is supported by other patterns: the larger patterns in which it is embedded, the patterns of the same size that surround it, and the smaller patterns which are embedded in it (Alexander et al 1977 xiii).

Once the patterns have been selected as a group to form a language for a particular project, they become a framework. This does not determine the design, but allows for an infinite number of design solutions (Salingaros 2000). Rather than being a fixed set of fail-safe formulas, the patterns are meant to inform and guide, leading toward a locally appropriate solution. The patterns form a 'language' when they are used collectively, cross-referencing with other patterns and thereby pointing to overlapping problems and issues. Alexander conceived of the pattern language as forming a network, with no set order or sequence. Michael Mehaffy (2007), in commenting about Alexander's continuing influence cites natural spoken language and computer science as inspiration for the development of the pattern language writes:

Alexander noted several hopeful sources. One was in the structure of natural languages. An entire complex system, with all its overlap, can be represented by a word or phrase, and can be linked to other systems and other words through grammatical rules. While following basic hierarchical rules of structure, natural language nonetheless does permit tremendous ambiguity, overlap and interactivity. Poetry, for example, is an obvious example of language that is rich in overlap and density of interrelations. Another inspiration came from computer science. Alexander had continued his work in the synthesis of form using computer programs, and he made an intriguing observation. Amid the unwieldy thicket of data he was generating, he saw recurrent patterns of the same elements, or the same kind of solutions. If these patterns could be abstracted, they could perhaps be re-combined in usable ways, preserving the essential network structures of the patterns. Such a 'language' itself could, like a natural language, contain overlap and network connectivity that comprised the vast majority of the built environment (Mehaffy 2007, 44).

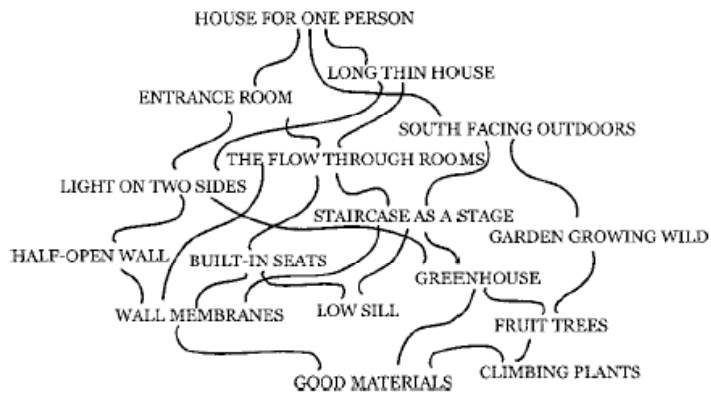


Figure 12: The patterns within the language are connected to each other through an overlapping network structure (Mehaffy 2007, 44).

13.1.4 Appeal of pattern language

One of most significant aspects of Alexander's work that has been developed by other disciplines is his notion of a 'language'; a shared construct that is communicated between designers, stakeholders and collaborators. The appeal of the pattern language approach for many academics, designers and practitioners is as a tool for thinking and problem solving. In a similar way that the Zwicky box can be used as a tool for conceptualising design solutions, so too can a pattern language be used as a tool for approaching design problems. As well as a conceptual tool that can be applied to many contexts, the pattern language approach is particularly well suited to interdisciplinary projects or where a diverse range of professionals need to share concepts and constructs in order to communicate with each other. Erickson argues that one of the main values for using a pattern language is that it provides a common language for design process as a way to support the communicative aspect of design (Erickson 2000a). Commenting on the field of interaction design Erickson writes:

A central challenge in interaction design has to do with its diversity. Designers, engineers, managers, marketers, researchers and users all have important contributions to make to the design process. But at the same time they lack shared concepts, experiences and perspectives. How is the process of design-which requires communication, negotiation and compromise-to effectively proceed in the absence of a common ground? (Erickson 2000a).

Erickson believes that Alexander's pattern language is a useful method to create a *lingua franca*, 'accessible to all stakeholders, particularly those who are traditionally marginalised in the design process; the users' (Erickson 2000a). While often overlooked and criticised by the academic and professional sectors of architecture (Protzen 1980, Dovey 1990), Alexander's *A pattern language* is still widely read and purchased those outside the profession, students, builders and do-it-yourself home designers.

Alexander's intention of *A pattern language* being inclusive and accessible, is similar to the later concept of 'open source' sharing found in computing; whereby users are treated like co-developers and are therefore given access to the source code of a given software. Alexander's pattern language is at its best understood as a conceptual framework to be used by different disciplines and professions, allowing participants and users, to

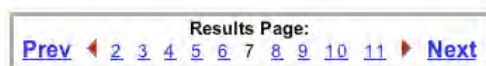
contribute more fully in the design process. Alexander’s work has been enthusiastically adopted by many other disciplines including the field of computer science, industrial design, education and organisational management. The extent of his influence has had more impact on computer science than architecture (Salingaros 2004), with it being applied specifically to object oriented programming, design of software applications and human-computer interfaces.

Alexander and his colleagues generated patterns from their own practice and from their collective knowledge of architectural examples from other cultures. In other fields, patterns have been generated from a range of sources; by describing patterns from bodies of collective expertise, individual reflective practice and research findings. It is the methodology, rather than the content of Alexander’s pattern language that has been taken up, extended and adapted by other disciplines. What has evolved from this methodology are variations on pattern language approaches developed by, and specific to, the needs of different disciplines.

Salingaros comments on the uptake of the pattern language by computer programming:

In an entirely unanticipated development, the pattern language format has found a basic application in computer programming. Any programming solution that reappears in separate instances may be identified as a “pattern”, and be subsequently reused as a unit. Patterns are now recognized as a powerful theoretical framework in which to assemble complex computer programs (Salingaros 2000).

A familiar example for internet users will illustrate how patterns have been adapted to use in computer programming and interface design. The *Yahoo Pattern Language Library* is a readily accessible pattern library for computer programmers recently available on the internet for people designing web pages. The familiar search pagination bar (pictured below) is a ‘pattern’ that can be used when there are more search results than can be displayed on a single page.



On the site the problem is described as:

- The user needs to view a set of search results ranked by relevance that is too large to easily display within a single page

The solution is described in a simple form as:

- Break the information into a sequence of pages sorted by relevance.
- Provide a pagination control for providing access to paged content

Accompanied by screen grabs, a more detailed description of how to implement a solution and the rationale for the solution follows. The computing patterns follow the sequence and structure of Alexander’s pattern language in that they describe a problem, context, principle, solution and examples, yet the content is quite different, which demonstrates the adaptability of the pattern language as a method (Yahoo Developer Network).

13.1.5 Criticisms of Alexander

Alexander has been criticised for his subjectivity, expressed through his poetic use of language (Protzen 1980), being un-scientific (Dovey 1990) and for his idealism. Protzen claims that Alexander's world view is nostalgic and romantic, oriented towards the past and biased towards white European communities and also questions whether the validity of the patterns can be empirically tested (Protzen 1980, 292). Since the 1970s, the idea that reality is a social construction peculiar to time and place has curtailed the search for underlying constants, making Alexander's work open to criticism. Saunders (2002) criticises his work as being absolutist and essentialist, which he attributes to Alexander's structuralist perspective, reminding us of the historical context of its origins. Dovey (1990) and Grabow (1983) argue that Alexander's work represents a 'radical paradigm shift in environmental design', an expression of his Taoist influenced world-view, where he proposes a more profound connection between nature and science than was evident in either science or architecture. Taken in its entirety, Alexander's pattern language is grandiose in its scale and ambition, highlighting that Alexander's vision stems from a utopian alternative world-view, contrary to the prevailing Modernist scientific paradigm of his time. Whereas architecture, building and mathematics are scientific and exacting processes, Alexander's language is frequently poetic and imprecise with an expressive quality that is aligned with his philosophical and spiritual views. To give an example, the following passage comes from Alexander discussing the problem of how to make safe and comfortable bus stops:

The secret lies in the web of relationships that are present in the tiny system around the bus stop. If they knit together, and reinforce each other, adding choice and shape to the experience, the system is a good one; but the relationships that make up such a system are extremely subtle. For example a system as simple as a traffic light, a curb, and a street corner can be enhanced by viewing it as a distinct node of public life; people wait for the light to change, their eyes wander, perhaps they are not in such a hurry. Place a newsstand and a flower wagon at the corner and the experience becomes more coherent. The curb and the light, the paperstand and the flowers, the awning over the shop on the corner, the change in people's pockets — all this forms a web of mutually sustaining relationships,

The possibilities for each bus stops to become part of such a web are different — in some cases it will be right to make a system that will draw people into a private reverie — an old tree; another time one that will do the opposite — give shape to the social possibilities — a coffee stand, a canvas roof, a decent place for people to sit who are not waiting for the bus (Alexander et al 1977, 452).

It is not difficult to see why the scientific and architectural professions, especially those with a more conservative, rationalist approach would find this Romantic language, originating as a product of the 1970s problematic.

13.2 Pattern language and interpretation design

13.2.1 Relevance for this research

There are several significant aspects of Alexander's work that make it relevant for this research. What is most relevant to this research is using Alexander's pattern language as a tool for thought; a methodological framework and practical strategy to create a *lingua franca* for professionals collaborating on interpretation projects. By harnessing practical and professional wisdom, evolved from the experience and observations of a number of professionals, this approach is highly suited to an emerging field such as interpretation design. As a recent field of design, there are no established precedents providing guidelines for interpretation design. The sense that information and experience from previous projects was not built upon, was highlighted by one designer who commented in the IAA forum that with each project they felt that they were starting from scratch again and that problems and successes were not communicated well from previous interpretation projects.

Pattern languages are also well suited to cross-disciplinary work. This is particularly true of Alexander whose work is described by Saunders as an 'impressive labour of synthesis, his work naturally expands to include psychology, anthropology, history, literature, sociology and religion' (Saunders 2002, 4). The observation that interpretation design is a form of postmodernised design, and is highly cross-disciplinary, is developed this research. In outlining a conceptual framework for interpretation design I have synthesized knowledge from a number of fields and disciplines incorporating findings, research, related concepts, themes and strategies used by other disciplines and professional practice. Also relevant is Alexander's work on built environments with an emphasis on harmony and connection with nature and place provides a rich resource for designers and architects planning place-based interpretation projects. His approach to architecture and sensitivity to human experience in places, expands upon discussions investigated in Chapter 8 about nature, culture, place and landscape. In particular his work relates to place, as it recognises the symbolic meanings people invest in their habitat, and the way good architecture can turn a space into 'place'.

Finally, a pattern language approach has an emphasis on language; a tool for communicating; a chance to explicate what is meant and understood by particular terms often taken for granted by the 'home' discipline. A pattern language approach involves deconstructing what has become naturalised inside particular disciplines and making it accessible and visible. Where Alexander is criticised for his poetic and Romantic language by some architects, this language may be highly appropriate for a profession like interpretation that relies on language to express ideas, feelings and qualitative attributes of places, people and objects. The 'quality without a name' that Alexander speaks about has resonances with the language of interpretation that describes it as interpretation as 'mysterious', 'unfathomable' and 'just out of reach' (Beck and Cable, 2002,7). It also echoes the intangible qualities of place that interpreters seek to tap into

and communicate about, what Vanclay calls ‘the coming together of the biophysical, social and spiritual worlds’ (Vanclay 2008, 3).

For these reasons, the conceptual framework of the pattern language format becomes an appropriate way to capture the material gathered from several sources in this research. The designer’s interviews, the research findings from the literature search, current design practice (in particular practice that extends collaboration) have all contributed to this new language. My personal experience as a designer, educator and researcher has informed the development of this new pattern language and the examples I have documented in undertaking the research serve to illustrate the qualities of this pattern language. The Interpretation Design Pattern Language presented here is not about Alexander, his philosophy or architecture, but adapts Alexander’s structure to bring together the fields of interpretation and design. Other pattern languages have informed the structure of this one; especially those developed for interface design, which involve dimensions of usability and interaction design. In particular Richard Griffiths characteristics of pattern languages guided my process. Griffiths of the University of Brighton has produced a collection of patterns for the design of useable software called the Brighton Usability Pattern Collection, and has developed the following list of pattern characteristics:

- Patterns need to be refined and worked over by practitioners to capture the true invariants in them.
- A pattern is a solution to a problem in context; they do not supply ready finished answers.
- People need to exercise their own creativity to implement a pattern.
- Patterns are hard to discover and may take a long time to describe adequately.
- Patterns are written to be usable by all development participants not just trained designers.
- Patterns are a richer resource than guidelines — more akin to ‘craft wisdom’.
- Patterns have an emphasis on process rather than on product.
- A good pattern will have evolved out of the experiences (both successes and failures) and observations of a number of designers.

(Griffiths 2004).

The pattern language I have developed is a propositional tool, as yet untested; each pattern being regarded as a starting point to be added to, and to be tested by experienced designers and collaborators. The patterns are therefore open to further refinement and input by designers and users, and in this way, are less prescriptive and richer than lists of guidelines. It is anticipated that this set of patterns will be used by participants working on interpretation projects, where dialogue about the designed visual interface is needed between groups of people that may include: interpreters, designers, educators, architects, scientists, writers, researchers, employees, volunteers, rangers, curators, bureaucrats and conservators. Although this pattern language has drawn on work from many other fields, its development comes primarily from a design perspective. In this way, it is design-led, but has relevance to a wide range of professions and it is envisaged that this initial set of

patterns will grow, especially once used on specific projects. Ideally, it is anticipated that this set of patterns be used as a starter set and that further project specific patterns could be developed to reach locally appropriate solutions and strategies.

13.3 Interpretation design pattern language

13.3.1 Methodology

I have written a set of patterns that can be regarded as a sub-set of a potentially much larger catalogue of patterns related to communication design. The patterns form a cluster particularly suited for interpretation design problems, but the same patterns may also be relevant or apply to other communication design problems and other design disciplines. The patterns are human-centred in that they are predicated on participation and it is anticipated that they will be added to and adapted. The first group of patterns (1–7) are led by the research findings from the disciplines visitor studies, museum studies, psychology and education. As presented in Chapter 12, literature surveys yielded a large body of relevant professional and academic knowledge currently under-utilised in interpretation design. Research findings and literature from these disciplines established common problems and patterns found in interpretation settings. Seven patterns were identified based on the research findings, and these patterns attempt to bring together design knowledge with interpretation knowledge. The patterns are summarised as;

1. Control – Visitors need to be given control over their experience.
2. Comfort – Visitors need to feel safe in an environmentally comfortable setting.
3. Personal connection – Communication needs to connect with visitor’s personal experience.
4. Challenge/curiosity – Communication should challenge, intrigue and encourage questions from visitors.
5. Participation/interaction – Interactive and participatory experiences and exhibits, lead to high levels of visitor attention and recall.
6. Variety/multi-sensory – Communication using multi-sensory attributes has more impact.
7. Flow – Interpretive settings can be personally enriching, rewarding and restorative enabling people to have ‘flow’ experiences.
8. Reading Place.
9. Lexicon for Place.
10. Visual metaphors.

Patterns 1–7 reflect the patterns identified in Chapter 12 from research findings in visitor studies, psychology and education. Here they are linked with interpretation and design practice to provide a set of design-led strategies and approaches.

Patterns 8–10 assist designers and teams to find a common language and sense of place for the local project site. These patterns use the rationale Erickson pursues as a way to generate a lingua franca to be used in guiding project, and ‘explores the potential role of design patterns as a common language among designers, stakeholders and users’

(Erickson 2000b, 2). This group use designer-led approaches to the site itself and are to be used to enable team members to respond to place and establish a communicative vocabulary of both text and image. These patterns assist in generating a visual language for the project, a common language between interpreters and designers using a human-centred approach. Primarily, the patterns focus on the visible dimensions that visual communicators or communication designers work with; however, as designers are engaged in designing wholistic experiences, the patterns may also include non-visual aspects such as sound, taste, touch and smell. Patterns 8 – 10 relate to place-based interpretation.

13.3.2 Pattern language development

The interpretation design pattern language was developed in 3 stages:

1. Summary of findings.
2. Problem identification.
3. Design responses to the problem.

Firstly, findings from the literature review and designer’s responses were summarised to identify seven patterns. A summary of the findings that led to the development of this pattern language are contained in Chapter 12. To illustrate the pattern development process, the stages of development of the first pattern CONTROL are outlined in detail below. This table details the process of creating the patterns. More general descriptions of the other patterns in the language will follow.

Stage 1 Problem identification

The first stage of the pattern is to identify and name the problem. The findings from literature search were grouped according to commonly occurring themes and patterns. The first pattern is called *Control*.

Pattern: 1 Control	Authors/ Study
Research findings and conclusion <ul style="list-style-type: none"> • Visitors should be given control over their experience. • Successful museum learning requires visitor's sense of self-determination and control. • Interactive exhibits which give visitors some control over their experiences, result in higher levels of visitor attention 	Moscardo 1996 Perry (1992) Bitgood and Patterson (1988)

Next, the pattern is phrased as a problem, in this case *Control* when phrased as a problem becomes *Lack of control*. When visitors encounter a lack of control in visitor and tourist settings, researchers have documented negative experiences including a passive distancing from the meaning of exhibits, (Tyler 1995), insecurity (Kaplan et al 1998), incompetence (Olds 1990), mindlessness (Moscardo 1996), anxiety (Pearce and Black 1984, Pearce 1988), fatigue (Gilman 1916, Robinson 1928) and a general sense of being overwhelmed by the amount of information to process.

Following Alexander’s system this can now be named as the problem statement.

Problem:

People can feel overwhelmed by and distanced from information in museum and interpretive settings.

Stage 2 – Design strategies

Within the interpretation design pattern language framework, design strategies that deal with the problem *Lack of control*, include *Visual hierarchy and Layering*. Following Alexander's model, these are not fail safe, prescriptive solutions; but can be read as generalised strategies that can be customized for specific local projects and settings.

Visual hierarchies

Hierarchies are a strategy used to deliver information in a gradual manner. This principle is utilised in many design systems found within interpretation design. Using systems of hierarchies to regulate the pace of information helps to reduce the effect of overwhelming visitors with information. Designers develop systems of visual hierarchies to prioritise certain information, and to give order to the remaining detail. For example, hierarchies regulate the layout of type and image on a page, the composition of a sign or poster, the navigational space on a website or computer interactive as well the physical layout of an architectural space. One interpretation designer explained a strategy used in his practice to give a hierarchy to information. Devising three levels of information according to the amounts they believed people could comprehend. In interpretation settings, they coined the terms:

- *Headline* – for a short grab of text to emphasis basic themes and encourage a return visit.
- *Bus stop* – for the amount of text one would absorb on a bus shelter panel, while waiting for a bus and includes easy to read brief explanations so the sense of the message is gained readily.
- *Novel* – the amount of text people would read if they were really interested in the topic and wanted to study it in more depth.

These levels of text have a corresponding visual form, which is easy to envisage in printed format (as a headline, bus stop or novel), but they could also translate into web form as a browser link (headline), one to two screens full of text (bus stop) or a .pdf article (novel). The same strategy can be 'designed into' a 3D space, where the visitor is gradually revealed more detailed information as they interact with an exhibit.

Layering

Layering, revealing and staggering are further ways to create visual hierarchies, whereby the physical structure of the communication is revealed in a gradual manner. The visitor may be required to interact with a three-dimensional structure to reveal all the segments of a story or layers of meaning; or information could be made available through audio visual information delivered at different points. The strategies of *Visual Hierarchies* and *Layering* are not limited just to this pattern and *control* is one pattern belonging to a larger framework. Similar to Alexander's methodology, each pattern can be cross-referenced with other patterns to form 'a language' to address a particular design problem. Other patterns related to giving audiences control are:

3. Personal Connection, 4. Participation/interaction, 6. Variety/multi-sensory

13.4 Interpretation pattern language descriptions

Detail of the proposed pattern language follows with examples illustrating each pattern. Underpinning these patterns is the body of research referred to in previous chapters. The patterns are phrased in accessible language able to be understood by designers and non-designers alike, and illustrated with best practice examples from the case studies, plus references to the citations in the text or for further reading.

The Interpretation Design Pattern Language is to be read using the following as a guide to its structure:

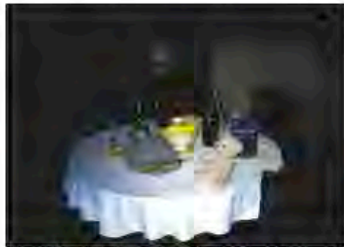
<p>Pattern number: Pattern title Pattern stated as problem Related design strategies</p>	<p>PATTERN 1: CONTROL Problem <i>People can feel overwhelmed by information in museum and interpretive settings.</i></p>
<p>Discussion of design strategies as applied to this problem</p>	<p>Design strategies</p> <ul style="list-style-type: none"> ▪ Create interpretation environments that reveal structured information in a staggered way, and allow audiences to control the flow and pace of information. ▪ Use <i>Visual Hierarchy</i> strategies to deliver information in a structured gradual way ▪ Use <i>Layering</i> to reveal information in a staggered way
<p>Example</p>	<p>Therefore Design interpretation environments that allow audiences to control and the flow and pace of information by interaction with objects, and presenting structured information which is revealed in a staggered way.</p>
<p>Image related to problem May show example of existing solution.</p>	<p>EXAMPLE: MARIA ISLAND COFFEE PALACE</p>
<p>Discussion of an existing solution which illustrates this pattern</p>	
<p>References/further reading</p>	<p><i>Maria Island Coffee Palace, Maria Island National Park, Tasmania</i></p> <p>The Coffee Palace visitor centre on Maria Island National Park, Tasmania allows visitors to interact with the heritage building, inviting them to occupy and use what was old 'coffee palace' accommodation. Visitors can sit dinner tables in the dining room whose settings correspond to particular phases of history of the building. Sitting at the table triggers and an audio presentation relating information from the appropriate historical period. They are also encouraged to play the piano, take reading material from bookcases or inspect collections of objects nestled in sliding drawers in the drawing room. Hierarchies and structured visual systems are used to layer messages and information held within drawers, in books, on signs, and via the audio environment. The tempo of the communicative atmosphere is quiet and relaxing, where visitors can sample from a diverse menu of offerings, selecting media they feel most comfortable with.</p> <p>References Kaplan Rachel., Kaplan, Stephen., And Ryan, Robert L. 1998. <i>With People in Mind: Design and Management of Everyday Nature</i>. Island Press, Washington DC.</p>

Figure 13: Interpretation Design Pattern Language Layout.

PATTERN 1: CONTROL

Problem

People can feel overwhelmed by information in museum and interpretive settings.

Design strategies

- Create interpretation environments that reveal structured information in a staggered way, and allow audiences to control the flow and pace of information.
- Use *Visual Hierarchy* strategies to deliver information in a structured and gradual way.
- Use *Layering* to reveal information in a staggered way.

Therefore

Using the design strategies of *Visual Hierarchy* and *Layering*, enables audiences to feel more in control, as they are able to direct their own experience in interpretation settings. When audiences can engage with heritage spaces through interactivity, rather than simply having institutional values and information reinforced, they can actively participate with, and in some cases, contribute to exhibits and experience. When the flow and pace of information has been designed using structured visual hierarchies, information is more accessible and less overwhelming.

Visual hierarchies

The use of visual hierarchy as a strategy to deliver information in a gradual manner is a principle utilised in many design systems found within interpretation design. Using systems of hierarchies to regulate the pace of information helps to reduce the effect of overwhelming visitors with information. Designers develop systems of visual hierarchies to prioritise certain information, and to give order to the remaining detail. For example, hierarchies regulate the layout of type and image on a page, the composition of a sign or poster, the navigational space on a website or computer interactive as well the physical layout of an architectural space.

Layering

Layering, revealing and staggering are further ways to create visual hierarchies, whereby the physical structure of the communication is revealed in a gradual manner. The visitor may be required to interact with a three-dimensional structure to reveal all the segments of a story or layers of meaning; or information may be made available through audio visual information delivered at different points.

EXAMPLE: MARIA ISLAND COFFEE PALACE MUSEUM



Interactive dinner table setting with audio.

Maria Island Coffee Palace Museum, Maria Island National Park, Tasmania.

The Coffee Palace visitor centre on Maria Island National Park, Tasmania, allows visitors to interact with the heritage building, inviting them to occupy and use what was old ‘coffee palace’ accommodation. In the dining room visitors can sit at dinner tables whose settings correspond to particular years of the building’s history. Sitting at the table triggers an audio presentation relating information from the appropriate historical period. Visitors are also encouraged to play the piano, take reading material from bookcases or inspect collections of objects nestled in sliding drawers in the drawing room. Hierarchies and structured visual systems are used to layer messages and information, held within drawers, in books, and via the audio environment. The tempo of the communicative atmosphere is quiet and relaxing, where visitors can sample from a diverse menu of offerings, selecting media they feel most comfortable with.

PATTERN 2: COMFORT

Problem

Visitors can experience physical and psychological discomfort such as dis-orientation, insecurity, over stimulation and fatigue in settings which lack clear orientation, familiarity, visibility and accessibility.

Design strategies

- Provide clear way finding systems that allow good orientation, freedom of movement, navigation and directions towards exits, tracks and facilities.
- Provide 3-D models that give setting and location cues to visitors.
- Build up consistent and reassuring cues for reading and understanding information, for example, type styles and icons that communicate the identity of park site or management authority.
- Design some smaller coherent spaces where people feel comfortable, secure and personally not intimidated, agoraphobic or overwhelmed.

Therefore

Creating confidence about way-finding is an important component of managing fears. Apart from the obvious physical requirements for comfort by providing shelter from extremes in weather, it is important for visitors to feel reassured that they will not get lost or disoriented, particularly in natural settings. Whether in smaller contained spaces such as visitor centres or on trails and tracks, visitors feel more comfortable if they have a clear idea of where exits are or how to return to the facilities or departure point from which they left. Finding ways to increase visual access can also reduce apprehensions (Kaplan et al 1998). Visitor comfort and security are important for people to be able to enjoy, to learn and to be absorbed in the experience in which they are engaging. The sense of being in a different world is easily undermined by intrusions and distractions. ‘Enclosures can remove distractions- can be natural outdoor “rooms”. Short interpretive trails provide another means of enticing the visitor into an unfamiliar landscape.’ (Kaplan et al 1998, 76). In natural places signs of familiarity and human interaction are reassuring.

EXAMPLE 1: FREYCINET NATIONAL PARK VISITOR CENTRE



*Outdoor viewing area,
Freycinet National Park Visitor Centre, Tasmania,*

Freycinet National Park Visitor Centre on the East Coast of Tasmania overlooks the geological features of a rocky granite range called the Hazards. The visitor centre, whilst orienting the visitor to the park, also allows for views to the outside environment; and encourages connection with the outdoors via trails and an outside viewing area for talks (see image above). The trails and landscaped outdoor ‘rooms’ hold enough signals to make visitors feel that they are still connected to the visitor centre, while also providing information about the local habitat.

EXAMPLE 2: WELLINGTON PARK



*Wellington Park Signage,
Wellington Park, Hobart, Tasmania.*

Wellington Park is an extensive natural area close to the city of Hobart in Tasmania. The park experiences extreme weather conditions from time to time (snow and bush fire), has high natural and cultural heritage value to residents of Hobart and is visited by tourists and people enjoying recreational pursuits such as walking, cycling and rock climbing. Being close to a major city, the park has many tracks and walkways, and yet in places feels quite remote from human contact and access. Orientation and safety are of a high priority, especially during poor weather conditions. The signage system works with these conditions, providing a range of functions including direction, management information, safety and some interpretation of the area. The identity of the system reinforces the presence of the management authority and allows the visitor a sense of security from the navigation system.

Reference

Kaplan R., S. Kaplan and R.L. Ryan. 1998. *With People in Mind: Design and Management of Everyday Nature*, Island Press, Washington DC.

PATTERN 3: PERSONAL CONNECTION

Problem

Unless the interpretation connects personally with the visitor, their experience will be superficial and limited in meaning.

Design strategies

- Make a connection with other's lived experience, both human and non human, this makes visits most memorable and meaningful.
- Human stories – Personalise the communication through developing a character or voice for human stories. Use the lived experience of the narrator to communicate by using the first person voice in text and audio. Visually use the first person through using models, film, images dramatisation and role play of characters that perform the function of a narrator.
- Develop visual concepts to allow the visitor to feel a sense of identification with the communication. Strategies such as; analogy, comparison, visual metaphor, personification, anthropomorphising can be useful.
- Objects – Use familiar objects from which to extend the narrative. Go from the specific to general, use strategies that anthropomorphise non human objects. Use strategies of metaphor, scale and size exaggeration.
- Nature/place – Design opportunities for people to make connection with a place which could be through an interpretive walk, allowing for *multi-sensory* engagement or simply through *quiet contemplation* of a place.
- Acknowledge the visitor's experience, feelings and social interactions as part of the experience, ensuring that the 'voice' of the communication is friendly, inclusive and non-patronising.
- Allow for multiple voices and different perspectives to be represented, not just a single authoritarian or curatorial voice.
- Allow for people to feel part of the narrative and that they are contributing to the living narrative of a culture via the experience of interpretation through *Interactivity*.

PATTERN 3: PERSONAL CONNECTION

Therefore

Each visitor brings to the interpretive setting, their own lived experience, education and interests. Interpretation can enable people to make sense of their own lives, which can be extended by making connections with other stories and places. People make strong connections with objects, information and settings if they have a sense of personal connection with what they are viewing and experiencing.

My experience tells me that the most difficult challenge you face will be in revealing to *visitors* why the place they've visited is even important to them – why it should even *matter to them* (Ham 2002, 12).

A strong personal connection between the setting and the visitor enhances levels of comfort, education and memorability of the experience. Visitors endeavour to make sense of information and interpretation and incorporate it into their own meaning-making framework, which according to interpreter Sam Ham, is central to powerful interpretation experiences. He writes:

In this way, a visitor's very presence at a natural or cultural site makes him or her part of the story, part of their *own* heritage...a connection that simply cannot fail to produce deep and enduring meanings about the place. And when these numinous meanings occur in our minds, we'll indeed come to care about the things and the special places that preserve and perpetuate our story, just as the subject-matter experts already care about them. Interpretation is *meaning making* (Ham 2002, 18).

Designing experiences that make a personal connection with visitors and encourage meaning-making, enhances and contributes to the cultural and natural heritage of a site, by encouraging a deeper sense of caring about places and their stories.

EXAMPLE: PORT ARTHUR HISTORIC SITE VISITOR CENTRE



Port Arthur Playing Cards.

Port Arthur Historic Site Visitor Centre, Tasmania.

The interpretation centre is the gateway to the Port Arthur Historic Site, where visitors pay their admission fee, receive printed information and then pass through interpretation installations and displays before entering the site. Upon entry, the visitor is given a playing card with their admission ticket, which contains the name of one of 66 convict characters who were incarcerated at Port Arthur. Through this orientation process, the visitor identifies with, and follows the story of, 'their' convict in the visitor centre, where life size photographic models represent each character in telling their story of transportation to and experience at Port Arthur.

Reference

Ham, S. 2002 'Meaning Making–The Premise and Promise of Interpretation', Keynote address, National Conference on Interpretation, Scotland, Royal Botanic Gardens, Edinburgh, April 4, 2002.

PATTERN 4: CHALLENGE AND CURIOSITY

Problem

Visitors can be bored, feel preached at, and have little incentive to be exposed to the messages and information in interpretive settings.

Design strategies

- Allowing for different learning styles, information that isn't presented in a straightforward or literal way may engage otherwise disinterested audiences.
- Designing information as separate clues or parts of a whole that accumulate to reveal a complete story.
- Working collaboratively with artists can create artefacts that rely less on literal perspectives and instead arouse curiosity, stimulate interest and provoke questions.
- Keep some objects or images hidden or concealed, which are later revealed to shock, confront or challenge perspectives

See also *Pattern 3. Personal connection*, and *interactivity*.

Therefore

Experiences which challenge visitors i.e. those that provoke, arouse curiosity, confront, disconcert, intrigue or surprise are valuable and motivate the visitor to work harder to understand and learn from a situation. Museums and visitor centres may use information quite provocatively especially to put forward contested views or conflicting positions on interpretation of scientific or cultural information.

By engaging artists to create art works; less literal, more poetic and multiple perspectives can be offered to the viewer for interpretation. One designer notes the benefits of working with artists:

Most obviously the role of an artist can lead to a different level of interpretation where another stimulus of thought can operate. Evoking a visitor into another way of 'reading' in conjunction with the more conventional approach of the written word can add an exciting dimension to a project (Ref 03/3B).

Where the traditional notion of educational institutions is that they instruct, museum and interpretive settings use strategies of provocation (Tilden 1977) to challenge and allow reflection.

EXAMPLE: BUNJILIKA, MELBOURNE MUSEUM



Baldwin Spencer in Two Laws exhibition, Bunjilaka, Melbourne Museum.

Source: Bunjilaka, Museum Victoria Two Laws Exhibition – Bunjilaka, Melbourne Museum.

In the indigenous gallery Bunjilaka in the Melbourne Museum, a film entitled *Two Laws* shows a dramatised fictitious conversation between Anthropologist Baldwin Spencer, Director of the Melbourne Museum from 1899 – 1928 and Central Australian aboriginal elder, Irrapmwe. The conversation presents the views of both men in the context of their own legal, educational and cultural systems and provokes questions about colonial acquisition of indigenous artefacts and the ethics of display in museums. The fictitious script draws strongly on the value of hindsight, so that these issues are discussed from a post-colonial perspective, allowing the viewer to apply their conversation to contemporary discussions about law and land. The scripting and dramatisation of the characters captured in film allows the viewer to understand and identify with the debate from both positions, whilst viewing this conversation surrounded by the ‘museumification’ of indigenous artefacts and culture, makes a powerful and intentionally provocative experience.

Reference

Tilden, F. (1977) *Interpreting Our Heritage* (3rd ed.). Chapel Hill: University of North Carolina Press.

PATTERN 5: PARTICIPATION AND INTERACTION

Problem

Visitors can feel distanced from and disconnected from interpretation.

Design strategies

- Incorporate interactivity through the use of interactive computer devices, touch screens and multi-media displays, encourage visitors to manipulate and touch objects and participate actively in displays and exhibits.
- Participating in talks, walks, improvised performances, writing, messages, making images and contributing memories; all engage people more deeply with the issues and topics of interpretation than those afforded by a purely visual engagement.
- Interaction is a strategy that can be used in non-personal interpretation in the absence of guides or interpreters.

Therefore

Interactivity and participation can be physical by touching or manipulating an object, or verbal by joining in a discussion, responding to or asking questions or participating in a guided walk. Designing opportunities for interaction and participation, engages visitors more purposefully with interpretation and is crucial in creating a memorable, holistic experience. Interactivity – being able to interact with something, is a quality that affords a visitor greater control and a more satisfying engagement with interpretation. Computers, via on-screen interactivity, allow visitors to select information arranged in multiple levels of complexity. While computers give visitors access to large amounts of information, an interactive interface allows the visitor to control the amount, flow and depth of information investigated. Computers allow a more expanded experience of interactivity permitting a non-linear unfolding of a narrative or information, via web like structures rather than predictable linear pathways. Interactivity also provides opportunities for visitors to respond in an open ended, unpredictable and in a sense more democratic way. Jennifer Garton-Smith writes:

Interactive interpretation must necessarily be at least two-way if not ultimately multiple. It is not interactive in a communication sense if the visitor is directed to arrive at the same meaning as the curator (Garton-Smith 1999, 140).

Interactivity therefore, provides opportunities for the audiences to participate actively in the construction of meaning, as well as make a personal and physical connection with the exhibit. Interactivity is also related to *Control* as it allows visitors to control the flow and sequence of the experience.

EXAMPLE: FOLKLORE OF CHILDREN, MELBOURNE MUSEUM



*Slingshot, early 1980s card files of children's rhymes, jokes and games,
Source: Australian Children's Folklore Collection, Museum Victoria.*

The Melbourne Museum's exhibit, *The Folklore of Children*, allows visitors to become part of the narrative of cultural heritage. A section of the exhibit is about school playgrounds, giving people an opportunity to record their own recollection of playground games, songs, taunts and memories. Visitors sit down in a shelter shed environment, a setting strongly evocative of childhood lunchtimes, and write their memories on field cards to be shared with other visitors and can in turn relive their own memories through the writing of others. Contributions become part of a collection that holds over 10,000 written cards, collected as far back as the 1870s to the current day. These cards record riddles, rhymes, skipping games, taunts, insults, war cries and games.

Reference

Garton-Smith, Jennifer (1999) *Learning from Popular Culture: interpretation, visitors and critique*. International Journal of Heritage Studies, Volume 5, Number 3/4 Winter page 135–148.

PATTERN 6: VARIETY/MULTI-SENSORY

Problem

Tourism activities often give priority to the sense of sight, overlooking the other senses as powerful ways to interact with and communicate about place.

Design strategies

- Design experiences that engage visitor's full sensory range to incorporate smell, taste, sound, touch as well as sight.
- Allow for segments of the interpretation to engage different senses rather than be dominated by one sense (usually the visual sense).
- Encourage learning about a place, through its natural attributes (flora, geology biology) by having access to the real objects in situ or by being able to touch objects in exhibits.
- Presenting a variety of visual and tactile textures, surfaces, aural environments, lighting and visual material will hold interest more readily than systems of display that cause the visitor to be separated from the sensory nature of the display.

Therefore

Being able to stimulate a number of senses is crucial to the impact of a visitor experience. Multi-sensory activities are more successful than those where sight dominates. Many different stimuli can co-exist in a single space. It is necessary to engage visitors through a number of different senses enabling them to access a range of ways of understanding place. Less utilised senses such as taste and smell are evocative triggers of memory and have the potential to cause memorable and lasting connections with place and meaning.

EXAMPLE: ABORIGINAL HERITAGE WALK



*Aboriginal Heritage Walk – Spirit, Connection, Land,
Royal Victorian Botanic Gardens, Melbourne.*

At the Royal Botanic Gardens, Melbourne, the guide of the Aboriginal Heritage Walk leads visitors through the gardens using plants growing in the gardens as a starting point to talk about indigenous culture and history. The tour starts with a smoking ceremony, whereby visitors are welcomed to the land by the guide, who burns sweet smelling eucalypt leaves, surrounding visitors with smoke as a welcoming and cleansing gesture. During the walk, people carry hand crafted traditional objects made from fur, wood, feathers and plants. At the conclusion of the walk the visitors are given a cup of lemon myrtle tea brewed from the leaves of a local tree. By using the senses of smell, touch and taste the experience of learning about plants as indigenous food medicine, tools and shelter has a very immediate and tangible dimension. Stimulation of all the senses makes the visitor more receptive to the total interpretation experience rather than through the learning of dry facts alone.

PATTERN 7: FLOW AND QUIET FASCINATION

Problem

When visitors arrive at natural settings they may feel tired, distracted and over-stimulated from multiple and competing visual demands on their attention.

Design strategies

- Use the natural setting to allow for moments of quiet fascination and flow.
- Design areas where the natural surrounding can be viewed from within the building.
- Design quiet spaces and seating to encourage time for contemplation, reflection and restoration and distractions are removed.
- Design some areas where text, image and visual information is simplified, minimised and unobtrusive.
- Orchestrate the pace and flow of the information in order to slow the visitor down rather than overload them.
- Design some areas that rely only on one source of stimulus, which could be an object, an audio track, a text, poetry or a view.
- Use arts approaches, such as poetry, music and writing which capture and express moments of numinous experiences and communicate the impact of natural places on others.
- Provide opportunities where distractions are minimised, and the mind can wander.

Therefore

People have moments of fascination, inspiration and aesthetic experiences that are often more related to emotional states than intellectual states in natural settings. Many natural environments have the capacity to evoke quiet fascination and can fill the mind and enhance restoration (Kaplan et al 1998). Through their work, writers, artists, conservationists and philosophers have expressed this fascination with places of overwhelming natural beauty, and in particular those with a Romantic world-view. A number of aspects including comfort, unhurried pace, and allowing a strong sense of place to permeate the visitor experience can encourage strongly emotional and memorable responses to places.

EXAMPLE: THE TWELVE APOSTLES, PORT CAMPBELL NATIONAL PARK



The Twelve Apostles, Port Campbell National Park, Victoria (left).

The Twelve Apostles Visitor Centre (right).

The Twelve Apostles is a geological feature viewed from the sensitive coastal and scenic Great Ocean Road in Victoria. The natural setting itself is spectacular although somewhat exposed, it is also the site of numerous shipwrecks. The external interpretive signage is designed discretely into the landscape using recycled timber from the Port Campbell pier and a visitor building allows a more sheltered quieter environment, for contemplation. Minimal imagery and emotive poetry are incorporated into sails raised inside the building, from which the coastal landscape can easily be viewed. The space, although located at a highly visited natural attraction, has the feeling of calm and contemplation and is visually uncrowded with large but minimal text and image. David Lancashire, the interpretation designer for the project, describes how his work aims to create a sense of place:

We are always trying to create a sense of place, if you walk into somewhere, into a physical environment, if you can actually feel a bit different then it's a starting point, whether its lighting, whether its colour, whether its shape, whether its fauna...if you can actually try and communicate to people that this is a different space than what they are used to maybe they will start take notice, it's a long bow, but that's where we've been coming from. Its like walking into a church, if you walk into a church, generally the church speaks to you of being a church, its nothing else, it actually gives you that feeling that's its of a place of reverence (Woodward 2007, 17).

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PATTERN NO. 8 READING PLACE

Problem

People perceive and value places differently and personally. Articulating and communicating place visually can be difficult.

Design strategies

- Create mental maps of the place.
- Create a visual inventory of place.
- Create a design/ visual paradigm.

Therefore

Reading the natural environment is culturally driven and people perceive places differently depending on their current and previous associations, memories and different experiences.

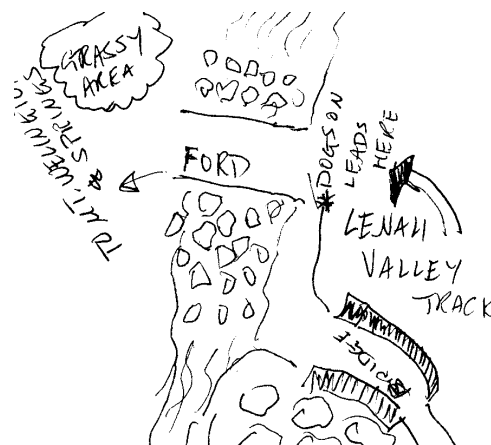
Natural environments are not just a collection of natural features but a landscape – and environment perceived. Landscape is a cultural construct that results from the interaction between the environment and the viewer (Copp 2005).

Similarly ‘place’ is thought of as being ‘space’ imbued with meaning referring more to the symbolic meanings that are invested in a location than its spatial dimensions. Some but not all environments are spectacular. Valuing the local, and vernacular requires noticing and communicating about place. Design strategies to record the place include noticing-activities such as mental mapping, visual inventory and visual paradigm.

EXAMPLE: LENA VALLEY TRACK, HOBART TASMANIA



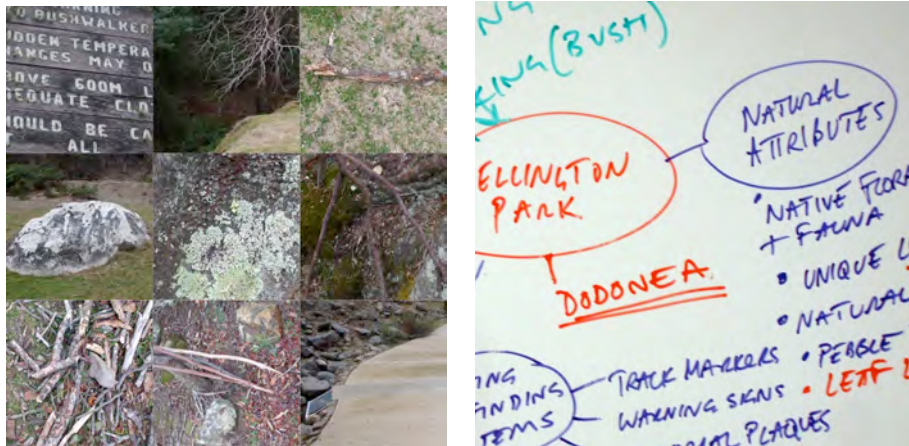
Lenah Valley Track, Hobart Tasmania (left).



Mental map (right).

Mental maps

Mental mapping is a technique used by cultural geographers and psychologists to record people’s subjective perceptions of place, attractions, negative feelings, associations and emotional reactions. The process asks residents, visitors, workers and project collaborators to map places that are special to them through the process of recording. Mental maps record preferred routes, resting places, lookouts, as well as places to avoid, and in doing so, become an emotional, perceptual recording of a place.



Visual inventory, Lenah Valley track, Hobart, Tasmania (left).

Mental map (right).

Creating an inventory of the visual and sensory elements of place records a non-verbal language of that place. Through the recording of colours, textures, sounds, maps objects, images, photographs, drawings, rubbings, ‘mood’ boards and swatches, become a visible list of visual attributes of place. This becomes a visual record of place to discuss with others.

A visual paradigm for a place can be created by selecting elements collected from the visual inventory and mental mapping processes. This paradigm is invested with personal meanings and symbolic associations with place, but in a visual form. In this way, a visual language or lingua franca for the place can be created that can be shared and visualised with others.

‘A visual paradigm is a set of assumptions, common values of practices which constitute a way of viewing reality for the community that shares them. By using images that relate to a particular paradigm a designer can instill a certain set of values and assumptions in a design that the viewer can readily recognise and accept’ (Ambrose and Harris, 2006 182).

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PATTERN NO. 9 LEXICON FOR PLACE

Problem

People name places and speak about particular places differently, revealing shared and divergent attitudes and assumptions of place.

Design strategies

- Gather language to create word maps. Note the metaphors and descriptions used. Look for shifts and divergent perspectives.
- Collect or create written metaphors for place. Collect already published material about place; from brief, local press, publicity, maps, brochure, travel guides.

Therefore

This pattern aims to establish a lexicon of place, which acknowledges the different ways people view the same location. It aims to draw out a working vocabulary and at the same time, recognise that people regard places differently; that these views are influenced by existing language and metaphors and may shift over time.

EXAMPLE: LENA VALLEY TRACK, HOBART TASMANIA

*fire trail access pinnacle walking track
damp valley source of spring water
access to the mountain local dog walk
icy cold fog tinderbox in summer
prime real estate
blocks still available crown land*

Lenah Valley word map.

Word Maps

Using a word mapping technique a vocabulary or lexicon of place can be created. By paying careful attention to the language used to describe nature and natural places, different assumptions and attitudes can be revealed. Australian ‘lexical cartographer’, Jay Arthur collects language about particular places to create language ‘maps’. Maps not only reveal diverse perspectives on place but can also disclose common perceptions as well. These strategies aims to establish a lexicon of place which makes visible the assumptions and perceptions held about place by different stakeholders, visitors, developers, tourists, indigenous people.

Metaphor

A device that transfers meaning from one thing to another even though there may not be a close relationship between them.

Metaphors are not literal, are extremely valuable in establishing and in communicating commonly held ideas about things (processes, places, sites, projects, people) through language. They can be revealing but can also conceal and so can be useful in declaring hidden aspects of a project. Metaphors can be playful, but are powerful ways of communicating different knowledge sets and professional practices.

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PATTERN NO. 10 VISUAL METAPHORS

Problem

Project team members approach projects with different perspectives, assumptions, terminology meanings and understandings, which can lead to frustrations in the communication process.

Design strategies

- Create visual metaphors for place to communicate about place within a project and for use by team members when working collectively. For example, place as: oasis, gateway, shelter, graveyard, incubator, lookout, highway, tip, dead end. Create a visual image for the project, site, place.
- Create visual metaphors for the project process to establish commonly held ideas, about processes and projects and activities. For example; research as excavating, design as problem solving, interpretation as a funnel, project as a journey/epic/marathon/ephemeral.



Laser cut metal sign Gariwerd/Grampians National Park.

Therefore

Visual Metaphor

A visual metaphor conveys an impression that is relatively unfamiliar by drawing a comparison with something familiar (Ambrose and Harris 2006, 162).

Visual metaphors are used frequently in the visual language of designers as a communication strategy. Metaphors are also used powerfully in communicating about place structures and objects in interpretation. For example: dragonflies as the lions of pond life; a national park as gateway to the wilderness; wombats as the lawnmowers of the bush; visitor centre as an ark.

Metaphors can be playful and are powerful ways of communicating different knowledge sets. Metaphors can also be used to describe the process of a project or activity. Metaphors are extremely valuable in establishing and communicating commonly held ideas, about processes and projects and activities. Metaphors can be revealing but can also conceal and so are useful to declare hidden aspects of a project.

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13.5 Summary – Interpretation pattern language

The interpretation design pattern language introduced here aims to facilitate the sharing of concepts, research and approaches from the fields of interpretation and design. Acknowledging that both these fields are inherently multi-disciplinary, the research draws on conclusions and findings from a range of disciplines to construct a ‘pattern language’ as a tool to share knowledge between design and interpretation. Articulating shared concepts from the fields of interpretation and design as a common pattern language, aims to strengthen the professional practice nexus between the fields of design and interpretation. The patterns and strategies here are not new or ground breaking. However, what is new is the synthesis of design and interpretation wisdom into a practical useable tool. The patterns described have been directly developed from this research are a starting point, with more patterns to be added over time with use on particular projects. At present, the pattern language remains a conceptual tool, however the next stage of applying the tool to an interpretation project will test its relevance and potential to strengthen collaboration and communication among interpretation project teams.

In the spirit of Alexander’s original pattern language set, these patterns have been written for use by all participants in the design process – for designers, interpreters other team members, collaborators and stakeholders, not necessarily at an ‘expert’ design level, but devised in such a way that makes the language open and accessible. At the risk of simplifying complex concepts there are references included for further investigation.

Richard Griffiths from the University of Brighton has produced a collection of patterns for the design of useable software called the Brighton Usability Pattern Collection. In reviewing the development of the interpretation pattern language it is useful to consider again what Griffiths describes as characteristics of patterns languages (Griffiths 2004) in section 13.2.1. Referring to Griffiths’ characteristics of patterns helps recap on the development of the Interpretation Design Pattern Language. This research aims to develop the field of interpretation and to develop its effectiveness in a highly postmodernised professional context. As interpretation design is already highly collaborative, outward looking and cross-disciplinary, it is important to have frameworks that support and encourage effective communication, the capacity for teams to envision projects together, seek partnerships and share knowledge with other professions. A pattern language structure has proved to be a valuable tool, already adapted for use in many fields. The Interpretation Design Pattern Language is integrative and synthesising bringing together knowledge from a range of disciplines. The interpretation design Pattern language is designer-led, initiated by a desire for better collaboration between designers and other professions. The patterns are grounded in a search for recurring themes in literature and research as well as listening to professional commentary from designers. The pattern language does not provide ready made solutions or answers, but rather, offers insights from an extended range of disciplines that may trigger strategies in interpretation.

The Interpretation Design Pattern Language is at this stage propositional and needs to be used, 'on the job', for it to be refined, adapted and extended by designers and non-designers alike. It is motivated by exploring the territory beyond and between the different professions, less interested in differencing and more interested in what Conklin calls the nuanced middle ground, while still being respectful of other disciplines (Conklin 2007). The pattern language aims to place the culture of expertise in the team and in the professional community.

Chapter 14 – Conclusion

14.1 Introduction

This research has examined one aspect of interpretation — interpretation design, which I have identified as a specialist field of design emerging from the 1980s onwards. As the scale, complexity and number of interpretation projects have increased, the designed elements of interpretation have now become a differentiated and specialised aspect of the entire interpretation project. Consequently contemporary interpretation design represents the collaborative endeavour of designers and interpretation professionals. Design outcomes represent multi-faceted and innovative design projects which practically and conceptually challenge traditional ways of working. This research has examined the historical origins, current professional practice and discourse of interpretation design to make visible a specialised field which is currently lacking a substantial profile in either design or interpretation. What has emerged is a complex picture involving systems of meanings, stakeholders and technologies.

14.2 Thesis summary

The issue motivating this research was the invisibility of interpretation design, the lack of professional dialogue about interpretation design and a deficiency in conceptual and practical knowledge about the field. In the absence of discussion about interpretation design in either the discourse of design or interpretation, the aim of this research was to make the field visible – to bring interpretation design to the surface for examination. The research focused on three broad questions;

- What is interpretation design?
- How can interpretation design shape ideas about natural and cultural heritage?
- What is the role of the designer in the process of interpretation design?

The research was guided by two methodologies, Grounded Theory and Pattern Language. A Grounded Theory approach was used to gather data from a series of ever widening and varying perspectives. This data formed the foundation from which I built the thematic conceptual framework, one of the outcomes of this research. A Pattern Language approach was used to interpret, sort, group and synthesise data into a practical tool – the Interpretation Design Pattern Language, a second research outcome (Chapter 13). With no existing theoretical framework for interpretation design, nor an account of its practice, this research examined its origins, projects, practices and potential development, through three avenues of enquiry; (1) interviewing designers (2) examining sites and artefacts and (3) locating interpretation design in a wider conceptual and professional context through literature reviews. An account of interpretation design was built using a number of perspectives which examined both the process and the designed products of interpretation design.

In recognition that the field of interpretation design is not a simple hybrid of interpretation and design, a wider set of reference points were investigated to build a more complete picture of the field and to structure a conceptual thematic framework for

the field (Chapters 3 – 8). Knowledge at a practical level and from inside the profession was gained by surveying designers about their professional practice and the interpretation design projects on which they worked (Chapter 11). The artefacts of interpretation design, including visitor centres and tourism ephemera, were examined to locate interpretation design with reference to design history and contemporary forms of communication design (Chapters 9 – 10). A cross-disciplinary perspective was gained by examining the relationship of interpretation design with other professional fields including tourism, visitor studies, education and psychology (Chapter 12). The visitor perspective was experienced first hand by visiting and documenting interpretation sites (Chapter 10). These multiple perspectives contributed to building a conceptual thematic framework to bring the field of interpretation design to the surface – as a construct, to analyse the activities of interpretation design at a comprehensive level that goes beyond the project by project status of current dialogue. Finally, the Interpretation Design Pattern Language extended the conceptual framework into a practical tool, as a contribution to the field of interpretation design (Chapter 13).

14.3 Findings

This research has investigated the emerging field of interpretation design, from a number of perspectives. The first group of findings comment on the status of the field of interpretation design in Australia;

- The recognition of and support for interpretation design has not evolved as rapidly as the field itself, as at present there is no academic research and no background theory to support its advancement.
- Projects that designers undertake are large-scale, highly visible, public, multi-faceted, use multiple communication platforms, are located at sites of significant natural and cultural heritage value and symbolically represent often complex and contested issues.
- Interpretation projects, lead the design profession in innovative and collaborative approaches, and represent a significant body of designed artefacts and collective professional knowledge which at present is not adequately represented through documentation or design discourse.

From these findings the first conclusion of the research is that despite the invisibility within the discourse of Australian design, designers working in this specialised form of practice have, since the early 1980s, contributed to projects which shape ideas, attitudes and visual representations of natural and cultural heritage in Australia's most widely visited and valued sites. Discourse and commentary about interpretation design is reported and communicated in an ad hoc way, with limited literature to support the practice and no formal recognition of it is a valid or valued form of design. Consequently there are few opportunities to facilitate communication between interpretation designers and advance their professional development.

The second conclusion reports on the status of the practice of interpretation design. Findings established by examining the practice of interpretation designers found that;

- Interpretation design is highly cross-disciplinary and collaborative, characterised by a differentiated professional practice with dispersed networks of stakeholders.
- At present professional knowledge is based on practitioner's know-how and publications from professional bodies, but there is no formal capture or repository for this knowledge from which to extend and build on.
- Designers recognise the need to refer to other disciplines and professions to widen the knowledge base for interpretation design and are willing to deepen their engagement with the complex issues that interpretation design projects present.

These findings suggest the degree to which designers are involved in interpretation projects vary and there is a range of levels of engagement. On one level, designers are still involved with production of finished artwork and delivery of communication design solutions. However, an increase in the scale and complexity of projects require a deeper level of engagement with ideas, content and issues of interpretation briefs, demanding that designers be more intrinsically involved with the research, process and consultation, and are, as a consequence, not only defining the practice, but are contributing new knowledge in the form of designed artefacts. Where designed artefacts of tourism have primarily been ephemeral and disposable, the scale, longevity and significance of interpretation projects, has highlighted the work of designers to be recognised as projects of lasting significance, both in tangible and symbolic form. Now a feature of Australia's cultural landscape, interpretation projects are highly visible and visited. With interpretation design projects located in some of the most controversial, contested and ecologically fragile land in post European contact history, designers are instrumental in shaping public attitudes and debate about land use. Designer's practice therefore, has contributed to the ongoing process of shaping Australia's cultural narrative, while at the same time being influenced by the legacy of culture, politics and history.

A third conclusion drawn from findings identified areas that could facilitate better interpretation design practice. Findings that support this conclusion include;

- Collaboration with stakeholders and other professionals from the outset of projects is integral to the design process and the success of the project's design outcomes.
- While good practice in interpretation design is ill-defined, research available from other fields (visitor studies, education and psychology) gives guidance on successful visitor learning, experience and engagement at interpretation sites.
- Constructs and concepts from fields such as tourism, geography, environmental and cultural studies add a valuable dimension to interpretation design which is not considered by the traditional domain of design knowledge.
- Constructs from other fields extend and enhance the visual lexicon available to designers to continue to contribute to ideas of natural and cultural heritage.

While interpretation design is located within a larger framework of the professional practice of interpretation, there exist many opportunities to enrich and better inform designers by integrating wider pools of knowledge that intersect the activities of interpretation, these including education, tourism, visitor studies and psychology. These findings led to the development of the two outcomes and contributions of this research.

14.4 Research outcomes

Where previously designed aspects of interpretation design has been handled by interpreters (Ballantyne 1999), this has changed since the 1980s, where design is now a specialised field. The research outcomes provide support for bringing design and interpretation closer together by offering;

- (1) A theoretical and conceptual framework, a set of knowledge, ideas and concepts offered from a broad set of related knowledge.
- (2) A practical conceptual tool for use in interpretation design.

14.4.1 Conceptual framework

The conceptual framework built up throughout the research is for use by interpretation designers, and interpreters. The research established that while interpretation designers acknowledge the need to look outside design, this is not always practical given time constraints and the limits of mastering more than one or two specialised fields. By delineating the context of interpretation design and the domains of knowledge that support interpretation design three professional contexts of interpretation, design, and tourism were considered. Although, the new field of interpretation design fits within some aspect of each of these three fields, it examined a wider set of conceptual knowledge beyond its obvious professional reference points. The conceptual framework drew out a set of conventions, concepts and lexicons that are both available to designers and shaped by designers. First a lexicon of place – a visual language formed from a set of symbolic elements – images, photographs and texts that have been formed through the discourses of tourism, geography and interpretation. Secondly, a lexicon of visual language formed through the visual artefacts of design that contribute to national and natural identity of Australia, built up through tourism ephemera and more recently through site interpretation. These lexicons extend the visual language of communication used by designers.

14.4.2 Interpretation Design Pattern Language

In fields of cross-disciplinary practice such as interpretation design, the experience of collaboration is critical for the success of projects and for designers to continue to work, and adapt new ways of working that harness knowledge and expertise from other fields. Evidence from designers demonstrated that collaboration with the increasing number of specialist professions was necessary and that this process was at times problematic due to divergent perspectives and understandings. The Interpretation Design Pattern Language is a propositional conceptual tool intended to harness a richer resource of experience, knowledge and professional wisdom from other disciplines than either design or interpretation commonly use. It is a practical tool that applies the findings of this research

combined with findings from related fields as a tool that will assist interpretation design as a field, to be agile and adaptive to change, future focused and continue to evolve. The collaboration of two professions each with a powerful tradition of communicating, situated in place, with a strong affective dimension, has the potential for interpretation design to contribute in a significant way to pressing national and global issues. Designers' potential to enrich this discourse depends on devising new ways of working constructively in highly collaborative and cross-disciplinary environments.

14.5 Contributions to knowledge

This research has presented interpretation design as a new field, with a substantial form of practice, significant projects and conceptual knowledge that both builds on and extends its 'predecessor' fields of interpretation and design. Furthermore, this research has addressed the absence of interpretation design studies in design and interpretation discourse and adds a significant new body of knowledge to the field. It has provided evidence that field exists and has proved the importance of the field to the communication of natural and cultural heritage. Besides addressing this knowledge gap, this research provides a foundation for further investigation. Interpretation design is positioned with reference to contemporary design practice and includes definitions of terminology, historical background and recommended conceptual knowledge important to support this field. The final contribution of this research is the Interpretation Design Pattern Language tool.

14.6 Critical reflection on the research limitations

This narrow focus of examining the role of design within interpretation has imposed limitations on the research, which it is important to acknowledge. From the beginning of the project, it was clear that the research methodology had to be designed in a way to allow generalised knowledge to emerge from other fields that could be incorporated into interpretation design and beyond the practice-led tacit knowledge. Therefore the level of new knowledge is broad but applied in a narrowly specific field. The research investigated a number of perspectives of interpretation design, including the opinions and experience and of designers but not the perspective of interpreters, which would add a further dimension to the research. The size of the sample of designers was limited by finding designers who are working in a relatively specialised and highly competitive field of design. At this stage the Interpretation Design Pattern Language is untested, this type of evaluation can only be obtained through testing on teams of collaborators which is an avenue for further research.

Appendix 1 Sample designer's survey

Interpretation Design Survey
Margaret Woodward (mwoodwar@inet.net.au)
Curtin University of Technology

I'm undertaking a PhD in Design at Curtin University of Technology and am seeking information from designers about their experience of working on interpretation design projects. Any responses (both positive and negative) you have to some or all of the following questions would be valuable and will hopefully contribute to a better understanding of collaboration among teams working on interpretation projects. Feel free to write as much or as little as you like. All responses will be treated confidentially and comments will only be reproduced for scholarly publication with permission from the contributors.

1. Could you list interpretation projects (and dates) you have worked on.
2. Given the complexity and scale of interpretation projects, does the role of the designer differ in these projects than on more traditional projects?
3. How have you experienced the process of working with a range of other professionals on interpretation project teams? Feel free to comment on both positive and problematic aspects.
4. What are the most challenging aspects of working on interpretation projects?
5. What would you consider to be the most valuable skill/approach that designers can contribute to interpretation projects?

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