

GIVING AND RECEIVING:

A case study of the Stowaways exhibit in
Blood, Earth, Fire - Whāngai, Whenua, Ahi Kā
at the Museum of New Zealand Te Papa Tongarewa

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CONTENTS

Abstract ii

Acknowledgements..... iii

Introduction..... 1

Chapter 1: Methodology and Design 10

Chapter 2: An Exhibition is born 20

Chapter 3: The Visitor Speaks 35

Conclusion 52

Appendix 1 56

Appendix 2 57

Appendix 3 58

Appendix 4 59

Appendix 5 60

Appendix 6 61

References 62

ABSTRACT

The role that the physical environment of an exhibition plays in the visitor's experience of a museum is a topic that, though increasingly acknowledged in museum studies, has not yet received detailed attention from researchers. The interaction of exhibitor and visitor, in and through exhibitions, can be situated in the wider context of the recent paradigm shift within museum practice, towards communication with the public and developments in museum theory, which consider the qualitative aspects of the visitor experience as an active dialogue, conversation or a process of meaning-making. This dissertation examines the interactive exhibit *Stowaways* in the permanent exhibition, *Blood, Earth, Fire - Whāngai, Whenua, Ahi Kā*, at the Museum of New Zealand Te Papa Tongarewa. It considers the question 'How does the physical environment affect the meanings that the visitor makes in and after visiting the exhibition?'

The study builds on existing New Zealand research, which questioned the gap between exhibition creation and visitor reception. A theoretical framework was constructed from relevant strands of the literature of museum studies, visitor studies and exhibition design. A qualitative approach was employed, in order to examine in detail both the exhibition development process and then how the visitor responded to the exhibition. Several methods were used to conduct the research, such as archival research and interviews with both the museum staff and seven visitors, who came with their families to the exhibit.

The findings provide interesting evidence of the complex and deep affect that the built exhibition space can have on the visitor, not just at the time of the visit but long afterwards. This was an affect that rippled out from the individual to their family group and everyday life. This dissertation makes a small but significant contribution to museum studies in New Zealand, through an integrated examination of the production and reception of a museum exhibit, from the perspective of both the visitor and the museum. One of the main conclusions was to re-iterate the important role of exhibition evaluation in facilitating a more complete communication between museum and visitor, by allowing museum professionals to build on the experience of the development process in a way that can inform future practice.

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This dissertation is dedicated to my children Harvey, Nicole and Sabina, may they also know the joy of life long learning.

INTRODUCTION

Museums have long been places of inspiration, conversation, investigation and celebration – places that feed our natural curiosity about the world. Our most important work lies in more fully articulating the quality and tenor of the dialogues museum exhibitions could be having with visitors (McLean, 2004, p. 10).

This dissertation aims to delve further into the dialogue between the museum and its visitors, by analysing the overlap between the two that is, what *occurs* in an exhibition. Having worked as a museum designer, I have always been interested in how built surroundings affect people. I am not alone in wondering how the physical environment affects the visitor in the museum:

Often these influences are at once the most subconscious and the most powerful, the hardest to verbalise but the easiest to recall. For this reason, the role of the physical context upon learning has been one of the least-studied most neglected aspects of learning (Falk & Dierking, 1995, p. 11).

The physical context of a museum exhibition has been consciously briefed, planned, designed and built with an audience in mind. This dissertation investigates the creation process in more detail: how it was developed and formed and then how the visitor responded to the exhibition. Does the exhibition communicate successfully with the visitor or is there a gap between the exhibition and the viewer? The gap between the developer's intentions and the visitor reception, at several National Museum exhibitions, has been the subject of previous research (Wizevich, 1993). Wizevich took an existing model of the provider/user relationship found in architecture and used it to help with an analysis of what was happening in museum exhibitions. The issue of exhibition communication, discussed in Wizevich's thesis, led me to query how the relationship (between the museum and its visitors) has changed in the 15 years, since she undertook her research. This research takes a case study approach to investigating a small immersive interactive exhibit, *Stowaways*, which is part of a new permanent exhibition at the Museum of New Zealand Te Papa Tongarewa. Firstly, the creation process is studied and secondly there is an analysis of how the exhibit is received and remembered over time, by seven visitors who visited it with their families. In the following literature review, three main subject areas provide the theoretical framework

for the study: museum studies, the built environment (exhibition design) and visitor studies. I begin with a brief analysis of the historical development of museums, which have led recent changes in museum practice.

The changing role and function of the museum

Museums have long played a central role in the culture of their societies. Their position and purpose have evolved over time, in order to reflect the social, economic and political contexts of the contemporary world, which have resulted in a shift from dictatorial to inclusive modes of communication. As recent writing in the field of museum studies shows, the museum was re-invented in the late twentieth century (Anderson, 2004; Corsane, 2005; MacDonald, 2006; Marstine, 2005). It is apparent from this literature that the influence of the museum extends well beyond 'the four walls' and museums are now seen as relevant in society, as never before. Over twenty years ago a new paradigm emerged, which changed the five basic responsibilities of every museum (to collect, to conserve, to study, to interpret and to exhibit) to a much tighter definition: to preserve, to study and to communicate (Weil, 1990). The words 'to communicate', demonstrate the significant change of emphasis, which is critical to this study, since any discussion of the embodiment of an exhibition involves an analysis of the relationship between the museum and the visitor. Perin offered a cultural theory of representation and reception which described the ideal communication as a circle of giving and receiving (Perin, 1992). She suggested that the visitor, as part of an interpretive community, should be at least consulted, if not included, in the creation process at the very earliest of stages, for the more the visitor felt 'heard' in the exchange, the greater the stimuli for 'human synthesis' (Perin, 1992). This approach, she maintained, would encourage and enable the professional communities (museum staff) to be more appreciative of visitor diversity and to plan for it.

Other recent transformations in museum practice were initiated by radical changes in government allocation of funds, because of shifting responsibilities. These resulted in museums being forced to be more accountable, both financially and socially. Museums started to employ marketing techniques and they promoted themselves in the leisure marketplace, as tourist destinations (Hooper-Greenhill, 1994; Kirshenblatt-Gimblett, 1998). This repositioning of museums within the tourism sector, which prompted a

great deal of research within museums relating to visitation, will be discussed below in the section on visitor studies. More recently, Black argued that the pressure to change, from inward focus on collections to an outward focus on visitor experience, came from three directions: from above (funding bodies and governance), internally (within the profession) and externally (from a more enquiring public) (Black, 2005). Wizevich's findings, together with current research, provide evidence that these changes have indeed taken place here in New Zealand. Another important development of the pressure to be more financially accountable led museums to adopt business models for their management structures and team approaches to their exhibition development (MacDonald, 2002; Miles, 1994). In the last two decades, New Zealand museums have moved from a curator-driven approach (Wizevich, 1993) to a team approach. The team approach to the creation of exhibitions is discussed in the next section concerning exhibitions and it can also be found in detail in Chapter 2.

In recent writing about museums there is also evidence of two important strands: exhibition creation *and* visitor reception (Lang, Reeve, & Woolard, 2006; MacDonald, 2006; Serrell, 2006). This study attempts to build on this nexus, by considering exhibition development, design and visitor responses within the same framework. Firstly I discuss the literature dealing with the creation of museum exhibitions and their significance as built environments.

The creation of museum exhibitions

Running parallel to the recent history of the museum, previously discussed, is the history of different approaches to displays within museums, from their origins as 'curiosity cabinets' through to world fairs and onto story-telling and 'blockbusters' (Hall, 1987). The exhibition has always been the public face of the museum but paradoxically the creation of the exhibition has rarely been documented. It was a process that went on 'behind closed doors'. Wizevich noted a gap in our understanding, regarding the exhibition creation process and she commented that it was an area warranting further investigation (Wizevich, 1993). Since then, however, there have been a number of studies that explained the process of exhibition creation and thus they amplified the roles played by the various team members and examined in detail the significant changes in museum practice, which have occurred over the past 20 years. These commentators all argued that museum exhibitions were 'cultural

creations', formed through composite practices and knowledge systems and they involved a large team of people (Belcher, 1991; Black, 2005; Edson & Dean, 1996; Lord & Lord, 2002; MacLeod, 2005; Mayrand, 2002; McLean, 2004; Valarde, 2001). The exhibition as cultural creation was discussed by MacLeod, who explained that museum scholars and professionals were starting to recognise 'the constitutive character and transformative possibilities of museum space' (MacLeod, 2005, p. 1). By analysing the complex creation process, she gave an insight into the spirit, nature and opportunities for museum space. Fleming reminded us that the museum was an important presence in people's psyche and therefore 'the concept of the psychological space of a museum needs to be understood by the modern museum' (Fleming, 2005, p. 55). Evidence of the transformative capability of an exhibition showed how the exhibition space had particular characteristics that allowed it to contain theories of knowledge and identity (Psarra, 2005). I see these studies as further evidence in support of my inquiry into the nature of exhibition space and Chapter 3 of this dissertation further explores this notion that the exhibition has the power to affect the visitor in this way.

The concept of the exhibition, as a cultural creation, was also analysed in two recent 'ethnographies', where the longitudinal evaluation suggested the surprisingly strong affect that a visit can have on the visitor (Knutson, 2002; MacDonald, 2002). Macdonald emphasised that 'the exhibition' could be thought of as an ongoing process, not an end product (MacDonald, 2002). This point was echoed by Knutson, who conducted a year long study of the design and installation of an international touring art and science exhibition (Knutson, 2002). She reported that creating an affective experience was a very important component in the design brief and one that was referred to throughout the process, by both curator and designer. She commented that, in terms of museum research, 'the notion of the psychological influence, or the affect, of a physical space remains an unexplored issue', and added that 'the effects of exhibition design on visitor experience are deeply felt but remain somewhat elusive to capture' (Knutson, 2002, p. 31). I see this gap in research as further substantiation for the need for the long-term qualitative research on the affect that the visit has on the visitor, which is the topic of this dissertation.

Exhibitions as built environments

Environmental psychologists have studied the behaviour of people in many architectural spaces, such as shopping malls (Underhill, 1999). However, until recently, what was missing from museum studies was an analysis of the exhibition as a built environment, similar to any other interior space. One study of the visitor and their relationship with the built environment in the museum, from an architectural perspective, concluded that much remains to be discovered and that further research may prove very useful for museum planners (Thompson, 1990). The idea of treating the exhibition as an architectural space was central to Wizevich's study, mentioned earlier. Wizevich presented a New Zealand perspective on the communication between visitor and the museum, or rather the lack of it (Wizevich, 1993). She found that differences, between design intentions and visitor response, were culturally determined by the intrinsic difference between the two groups and that the evaluation techniques could also be implicated in exhibition failure, because traditional evaluation, which consisted of formal interviews to assess the learning that had taken place, was 'one-way' and it did not allow for visitor feedback. As suggested previously, there has been a significant paradigm shift, from an exclusive mode of communication, where the museum establishment dictated to the visitor, to inclusive communication, where the visitors' perspective is acknowledged through various evaluation procedures (Screven, 1990). Current research examines the consequences of these changes on the links between the exhibition design and visitor research relating to museum practise today (Kelly, 2005). Wizevich proposed that exhibitions be treated as architectural settings, where the gestalt nature of the visit could be assessed, using the language of 'space'. Since the subject of exhibition design as a discipline is outside the scope of this study, I do not conduct an in-depth analysis of the grammar of exhibitions. However, it is important to point out that a great deal of literature emphasised the importance of a 'language' to describe space, because this insight could assist in the development of the museum exhibition (Hall, 1987; Hillier & Tzortzi, 2006; MacDonald, 2006).

Visitor Studies

As previously discussed, the visitor plays a central role in the museum exhibition, because their presence in and movement through the space makes the exhibition come alive. The focus of this section is on museum visitor studies, which is a rapidly expanding sub-discipline within the field of museum studies and it encompasses many

varied and diverse areas: theories of learning, meaning-making, life long learning and how prior knowledge affects the visitors experience (Falk & Dierking, 1992; Falk & Dierking, 2000; Leinhardt & Knutson, 2004; L. H. Silverman, 1995). Life long learning and the significance of meaning-making are the two key areas that are of particular interest for my study, because of the influence over time of an environment on individuals and groups within exhibitions.

Hooper-Greenhill provided an extensive recent survey of visitor research (Hooper-Greenhill, 2006). The wide scope of visitor studies was examined, with particular reference to three interwoven threads: the museums view of its visitor, the purpose of exhibition evaluation and the changing paradigms of educational psychology. She made the point that, in the early 1990s, this 'research failed to make a distinction between the competent production of effective communicative media and the use made of this media [by the public]' (Hooper-Greenhill, 2006, p. 367). This point was supported by Wizevich's work, conducted at about the same time and one of the objectives of this study is to assess the current thinking on evaluation, as it has developed since the early 1990s. According to Hooper-Greenhill, museums began to realise that the public have their own agendas for visiting, such as entertainment or other social factors and that the attainment of 'facts', as prescribed by the museum, might not be their priority. This is a key point supported by Wizevich's research and it was a reason for the 'perceived failure' of the visitor to connect with the exhibition that she was investigating (Wizevich, 1993). Hooper-Greenhill concluded that museum visitor studies was a fascinating and challenging field, encompassing 'desires, perspectives, and experience from both academic and professional environments' (Hooper-Greenhill, 2006, p. 374). It is this integrated aspect of the field that I find fascinating: the combination of academic theory and the practical experience of museum professionals and I hope that, by taking account of museum practices, this research will make a contribution to museum visitor studies in New Zealand, both in universities and museums.

Early visitor evaluation in the museum examined the success of the museum in educating the visitor. As it became apparent that the museum could offer not only an occasion to learn what was prescribed but also the opportunity for free-choice learning, (demonstrated by educationalists as being intrinsically more satisfying) evaluation

studies then moved on to another phase. The built environment and its importance, in relation to learning in the museum, were explored in later studies. Although considerable research has been done in the fields of psychology, environmental design, architecture and visitor studies, in order to increase an understanding of the many factors at macro and micro level, 'we [still] need to more deeply examine the complex relationships between all of these factors, and how the built environment as a whole impacts visitor behaviour and learning' (Falk, 2004, p. 4). As McLean, a former exhibition designer argued in the quote which opened this introduction, the 'negotiation' aspect of the dialogue was central to the museum's responsibility to communicate to its visitors and this was the very area where more research was needed - at the intersection between the exhibition and the visitor experience.

In the last 10 years, there has been a change in the understanding of communication transfer, from passive reception to negotiation, where the 'meaning' is made by the beholder (L. H. Silverman, 1995). This shift in emphasis, from behaviourist to constructivist approaches, was influenced by what took place in educational theory, namely the way meanings were constructed by visitors (Greene, 1996; K. Henderson, 1990; Weil, 1998). The 'learning' environment, which museum professionals were calling for, demanded more systematic methods of exhibition criticism, as a way to move beyond personal opinion, or audience numbers, to look more closely at the workings of the exhibition as an experience (Serrell, 2006). Leinhardt and Knutson studied the learning experience that took place in a museum, by analysing three clusters of factors: identity, environment and conversation. They further pointed out that the 'analysis of the exhibition as a conceptual whole and the psychology of environments had not yet made their way into more empirical discussions of visitor activity' (Leinhardt & Knutson, 2004, p. 126). This study responds to this call for more investigation into the special qualities that make an exhibition so unique. I explained earlier that this study is not going to be an investigation of the exhibition in an architectural sense. However, I believe that my background as a designer has given me an awareness of a design 'language', thereby making it possible for me to analyse the exhibition in a more quantifiable way.

Another gap in the literature, concerning spacial behaviour, can be seen in work which offered a New Zealand perspective on the museum exhibition, as a leisure destination.

Armstrong argued for 'more consistent exploration of the visitor agenda in terms of expectation, perceptions, attitudes, satisfaction and learning' (Armstrong, 2002, p. iii). He proposed that there should be more investigation of the visitor/museum relationship, in order to increase museum professionals understanding. This recent research was relevant to my work, since it was conducted at Te Papa. I build on this research, by combining an investigation of the creation of that space, through interviews with staff and archival research, with observations of the visitors' spacial behaviour and an analysis of the visitors' perceptions of the space, obtained through interviews.

Summary

By integrating theory from various fields and adopting appropriate research methods (discussed in the next chapter), this dissertation seeks to provide a fuller understanding of how exhibition evaluation might be more usefully employed for visitor, museum and society. How is the physical environment of the exhibition, which is a space culturally constructed by a team of professionals, received by the public? What meanings do the visitors make from their visit? The aim of this research is to investigate the creation and reception of an exhibition, by analysing the provider's intentions and the visitor's response. In order to implement this goal I stated several objectives. Firstly, I would investigate the process of the exhibitions creation, in order to understand more about the responsibilities of the team members involved and their individual views on the role of an exhibition and to see if these views influenced the process/product. Next, I would explore the meaning the visitor has developed as a result of the visit and I would study what part the physical environment of the exhibit played in the formation of those recollections. Lastly, I would survey the nature of the relationship between the visitor and the physical environment of the exhibition. Drawn from these related thoughts and lines of enquiry, my final research question asks: 'How does the physical environment affect the meanings that the visitor makes in and after visiting the exhibition?'

Employing a theoretical framework, drawn from this survey of the literature, this research will be conducted through collecting more information on the meanings visitors make from their visit. Wizevich's thesis was a useful starting point from which to further explore the relationship between these two groups, who seek to work in

partnership – exhibitors and visitors – within the museum experience. Employing the two strands in this investigation – design and evaluation – has allowed me to apply current thinking from those fields to an investigation of the communication circle that is an exhibition. This study uses both these approaches: the investigation of the cultural creation of the ‘architectural setting’, in addition to the longitudinal evaluation, discussed in the methodology section of Chapter 1. Chapter 2 explores the creation of the exhibition space and the process of exhibition development. In Chapter 3, I report on the findings from the research relating to museum visitors and I consider the influence that a museum visit (in particular an exhibition space) can have, not only on the visitor but also on their friends and family.

CHAPTER 1: METHODOLOGY AND DESIGN

This dissertation examines the gap between intent and response, which has been identified in the literature surveyed in the introduction. My research builds on this framework and focuses on the interaction of visitor and space, by asking ‘How does the physical environment affect the meanings that the visitor makes in and after visiting the exhibition?’ To answer this question, I looked at the topic from two points of view: the museum’s perspective and the visitor’s perspective. Since the museum exhibition is a cultural construction and part of a dialogue, which the museum is intending to have with the public, I considered it necessary to have an understanding about the creation of that space and the intentions of the developers of the museum exhibition. In addition, I wanted to know how the physical environment affected the visitor and to find out if that had an impact on what the visitor took from the exhibition. I then needed to investigate if what the visitor had remembered also had an impact on their lives and by extension that of their family and friends. It was the subjective reactions of the visitor that I attempted to uncover: their feelings, opinions, likes, dislikes and emotions. Through a qualitative approach, the data on the creation of the exhibition was gathered from archival research and interviews with the people responsible for that creation. Data from the visitors was gathered through observations, questionnaires and interviews.

Using this data, it was possible to make comparisons between the documented objectives for the creation of the space and the personal views of the creators and what the visitors commented on about their visit. This nexus is significant, because there may still be a gap between what the provider intends the visitor to experience and the reality of that experience, as suggested by the literature review. Any information relating to this conjunction of intention and reaction will be useful for the development of further exhibitions and the museum community at large, in order to assist them to fulfil their mission to communicate with their public (Falk & Sheppard, 2006; Weil, 1990). Whilst this is a very small-scale study, the findings will indicate the value of further, larger scale research in the area. This chapter begins with a detailed survey of the background rationale and justification for the choice of the research methodology,

which demonstrates that it is an appropriate tool for my inquiry. I then explain my choice of *Stowaways* as the case study. Lastly the research process is discussed including details of the procedures for the research.

Rationale for research design and methodology

The two leading paradigms that provide the basis for a philosophy of social science are positivism and interpretivism. Positivism can be outlined as the seeking of facts or the causes of social occurrences, with the assertion that the truth can be obtained objectively and that it is singular and external to the individual (K. A. Henderson, 2006). Since each visitor is unique, it is not possible to assume that they will all gain the same 'truth' from an exhibition. Conversely, the interpretive paradigm approaches research from the perspective that human behaviour is not as easily measured as phenomena in the natural sciences. Human motivation is shaped by factors that are not always observable, for example, inner thought processes. The interpretive paradigm enables the viewing of human behaviour as a product of how people define their world. The assumptions of this paradigm are that: meanings are important; social behaviour can best be understood in its natural environment; reality is the meaning attributed to experiences; and social reality is not the same for all people (K. A. Henderson, 2006). Having given a great deal of thought to my own views and my area of research, I find I am more comfortable with this worldview. I believe people and their actions cannot be studied independently of the meanings they make and use in their lives. The interpretive paradigm allows us to look at ourselves and to contemplate how our ideas reflect the social reality of the world. In addition, it helps us to see perceptions of reality through others' eyes. Understanding those multiple points of view is the objective of this interpretive research and taking account of my own perspective, acknowledging it and even using its qualities to assist in the understanding of the data, will be fundamental to this work. As explained in the introduction, my perspective is that of someone who has worked as a museum designer before embarking on this research and therefore while it is difficult to see how this bias can be avoided completely, an awareness of it will guard against seeking support for preconceived ideas.

The research methods that most closely align with an interpretive worldview are those of a qualitative nature (D. Silverman, 2005). These include case study, action research,

ethnography (participant observation), participative enquiry, feminist perspectives and grounded theory. The advantages of all these approaches being the relatively small sample sizes and the fact that the data is 'rich' in personal comment and it enables exploration, below the presented surface of an issue. In a case study approach, the researcher identifies 'an instance' and observes, questions and studies it, looking for the unique features (Gillham, 2000; Yin, 2003). I chose to adopt a case study approach since the investigation of one particular situation and the reception of part of an exhibition, in the short time that the visitor was there, was my intent. The case study is concerned principally with the interaction of factors and events and one of its great strengths is that it allows the researcher to concentrate on a situation and identify the various interactive processes at work (Bell, 1993). One of the flaws, in this method, is the fact that the researcher only selects one small area for study and also what is to be presented in the final report. I argue that the outcomes from this study will provide enough evidence to point to the value of larger scale studies in this area, in the future. As Bell stated 'A successful study will provide the reader with a three-dimensional picture and will illustrate relationships, micro political issues and patterns of influence in a particular context'(Bell, 1993) . A three dimensional picture of the visit, over time, is precisely what is sought in this dissertation.

One of the features of a case study approach is the triangulation of data, which is the application and combination of several research methods, in a study of the same phenomenon (or instance). This has the effect of founding the credibility of the qualitative analyses, by overcoming the weakness or intrinsic biases or problems that arise from single method studies. There are many different qualitative methods available to the researcher. I chose to use archival research, interviews and observations. I will now discuss the methods, which I decided to use and also offer the reasons why I rejected others. The archival research was conducted, in order to gain background information on the project, from the written record of surviving documents. Documentary evidence from Te Papa, in relation to the creation of the exhibition, was examined and this included concept and developed design documents, procedural and communication documents and minutes of meeting.

The interview has been used for a long time as research tool, for example, the anthropologist and the social scientist use it to study the human condition. With the

introduction of the qualitative research interview, where the focus is on an interchange of views between two people, conversing about themes of mutual interest, we see a shift that brings the social sciences closer to the humanities (Kvale, 1996). The qualitative research interview is a professional conversation, which is increasingly being used as a research method in its own right, with its own methodology and specific rules and techniques. The interpretation of the meaning, developed from these conversations, brings alternative concepts of reality and truth to social science research. Interviews are an important means to acquire first hand information, either one-on-one or in a focus group. There is quite an overlap with the use of interviews: the single interview can linger and be more detailed, whereas the focus group offers insights into the group dynamics, whether this is a family or a common interest group. Whilst a focus group may have been an interesting approach to take, using both a group of professionals and a family group, I decided not to pursue this type of interview for this research, since it would have been too complex and it would not have allowed for 'off the record' comments to be discussed. Therefore, I chose to interview the people individually. The categories of visitors, identified in the exhibition brief, were cross-generational groups but, due to the practical and ethical issues surrounding the interviewing of children, I chose to only interview adults.

The third research technique used, namely observation, has the advantage of revealing behaviour and characteristics that would have been difficult or impossible to discover by other means (Bell, 1993; Diamond, 1999; Griffin, Kelly, Hatherly, & Savage, 2005; McManus, 1987, 1988; Serrell, 1996, 1997, 1998). It is well understood that interviews are important, since they reveal the perceptions of the person involved. Direct observation offers another perspective because it reveals what they actually did or how they behaved. In this instance, it refers to the close study of the visitor as they moved around and through the exhibition. It allows a great deal of scope for acquiring information: who visits the exhibition; how long they stay; what they look at; what they interact with; what catches their eye (and what does not); and their route around the exhibition. This technique was the one I used when I undertook research on behalf of Te Papa for the *Summative Evaluation* (Allan, 2006). A detailed plan of the inside of the container was drawn up with twelve boxes around the outside for each of the components with tick boxes for 'saw', 'read' and 'opened or interacted with' and space for verbatim comments. The visitors were followed at a discreet distance and their

movements were traced onto the plan along with notes on the time spent, gender and approximate ages of the visitors. Closer investigation of the data yielded a wealth of information on the behaviour of the visitors towards the exhibition. I was able to access that data and since I was to interview the same visitors, at a later date, it became the first stage in this research. One of the disadvantages of observation as a research tool in a confined space, such as the one used, is the danger of the presence of the observer influencing the visitor and so the researcher must remain as unobtrusive as possible. In addition to observing the visitors, I was a participant observer at the *Stowaways* progress meetings held at Te Papa and I was able to share the same experiences as the team members and in this way I gained a better understanding of why they acted in the way they did (Bell, 1993; Knutson, 2002; MacDonald, 2002).

Since this participant observation of the process was of an ethnographic nature, I will briefly discuss the part that I, as the researcher, played in this research. When undertaking social science research, certain sociological theories are assumed and it is pertinent to reflect on how these may be manifest, in both the personal qualities of the qualitative researcher and their approach to the research situations. Firstly, as the researcher, I needed the virtues of subjectivity, empathy, honesty, detachment and perceptiveness, in order to be self-reflecting and accepting of any ambiguity or contradictions. In addition, the ability to think and function holistically were significant, as was the capacity to be open to people, ideas and new situations (Patton, 2002). It is important to remember that the nature of this type of research is often narrative in form, offering the possibility for close detailed attention and the opportunity to follow a diversion that may lead to insightful facts. Each person's story or account was unique and this method allowed me the opportunity for exploratory questions, such as what and why they thought what they did. Having established the type of approach that my research required, I will now proceed to explain my choice of the interactive exhibit, *Stowaways*, within the exhibition *Blood, Earth, Fire - Whāngai, Whenua, Ahi Kā* at Te Papa, for my case study.

The decision to use *Stowaways*

I have been interested in the subject of the built environment of the museum exhibition and its importance to the visitor experience in the museum, for a long time. Through contact with Visitor and Market Research at Te Papa, as part of the Museum and

Heritage Studies course, I became aware of the possibility of undertaking research into the visitors' reactions to a section of a new permanent exhibition that was being proposed: *Blood, Earth, Fire - Whāngai, Whenua, Ahi Kā* (from now on referred to as *BEF*). This was the next large exhibition to be produced and therefore the timing for me, to use it as a case study, seemed fortuitous. In addition, the environmental theme was of interest to me. I discussed my ideas with Te Papa managers and I was fortunate to be given permission to undertake such a study, which meant I was able to sit in on some of the early meetings and take notes and record observations of the interaction between the staff of the different departments. Three of the important factors for this research were the fact that Te Papa, as a museum, was large enough to have: a thoroughly documented creation process; a budget generous enough to create a 'complete environment' space; and a department dedicated to undertaking evaluations throughout the process. Another important consideration, in the choice of an exhibition to study, was that it had a section which fitted my requirement of an 'enclosed space', a specific 'start' and 'end' and a particular 'feel' to the space that was different from the rest of the exhibition. This was important, since I was intending to study how the visitors reacted to and in a space. That section was *Stowaways*, which was planned as a representation of a shipping container. This was not only an interactive space but it was also one that the visitors had to actually choose to enter and 'experience' and therefore it was ideal for my purpose. The objective of that particular segment was to show that the natural environment of Aotearoa New Zealand is continually at risk from the accidental introduction of alien species. This was to be achieved in an informative, entertaining and fun way for families, which is explored further in the next chapter.

The research process

When planning my research, I looked to the study undertaken by Wizevich, since (as explained above in the Introduction) I saw my study as a development of the work she undertook in 1993. I adopted a similar approach: research into documentation relating to the creation of the exhibition and interviews with both the people involved in the creation and the visitors. In addition to the studies mentioned in the literature review, I also read two recent dissertations from Victoria University, one that charted the development of exhibition creation (Ballard, 2005) and another that studied in depth, the experiences of visitors in an exhibition (Sibley, 2008). Sibley advocated that a time gap was important, in order to establish what memories the visitor retained about the

visit. In this study, there was an in-depth interview with visitors, a month after their visit. This study supports my decision to have an interval / time lag between the visit and the interview. Ballard investigated issues relating to the negotiations between an immigrant community and Te Papa, throughout the development process of a collaborative exhibition. The focus was a case study which analysed the exhibition development process, from both archival files at the museum and interview material. I followed a similar method to Ballard, for my archival research, since I had access to the documentary material relating to the creation of the exhibition from various sources within Te Papa, with their permission.

Throughout the research process, I kept a research journal, where I recorded ideas, thoughts and references and I made notes on all aspects of the development of the research. This, together with the wide range of data available from the archives, in addition to interviews with the team members and interviews from visitors, who had visited the exhibition and taken part in a previous evaluation, provided me with a variety of perspectives. It was then possible for me to build a more complete picture of what the visit meant to those visitors and a report on the findings can be found in Chapter Three.

The archival research was carried out between March and July 2007 and the staff interviews were carried out in September 2007, at Te Papa. I had already talked to all the staff about my research, whilst taking part in the *Summative Evaluation* (Allan, 2006) and I had received their informed consent to be involved in the process. Therefore the formal request for an interview was sent by email. The only exception to this method was the Subject Expert, who had since ceased employment at Te Papa and I interviewed him in his present office, at a later date. The visitor interviews were conducted during November 2007. In the next section, I discuss in detail the different methods used in the research.

Procedure for research method one: archival research

Since the exhibition, *BEF*, was an 'in-house' Te Papa exhibition, the method of data collection was quite straightforward. I accessed the exhibition documents through VMR. The range of material included: proposals, concept documents, detailed design documents, plans, information on the target audience and visitor profile, evaluation

reports, communication documents (such as emails), minutes from meetings and Te Papa's procedural and guideline documents. All these documentary sources were either photocopied or I made notes. These notes were then cross-referenced, in order to make it easier to analyse the data collected. These documents gave me a view of Te Papa's official and working approach to the exhibition and in particular the segment, *Stowaways*. I discuss the exhibition development process in detail in the next chapter, where the gradual shaping and forming of the process is analysed by highlighting the points at which there were decisions made or opinions voiced, which were critical to the final outcome of the exhibit. After analysing the written data relating to the creation of the exhibition, any gaps would be filled with information of a more personal nature gathered from the team members, which was accomplished through staff interviews.

Procedure for research method two: a) interviews with team members

The first interviews undertaken were with six of the Te Papa staff members who were responsible for the creation of the *Stowaways* container. I had already met all of them whilst sitting in on progress meetings and consequently I was quite comfortable emailing them and asking if they would be prepared to take part in the interviews. All staff members I approached agreed to my request. I sent them a 'Participant Information' sheet, which outlined the aim and objectives of my research, a consent form to sign and an interview question schedule. The aim of the interviews was to elicit more details concerning the process and to invite the participants' perspective on the events, so therefore I used a list of pre-defined open-ended questions (Appendix 5). Further details relating to the roles of the various team members are offered in Chapter Two, but here I will just list the positions: Concept Developer, Designer, Exhibition Educator, Exhibitions Interpreter, Project Manager Interpretive Media and Subject Expert/Curator. I taped the interviews in order to accurately record the responses I received and then I made notes from the tapes, very shortly afterwards. After studying the tapes and notes, I felt that some of the interviewees had offered many comments that were directly relevant to my research and hence I found it helpful to transcribe large portions of the interviews. This helped me with coding the results and in addition it demonstrated the credibility of the research (Rubin & Rubin, 2005). The concepts and themes, which came out of these interviews, are referred to in the following chapter.

Procedure for research method two: b) visitor interviews

When considering the choice of visitors to interview, I thought about my research objectives, to investigate the longer term, meaning-making potential of exhibitions. Since the long term affect was an important aspect of my inquiry, I chose to approach visitors, who had been involved in the earlier *Summative Evaluation* of the *Stowaways* interactive, undertaken in September 2006 (Allan, 2006). This meant that it would be about one year since these participants had visited the exhibition, an apposite time to investigate what they had retained in their memory of the space and any further recollections associated with it. The participant selection method for this initial survey was purposeful sampling: personal judgement was used to choose visitors from those people who were visiting the exhibition, at the time of the evaluation. The time period chosen was three days during a school holiday. Adults who visited with small cross-generational groups were chosen, since one of the objectives of *Stowaways* was to foster discussions between visitors.

For the research for this dissertation, I wrote to the 14 people who took part in that earlier evaluation, to ask if they would be prepared take part in a short telephone interview. I enclosed the same information sheet that the staff received, a list of pre-defined open-ended questions, indicative of the ones I would be asking them (Appendix 6) and a consent form, which they were asked to sign and return. Two of the consent forms were not returned and it was not possible to contact five of the people on the phone number they had previously given. More details about the nature of these questions and what was discovered are discussed in Chapter Three. Another method of finding respondents could have been to seek access to Te Papa's database of visitors, who have recorded that they are prepared to take part in research. Having established if they had visited the exhibition, I could then have asked them about their recollections of the visit. This would have had the advantage of generating a larger sample, but it would not have had the depth afforded by the method used. With the method chosen, I was able to check back through the data from the *Summative Evaluation* (Allan, 2006) and triangulate this data with the new data. In the interviews that I undertook with the visitors, I was looking for detailed responses and references to the displays, within the container of *Stowaways*. In Chapter Three, I report on these interviews and comment on and analyse what the participants talked about, compared

to what they engaged with, talked about and looked at when they were actually visiting the exhibition. This was possible through reference to the earlier Summative Evaluation (Allan, 2006).

Summary

In this chapter, I have explained why I took an interpretivist stance to the methodology of this research design: I was searching for the subjective impressions of both the visitor and the people who created the exhibition segment. Adopting a case study approach allowed me to investigate a complex event, the visit to an exhibition, from three varied perspectives: the documented museum process; the members of the team who created it; and seven individuals who visited it. Analysing, not only the developer's stated objectives but also the documentation of the process and by interviewing both the people who created it and the visitors who experienced it, *over time*, has afforded me the opportunity to examine in detail, a process that is normally not understood. Research into the themes and content that has emerged from these three research methods has revealed priorities, understandings, meanings and constructs, which are central to the exploration of this topic. In the next chapter, the process of creating the *BEF* exhibition and the *Stowaways* exhibit, in particular, is documented. The official standpoint gradually gives way to a narrative style, as the text is interspersed with the views and opinions of the team, who were responsible for the creation and development of the exhibit.

CHAPTER 2: AN EXHIBITION IS BORN

This dissertation investigates the affect that the created space has on the visitor. Since the museum exhibition is a cultural creation, it is important to look at the creation of the physical environment, from the museum's perspective. That is the purpose of this chapter. The museum's intentions for the exhibition as a whole are introduced and then I focus on a small immersive interactive component within it *Stowaways*. The information relating to the exhibition development process was collected from several sources. At meetings over a period of two years, I was able to conduct internal participant observations of the exhibition development team. The ethnographic studies of the exhibition creation, work undertaken by MacDonald and Knutson, were useful to my study, in this respect (Knutson, 2002; MacDonald, 2002). I used archival documents held at the museum and for the remainder of the data I used interviews with people, who were part of the exhibition team.

The development of an exhibition, in a museum the size of Te Papa, is a long and complex process. In this chapter, I first explain the manner in which Te Papa approaches the creation of a permanent exhibition and I explain the roles of the key team members who work on the projects. I then briefly describe the process that created the permanent museum exhibition *BEF* and I draw out the objectives of the exhibition as a whole. Following this, I focus on the *Stowaways* interactive. Throughout this section, I record comments from museum staff, relating to their role in the process, which I have drawn from the interviews between myself and these staff members. These comments and quotes provide insights into their own ideas and visions for the space and I examine how they see these changes, from a professional perspective. Throughout the text, I refer to the evaluations that took place (or were planned), in order to ensure that the point of view of the visitor was integrated into the exhibition development. When presenting exhibitions it is important the audience is 'heard'. Throughout the exhibition process, the museum demonstrated its commitment to evaluation, by incorporating front-end and formative evaluation (MM Research, 2003). From the beginning, funds were set aside to test the nature of the visitor experience and then components of the exhibition were modified after it was

determined to what extent the exhibition was achieving its original goals and objectives. The chapter concludes with a description of the *Stowaways* container when it was completed.

Outline of the process of exhibition development

Te Papa's *Exhibition Development Process* document outlines the two fundamental reasons for the exhibition development process: to ensure exhibitions are audience focussed and to ensure financial control and resource management (Te Papa, 2002). This model, which Te Papa has used since before its opening in 1998, indicates an attempt to maintain a balance between being mission-led and being customer-focused or market-led (Seagram, Patten, & Lockett, 1993; Young, 1996).

The planning phase in the development of interpretive exhibitions is a multi-disciplinary process, requiring the input of concept developers, subject specialists, educators, interpreters and designers. These four disciplines are required to work together in the simultaneous and iterative development of content, form and context. The planning phase is divided into four stages: Concept Development and Business Case, Concept Design, Developed Design and Documented Design. The Concept Development and Business Case phase is not relevant to this study, because it occurs before any design decisions are made. In this chapter, I make a detailed exploration of the documentation relating to the two middle phases. The Concept Design explores ideas for the overall form of the exhibition, then tests these ideas and assesses audience reaction and explores and finally agrees on options. The Developed Design stage finalises the form and content and produces final plans, models, design elements, text and schedules. The Documented Design stage is concerned with the actual 'on the floor' production, which apart from issues involving the contractor for *Stowaways*, is not relevant to this work.

Within this process of developing an interpretive museum-based exhibition, there are several functional, specialist and creative roles that must be encompassed, namely, exhibitions advocacy, audience advocacy, creative interpretation, subject expertise, exhibition design, project management, team management, artefact management and exhibition operation (Te Papa, 2002). There are five roles mentioned in the exhibition development documents that are specifically relevant to this *Stowaways* study. The

subject expertise and exhibition design are self-explanatory and the other are explained in more detail as follows:

- Audience advocacy – ensures that the exhibition (a) identifies its target audience (b) has target audience interest/appeal (c) employs a variety of learning techniques and (d) reflects the needs of the physically disabled.
- Creative interpretation – ensures (a) the creation of a range of challenging and enjoyable learning techniques and experiences for the target audience and (b) translates the concepts and objectives of the exhibition into an effective interpretation and design.
- Exhibition advocacy – to display a sound knowledge of the exhibition theme and enthusiasm for it (Te Papa, 2002).

In order to accomplish these functions Te Papa adopts a team approach:

The team approach is a political and administrative model in which the exhibition team is made up of advocates for content, design and audience. Each of these advocates has a say and status in the process in order to create a product that reflects multiple levels of ideas and information and multiple viewpoints (Te Papa, 2002).

The following team were assembled to fill the functional roles in the exhibition development, Collection Manager, Conservator, Concept Developer, Designer, Exhibition Educator, Exhibitions Interpreter, Exhibitions Manager, Researcher, Subject Experts/Curators and Writer. Throughout the remainder of this chapter, references to ‘the team’ refer to the group of personnel who worked together and who were directly involved in the *Stowaways* section. This group was smaller than the team working on the whole exhibition and it was comprised of the Concept Developer, Designer, Exhibition Educator, Exhibitions Interpreter, Subject Expert/Curator and at a later date the Project Manager Interpretive Media. The Exhibitions Evaluator was not one of the actual team but he worked with them in an advisory capacity. I now provide an explanation of these key roles, in order to clarify what part each member of the team played in the process. Firstly I list the main responsibilities followed by the area in which they were involved:

- The Concept Developer has four main roles in the exhibition planning process: exhibition advocacy, creative interpretation, subject expertise and audience advocacy.
- The Designer has three main roles: exhibition design, creative interpretation and audience advocacy.
- The Exhibitions Educator has two main roles, creative interpretation and subject expertise.
- The Exhibitions Evaluator has one role, that of audience advocate.

- The Exhibitions Interpreter has four main roles: creative interpretation, audience advocacy, exhibition advocacy and subject expertise.
- The Subject Expert has two main roles; subject expertise and creative interpretation (Te Papa, 2002).

These roles intersect considerably and later on this ‘overlap’ within the team became significant during the *Stowaways* project, when the Interpreter was required to concentrate on other areas of the *BEF* exhibition and the Educator was able to take over the role. Another change within the team occurred further on in the process, when a second Designer was brought in to take over the completion of the design drawings for *Stowaways*.

The process

Since October 2000, Te Papa has been developing the concept of an exhibition about the people and the land. However it was not until early 2004 that work started on the concept design for the exhibition, which was given the temporary name *Shaping the Land*. It was planned as a long term exhibition covering 760m². The team was assembled and in a short time they translated the extremely complex topic, ‘The history of New Zealand, how we came to the country and changed it and how it changed us’ (Exhibitions Educator, 2007) and developed a conceptual structure that represented an exhibition. The *30% Concept Design* document produced in April 2004 explained the concept, exhibition narratives and themes and the high-level communication objectives (Te Papa, 2004a). Other aspects, such as design, interpretive media and the object list were deliberately less developed. The exhibition was scheduled to open in December 2005 (this date was revised 14 months later). At this stage the ‘design and feel’ was described as ‘a totally new exhibition experience’ and one where the visitor would be highly engaged and immersed within the exhibition (Te Papa, 2004a). The interpretive media was to be mechanical and computer interactive and involve tactile hands-on objects, in order to maximise learning through the sense of touch.

As explained earlier, evaluation was considered an important part of the process and in order to support the work in the concept document and assist with planning, a front-end evaluation was undertaken. In that report, the respondents advocated for a fully immersive and interactive environment within the exhibition, one that would use the

senses of smell, sight, sound and touch (MM Research, 2003). They wanted visitors to feel part of the exhibition, to the point that the exhibition was ‘about them’. This is exactly what the developers hoped to produce, as the Concept Developer explains:

In this case we always wanted a theatrical presentation as much as possible ... more smoke and mirrors ... overall we wanted to get that [theatrical] impression, because [it was] my view at the time certainly, that affective outcomes are important, so that people become immersed in the experience, as much as we could afford to do that ...
(Concept Developer, 2007).

The next evaluation stage, in mid 2004, was the formative evaluation project brief that proposed testing the visitors’ reactions to the exhibitions objectives, particularly those of an immersive nature. Due to the short timeframe allocated for exhibition development, it was proposed to undertake informal focus groups of 1-2 hours (Haughey, 2004). What happened to this evaluation will be discussed further on in the chapter.

By September 2004, the overall concept for the exhibition had developed considerably. At this point there was the first mention of *Stowaways*, which was planned to be an entertaining immersive, interactive part of the exhibition, aimed primarily at children and cross generational groups. A simulated shipping container, filled with boxes and crates, where ‘visitors can check a container coming into Auckland to see if it is free of pests – just like the “border control” activities of a MAF inspector’ (Te Papa, 2004b). It was believed that this would be one of the exhibition’s ‘visitor highlights’. The interpretive strategy for the exhibition describes the exhibit *Stowaways* as one of the ‘Design elements [that] will also supply informal educational opportunities for children throughout the exhibition, while maintaining adult appeal...a shipping container in which you search the cargo to discover introduced pests’ (Te Papa, 2004b). The Concept Developer offers an idea of how that concept came about:

One of the ideas that came out of this big meeting ... held in February 2004 was a concept called Alien Nations ... so it was really looking at the impact of alien species on the country and the basic idea of a giant container full of everything and then building the story from that...
(Concept Developer, 2007).

As mentioned earlier, the creative interpretation of the exhibition was the responsibility of many team members and I discovered that the development of this

particular section was collaboration, from this early stage. The idea being developed was that this area would be the fun, but slightly frightening part of the exhibition, because 'scary is good' (Exhibitions Interpreter, 2007). The Subject Expert describes in more detail his memory of the approach that was taken:

The very first thing that got done on it was that the Exhibitions Interpreter and I went to the MAF place and started looking at things brought in ... the structure, just getting a feel for it, the ideas, sort of collecting both data and information and a feel of what it was like, of what the floor was like and what it was like to be in those spaces. Now the initial idea [pause] I think um I'm, it's vague ... but I think it was my idea that we made it scary and kind of haunted house sort of feel ... in a sense ... it was a very organic collaborative process at that early stage ... and ... as early ideas always are, it was bigger than Ben Hur and incredibly expensive when it would have been costed out, but in my mind, certainly, my vision for it was a completely immersive space that you would go and feel completely [pause] divorced from the rest of the exhibition, not intellectually because it is still following a theme but, physically and ... our vision for it, .. was that it would rival the ... earthquake house, so it was meant to be noisy, sound filled and interactive and exciting and curious and quirky.... I would bring in films to show people for look and feel [that I was thinking of] ... Tim Burton films and that was really the kind of thing *Corpse bride* and ... *Nightmare before Christmas* those sorts of fun quirky, kind of scary but makes you laugh and really sort of based for kids or families it was really meant to be cross generational ... that was the way it was meant to be (Subject Expert, 2007).

At this time, the formative evaluation was planned to be in two parts. Part one (the focus groups) were scheduled for October 2004 and part two (evaluation of the interactives/immersive experiences) were planned for Aug/Sept 2005, prior to their completion. Five months later, in February 2005 the *Shaping the Land 90% Concept Design* document was produced which outlined the team's final concept and structure for the exhibition. It was noted that 'the 3D Design is not as far advanced, as the team would like. However it is advanced enough to give a strong indication of the intended look and feel of the exhibition' (Te Papa, 2005b). This was the first warning that the time schedule for the whole exhibition was slipping. There was discussion within this document about the fact that time was now very tight to meet the deadline and questions were asked of the Exhibition Appraisal Team (later referred to as EAT) as to whether there was too much content in the exhibition or whether the budget could be increased. The exhibitions team asked that consideration be given to delaying the opening date, because of the slippage on the timeline.

The *Stowaways* interactive display was starting to take shape as a concept and it was described as:

A walk-in interactive zone. Visitors will be invited to take on the role of a MAF inspector and discover the pests trying to sneak into the country inside a MAF container. Lift the lids of crates to discover snakes, insects, rats etc. Use a wall mounted dentist-style microscope to discover fire ants and moulds mounted in Perspex on the bottom of containers. A sound scape will play in the space featuring rustling, scratching noises. A dark case in a corner will feature glowing eyes staring out. While a great space for kids, the serious message here is that thousands of biological threats to agriculture and biodiversity are intercepted at our borders every year, and that border protection is crucial for the health of the environment. MAF Biosecurity is actively helping us source content for this display (Te Papa, 2005b).

However, the team members intended it to be somewhat more theatrical:

I wanted it to be dark scary and tacky and I wanted it to be noisy, I wanted it to be smelly, I wanted it to assault all of you, kids almost being a little bit too scared of going in (Exhibitions Educator, 2007).

I guess the thought was they would be [pause] perhaps this immersive environment that they would be kind of maybe spooked at times or captivated or you know intrigued, or perhaps get into that exploratory kind of mode and would enjoy, almost like entertained I guess and enjoy the moments of discovery as they work their way through it (Designer, 2007).

At this stage in the exhibition process, there were communication and behavioural objectives, specifically outlined for the *Stowaways* (Te Papa, 2005b). These objectives were important, since they were what the evaluation was testing but this aspect will be discussed later in the chapter. By this time there was an outline plan for the whole exhibition and the *Stowaways* section could be seen in the plan and elevations. It was noted that, due to slippage of the concept design phase, the delivery of both the 3D design and the various media contracts was going to be very 'tight' if it was going to meet the opening date of December 2005. A design development time of three months was only half of the usual preparation time for a permanent exhibition of this size and the construction period of nine weeks would therefore, be very be short. This quote from the *Shaping the Land 90% Concept Design* document is mainly concerned about the technical aspects of production, but the last part is very straightforward and relevant to the subject of this research:

The timing of the media prod[uction] does not look so challenging at first glance but for both the short and long term lead items as many as 4-5 selection processes will need to be run in parallel as there will be at least 8 different

contracts to be let i.e. AV, sound, Mechanical interactives, specialist media, models, big hits etc. ... the more time we can give the chosen companies, the better results we can expect (Te Papa, 2005b).

In the production timeline, there appeared to be no specific line for evaluation, since testing/commissioning was to take place during the six week installation time. In the document, there was a call for content and budget issues to be worked through by the EAT, if the December opening deadline was to be met.

Four months later, in June 2005 the *50% Developed Design* document was produced. All the pondering and speculating was now over and the design had to be finalised and prepared for production. The focus now was on writing briefs for the interactive experiences and the development of the 2D and 3D Design. The extent of what was achievable, within the budget, was still being debated and one of the issues was the delivery of the interpretive media. Here the team examines the problems:

The biggest challenge facing the team at present is getting all interactive briefs developed in enough time for Te Papa to source appropriate external firms to do the work ... all briefs need to be complete by mid August ...
(Te Papa, 2005a).

By this time, the time slot for formative evaluation had been changed from September to February 2005. The aim of this evaluation was to test the interactive/immersive experiences happening in and with the interpretive media, prior to their completion with an allowance of time, in order to make alterations, if necessary. Since the programme was already behind schedule, the exhibition opening date was changed and it was now planned to open on 29 April 2006. The description of the interpretive media for *Stowaways* had not changed from the *90% Concept Document*, apart from more description being added to the interior:

Discover mosquito larvae in a pool of water trapped in the bottom of a car tyre; a nest of poisonous spiders tucked away in a packing crate. The sounds of scratching and sniffing will emerge intriguingly from some cases; one case in a dark corner may have glowing eyes staring out of it. We believe this cross-generational activity zone has the capacity to draw families back for repeat visitation, and could provide an Earthquake House style hit (Te Papa, 2005a).

The 'Earthquake House' is an immersive interactive, in another exhibition, where the visitor enters part of a 'house' and experiences 'being in an earthquake'. It is one of the most popular exhibits in Te Papa and it attracts repeat visitations. By the time of

the *90% Developed Design* document, in September 2005, the exhibition had its official title, *Blood, Earth, Fire - Whāngai, Whenua, Ahi Kā*. In this document, the design and construction briefs, for most of the interpretive media, had now been completed and contracting for those experiences was underway. However, one of those still outstanding was *Stowaways* (Te Papa, 2005c). The development of *Stowaways* remained at the 50% design level, with the installation of this component now planned for 6th March 2006.

Throughout the long and complex process of the exhibition's creation there were key meetings, at which the exhibition proposal was presented to the wider museum community. This particular meeting involved EAT and the purpose was to give other departments the opportunity offer their final comments on aspect of the design and also for them to give their approval before production started. It was a very large meeting, where each of the team members presented their own area of the project and those present had the opportunity to ask questions of all the team members. The Designer, who had already been under a lot of pressure up to this point, was reflecting on this meeting when he later states:

... beyond ... our *BEF* team ... [are] the various groups that we had to present to for approval and things like that ... and cos it's this really big process and it has to be done and I totally understand that but sometimes that can really slow us down and I do believe that some of those people on that, some of those approval groups perhaps aren't, shouldn't be there because to be honest they are not really um adding value to the process ... and sometimes questions raised are, seem actually a little naïve or something ... there's another whole thing that's impacting on, on trying to drive this thing forward ...
(Designer, 2007).

It is apparent that he felt that meetings, such as this one, were possibly responsible for slippage on the time schedule. From this point the focus of this chapter is no longer on *BEF* but on the creation of the *Stowaways* container. In October 2005, the *Creative Media Brief* document was produced, with a list of the objectives for *Stowaways* (Appendix 1). Later, there was a meeting, where minutes record that the staff needed to 'Start thinking about *Stowaways* again, organise a meeting with [Designer]' and to 'keep budget in mind' (Te Papa, 2005e). Over a month elapsed before another meeting was scheduled, in which this time there were discussions on how *Stowaways* was to be made: either constructed in-house or by a theming company. Theming companies specialise in set dressing and they use theatrical scene painters to make spaces look

‘lived in’ or ‘old’ or in this case ‘damp and creepy’. Several staff members attended this meeting, including the two Designers, the Exhibitions Educator, the Project Manager Interpretive Media and the Subject Expert. Since the Designer was very busy with production drawings, a second Designer was contracted to assist with the detailed planning of the container interior. At this stage, there was obvious concern about the production of this exhibit and one staff member mentioned that ‘[We need] to organise meeting next week to get *Stowaways* back on track’ and it was proposed that the Designer, the Exhibitions Educator and the Subject Expert get together for another meeting to ‘sketch it out further’ (Te Papa, 2005e).

At a progress meeting two weeks later (9th Dec) it was decided to use an outside contractor and therefore Designer II presented the drawings of the inside designs for the container, from which the contractor could work (Appendix 2). Since Designer II had not been involved at all before this stage, he asked for clarification on some items of the mechanics of the design and requested information on the creatures involved. Concern was expressed, retrospectively, by some of the team that, at this time, the second Designer did not seem to quite understand the ideas that the others had for the space. ‘I was disappointed with that’, states one staff member ‘there was no passion, they [the internal boxes] were really boring’ (Exhibitions Educator, 2007), and the Subject Expert comments:

I remember having a meeting with him that we were finding a little bit frustrating because he wasn’t quite getting it, he didn’t get the vision and maybe that was because we didn’t explain it well because we knew what was in our heads but, kind of [pause] I don’t know, we just didn’t feel he was on the same page as us ... (Subject Expert, 2007).

The above was yet another instance, when the vision that the team had for the space was (possibly) compromised because of a combination of factors and yet, as will be seen in the next chapter, from the visitors perspective, *Stowaways* was still a successful exhibit, in the end.

By late December 2005, the *Stowaways Request for Proposal* document (hereafter referred to as RFP) was produced. The RFP document contained detailed information relating to the components needed for inside the exhibit and the scope of the theming required from the contractor, in order that they could ‘pitch’ to carry out the work. The

document included directions for manufacture, specification for robustness and quality and instructions for delivery and installation in the container (Te Papa, 2005f). The contractor was given one month to construct the main components (the boxes and drawers) and these were then to be installed in the container by 3rd March 2006, with final special effects completed by 31st March. The RFP resulted in only one contractor submitting a proposal.

Early in 2006 it became apparent that, since the container was so large, it needed to be constructed on site and since the interior was being constructed by a different contractor the evaluation of *Stowaways* would have to be undertaken ‘on the floor’ during the first week of April, if it was to take place, before the exhibition opened to the public. By the middle of February 2006, the empty container was on site in the exhibition construction site. At a meeting on site, it was discovered that the container space was a great deal smaller than specified on the plans. However the Contractor was confident that, by making the boxes smaller, everything could still be fitted into it. There was considerable discussion about the installation and testing of the audio, since the sound effects in the space were very important to the ‘creepy atmosphere’ and also the ‘surprise’ factor.

On 14th March 2006, there was a team meeting to discuss in more detail the set dressing of the inside of the boxes and the ‘creepy crawlies’. This meeting highlighted some of the differing opinions on the project, where some team members were in favour of ‘real’ creatures and others wanted the comic ‘ooh yuck’ type ones. The consensus was that it would be better if these creatures were replica but they were experiencing real problems sourcing such items ready made and at this stage in the production there was no time, or sufficient money, to get them specially made. The Exhibitions Interpreter reminded everyone that the focus should be on the communication objective: the fact that our environment is at risk. Underlying this meeting, was a sense that people had been too busy to work out the details and now six weeks before opening, it simply had to be *done* and if they could not get the ‘ideal’ creatures then there would just have to be compromises.

The Exhibitions Interpreter talked later about her disappointment that the creatures were not replicas since that was the intention for the container but, because of issues

around time and money, it did not happen and it seemed 'it got forgotten' (Exhibitions Interpreter, 2007). It was around this time that concern was expressed that the 'fluid process', that had worked so well at the beginning of the project seemed to be presenting problems (Subject Expert, 2007) and that, whilst those involved were very creative and enthusiastic there possibly should have been '... a little more control to ensure that things were being done in a robust way' (Concept Developer, 2007).

A week later, there was a meeting on site with the Project Manager Interpretive Media, the Evaluator and three contractors, to discuss the Stowaways AV and lighting. It was apparent from the tone of the discussion that people were starting to panic. The components were all in place but the job was not completed to the satisfaction of Te Papa management. The main contractor was not performing as well as expected and the design did not convey the ideas intended by the team. By this time it was evident that, since the completion of the exhibit was so far behind schedule, the team had run out of time to undertake any evaluation before the exhibition opening. A meeting was held with the Exhibitions Manager, the Exhibitions Interpreter and the Evaluator, to discuss undertaking an evaluation shortly after opening.

When the exhibition opened, therefore, a number of people in the team felt uneasy about the way the exhibit had turned out. There was a sense of disappointment, 'Still a nice idea but not what it could have been, yea, again a bit, um a lacking in time and resource to really get it there' (Designer, 2007). There was also frustration that the evaluation had not taken place:

There certainly wasn't enough time for prototyping and all that kind of stuff at least for the mechanical interactives ... [they] are by their nature prototypes, ... you need them on the floor for a month at least to bring up any major issues ... (Concept Developer, 2007).

... I think mechanical ones [interactives] are fantastic, but there's very few that work well and they need a good lead in time to prototype and that doesn't happen ... (Designer, 2007).

The point that the interactives needed time for testing was something that was acknowledged in the original documentation 'The more time we can give the chosen companies, the better results we can expect' (Te Papa, 2005b). It follows, therefore,

that if less time was allowed the end result could be compromised, which appeared to be the case with *Stowaways*.

The testing for *Stowaways* was undertaken more as a remedial evaluation, after opening, when it was realised that there were areas in the interactive that needed improvement (Owen, 2006). This evaluation, undertaken a month after opening, consisted of not only visitor observations but also a questionnaire. The robustness of the mechanics of the boxes or the ease of their use, was not explicitly tested. The report made recommendations for additions and alterations to the exhibit before another evaluation was undertaken. Overall, it was pointed out that the exhibit had met its stated objectives. Shortly after this evaluation, more work was done on the graphics, the lighting and the theming of the interior. After this remedial work was completed, most of the team commented that the exhibit was then more as they had originally envisioned it, but some people still felt it had just been ‘thrown’ together.

Stowaways walkthrough

In this section I present a descriptive walk through the *Stowaways* segment as it was when finished and presented to the public. The following account is based on one written for the design document (Te Papa, 2005c) and it is included to give the reader, who has not visited the *BEF* exhibition, an idea of what the visitors (mentioned in the following chapter) experienced in *Stowaways* and it can be read in conjunction with the drawing (Appendix 2).

Visitors see a large shipping container, the left door is open. On the right hand door there is a panel with an invitational instruction to enter the container and be a MAF inspector. It explains how many creatures attempt to invade New Zealand every year, and how small they are, making keeping them out very time consuming and expensive.

It is dim inside the container and even from the threshold visitors can begin to hear scuttling and scratching. There is a sense of entertaining tension. Inside the visitor sees piled boxes in the gloom. At first, they just look like ordinary boxes, but then they see that many of them can be opened or investigated further. Those who look up can see ants crawling across the ceiling. A corridor meanders through the boxes and crate. To their right, large tyres lean against the wall. The sign in the middle invites the visitor to investigate the water at the bottom. As they put their heads nearer they hear the sound of mosquitoes. Next to it, a box of mangos. The sign invites the visitor to open it. Oh no! The mangos are rotten and being munched at by maggots! Next again there is a large crate overflowing with bananas. Some of them can be lifted to reveal a bat.

Across the corridor a suitcase can be opened to show moths amongst the folded clothing. Beside it another box this time with pineapples, on investigation a large hairy spider jiggles ominously. Around the bend there is a large crate with a writing desk inside, the visitors can open it and see huge tracks by wood-boring beetles, and hear the sound of their chewing. Beside the desk is another crate this one contains a large tribal mask and at it's base is a large pile of sawdust from the borers. If the visitor presses a button the mask spins round and a light comes on showing that the mask is covered with tiny holes drilled by the minute insects.

Diagonally across the corridor (on the right side) piled in front of the wall of the container are a lot of pipes and the sound of scuttling little feet can be heard. A large stack of crates is next and on top are sample boxes of seeds. The seeds are all from plants that are noxious weeds in New Zealand. A mouse has munched on the seed packets and spread them and mouse droppings all around. Above the seeds is a metal box, which no one notices until it suddenly, rattles with a frighteningly loud noise. The box cannot be opened and so the visitor is left wondering 'What's inside?'

Finally next to these crates is a white 'scientific' looking box with a biohazard sign plastered on the front, visitors can open it and inside lit by an eerie green light they can see strangely glowing fluorescent vials and hear the sound of bubbling.

Aside from the interactives components, there are many other things for the visitor to notice. Spider webs in the corners, moulds and fungi on the walls, and insects of various descriptions dotted all over the cargo.

Once again outside, interpretation asks the visitors 'How many stowaways did you find?' and a cartoon key gives them a clue as to what was in there. Interpretation also points to a case of real insects and other creatures that have been found on shipping containers in New Zealand on the right beside the wall of the container.

(Te Papa, 2005c)

Summary

This chapter has examined the way in which an exhibition is created. Different types of data were collected and they provided a variety of perspectives, with which to construct a more complete picture of the exhibition development process. It can be seen that what ends up 'on the floor' is sometimes a compromise from what was originally envisioned. I found that the reasons for this gap, between the original vision and the reality as built, was due to many reasons, not least the project running out of time and money. However, even though the exhibition segment, as built for opening, was less charismatic than everyone had hoped, the modifications that occurred, as a result of the evaluation, produced an exhibit that was closer to the team's vision. This analysis is relevant to my overall argument, because I believe it is only through awareness of the significance of the exhibition to the visitor and their lives, that the evaluation process can increase its credibility to the exhibition planners and heightened priority in terms of exhibition production scheduling and budget. A commitment to a larger budget for evaluation would have demonstrated its importance to the process of creating an exhibition. In the next chapter, the value of a more extensive evaluation is highlighted and the importance of a visit to the exhibition (and the way in which it impacts on a visitor's life) is discussed.

CHAPTER 3: THE VISITOR SPEAKS

In the previous chapter, I took an ethnographic approach to the creation of a museum exhibition, inspired by Macdonald's anatomy of the Science Museum, in order to examine how developer intentions for the design of the space were negotiated and mediated by various factors (MacDonald, 2002). We now turn to an analysis of the visitor's experience of the exhibition, thus demonstrating the value of an integrated, holistic understanding of a complex overall process, rather than a quantitative, short term cognitive one. Using a number of visitor studies, an attempt is made to reveal what meanings the people who came to see the finished exhibition, made of their visit.

As pointed out in the introduction, there is now more awareness that the museum visit can have a far reaching influence on the visitor and there is value in listening to the visitor (Perin, 1992). It is important to listen very carefully to what the visitor is saying and thinking, and then to probe further - because learning is a socially constructed activity (Leinhardt & Knutson, 2004). How much, how far and to what extent has the visit impacted on their life? Learning in the museum can be viewed as a two-phased affair (Leinhardt & Knutson, 2004). Firstly, there are the interactions and conversations that arise out of the context of the museum, which are strongly influenced by the environment created by the museum staff. As we learnt in the previous chapter, the developers put a great deal of work into engineering the responses that the visitors have to the exhibition story/theme. Secondly, and this is a fact which is very often overlooked, there are the conversations that continue on after the event of the visit. This chapter reports on the layering of these contacts and conversations and endeavours to discover the effect that the visit has had, with regard to the longer term 'learning' that the museum can offer.

In addition, the previous chapter explained how evaluation is an important part of the exhibition process. Frequently a formative evaluation is executed, in order to assist the exhibition creation process; what is the visitor taking from the exhibit, what is 'working' (i.e. achieving the objectives) and what is not working, thus giving the visitor the opportunity for a 'say' in the process. The formative evaluation for

Stowaways did not happen and therefore an *Observational Evaluation* was undertaken very soon after opening (Owen, 2006). Five months later, on behalf of Te Papa, I undertook a *Summative Evaluation* study (Allan, 2006). I will discuss these studies below. The main objective of this chapter is to report on the research interviews undertaken, about a year after the initial visit. After analysing these longer interviews, it was possible to gain an impression of the impact the visit had on the visitors and their families and to begin to understand how and why the physical environment of the exhibition had affected them.

The Observational Evaluation

When the *BEF* exhibition was being created, there were specific objectives outlined in the *Interactive Media Brief* (Te Papa, 2005d). The objectives for *Stowaways* were cognitive, behavioural, social and emotional (see Appendix 1). The report on the evaluation of *Stowaways*, which was undertaken a month after opening, provided statistics on what the visitors saw, the time they spent inside and what they did inside the container (sample size 184). There was a questionnaire component in the survey and the results demonstrated that ‘all respondents were aware of the general intent behind the exhibit’ (Owen, 2006). Visitors were asked: ‘How do you feel about the *Stowaways* container?’ From the 28 visitors who were studied, only 14 responded with an actual emotional response and nearly all of these reactions were ‘interesting/informative’ or ‘scary’. The conclusion averred that these were in line with the stated objectives of this interactive exhibit. The evaluation ended by recommending that, after some additions and alterations had been carried out, a further evaluation should be undertaken.

In order to investigate the affect that the space had on the visitor, from a different perspective, I studied the data recorded by the researcher on the actual observation sheets, together with the written verbatim comments of the visitors. I found that, from 184 observed visitors, 17 were *reported* by the researcher as having an emotional reaction to the exhibit: laughing, giggling, yelling, saying they were scared or appearing to be amused, scared, startled, surprised, frightened, interested or curious. The numbers are indeed small but nevertheless, I suggest that these observational comments demonstrate an emotional reaction, which is actually caused *by the exhibit*.

The Summative Evaluation

After the above mentioned additions and alterations were carried out, a *Summative Evaluation* was implemented in 2006, five months after opening, in order to test the documented objectives of *Stowaways* (specifically the emotional and social objectives) against visitor reception and involvement at the time (Allan, 2006). The method was in two parts. Firstly, there was an unobtrusive observation of visitors in the exhibit (Appendix 4). Visitors who stayed in the container for more than 2 minutes were invited, after they had exited, to complete a short questionnaire, which asked them what they thought the exhibit was about, what made an impression on them and what they talked about whilst in the exhibition (sample size 16). Their emotional reaction was gauged by self-selection in a multiple-choice question. Secondly, a short telephone interview was conducted, one month later, with the same visitors and more searching questions were asked about the feelings they experienced in the space. This research concluded that all the visitors interviewed understood the primary objective (cognitive), a vast majority had an emotional reaction to the exhibit and nearly all the visitors were observed having social interaction with their visiting group or other visitors.

In this report, there was fleeting evidence of the four different types of engagement, namely, physical, social, intellectual and emotional that a visitor experience involves (Falk & Dierking, 2000). Later, when looking for further examples of this engagement, particularly in the area of the visitors' social and emotional engagement with the exhibition, I re-examined the data in the appendix of the Summative Evaluation, keeping the research question in mind. Did a physical interaction with the exhibit have an effect on the degree to which they remembered what they had seen? I focused on four points: the degree of interaction that was observed happening, notes about conversations that happened in the exhibit, items they reported/remembered at the time and what they recalled one month later. My intention was to build narratives from the visit (rather than using statistics) to give me a picture of the process of meaning-making, in response to the space. By analysing the changes within the visitors memories, from just after the actual visit to three months later and looking for connections that showed any correlation between the observed interaction with the exhibit and the later degree of recall and/or conversation, I was able to identify the

threads that followed through their remembrances and therefore construct visitor profiles. These earlier connections with the exhibition form the introduction to the narrative of the visitor stories presented below.

My research interviews

As noted in Chapter 1, the assumptions of the interpretive paradigm are that: meanings are important; social behaviour can best be understood in its natural environment; reality is the meaning attributed to experiences; and social reality is not the same for all people (K. A. Henderson, 2006). Adopting a qualitative approach for this research enabled me to explore, in more depth, the visitor's thoughts, feelings and beliefs and I started to understand what meanings they made out of the visit and connections that occurred in their lives, as a result of visiting the exhibition. I wrote to the 16 visitors, who took part in the previously mentioned *Summative Evaluation*, asking permission to conduct a longer interview with them and seven agreed. One interview was conducted face to face and the other six were conducted on the telephone. The interviews ranged in length from 10 minutes to over half an hour. The sample was made up of one male and six females, with a range 33 – 60 years. The demographic characteristic of the visitor to *BEF* over the period from opening until this evaluation, indicated that the adult visitors gender mix was 50/50, most were in the 16-39 age group and over half of them were from overseas (Harvey, 2006). This would indicate that the sample is not typical of the general trend. However, I specifically chose the school holiday period, in order to interview an adult within a family group and a large percentage of the visitors, during this period were New Zealand residents.

In order to examine the affect that the visit had on the visitor, I used two avenues: emotional and social. I asked the interviewees to describe their memories of conversations with the people with whom they visited the *BEF* and also with others after their visit. I enquired about the emotions they remembered feeling at the time of the visit. This is very problematic for some visitors. (The questions are listed in the Appendix 6.) Since learning is socially constructed, it is the subjective reactions of the visitor, which I endeavoured to uncover: their feelings, opinions, likes, dislikes and emotions, stories and impact themes. I was searching for indicators of a connectedness with the exhibit, as a measure of how the physical environment had affected the visitor. In addition, I was scrutinising their responses to ascertain if what they

remembered had made an impact on their lives, which would demonstrate an instance of life-long learning (Leinhardt, Crowley, & Knutson, 2002). This research moved beyond just assessing the objectives of the exhibition, to the exploration of the meanings, which these visitors made from their visit later in their lives.

In the remainder of this chapter, I report on these interviews and discuss and analyse what the interviewees talked about during the interview and I compare this with how they engaged with the exhibit, during their visit. This is accomplished by examining what they talked about when they were actually visiting the exhibit, since this information is noted in the earlier evaluation. I was looking for embedded memories and narratives, rather than merely statistics.

Mother #1

This family came from Auckland to Wellington for the weekend. The mother is a 44-year-old student, who describes herself as a regular visitor to Te Papa. She is accompanied by her son (12) and her daughters (10 and 15). Their visit is made late in the morning on a Saturday in September. She stops to read the entrance sign. A child says 'You should go in here Mum' 'What is it?' she queries. First of all, the child opens the suitcase with the moths inside and yells 'Err!' 'You're imagining things' retorts the mother but she walks over to inspect it anyway and comments 'It's too dark'. They look at the mosquitoes in the tyres and talk about them. Next they move onto the mango box, the mother reads the sign out loud as the child slides over the box revealing the munching maggots and a discussion follows. (The mother later recollects that the children liked the squishy squelchy sounds and they wanted to know what the maggots were made of and how the boxes were operated.) Beside them is the box of bananas. They read the sign but do not discover the bat. However, it is noted by the researcher that they talk about rabies (mentioned on the small graphic panel). Turning round, they next open the suitcase to reveal the pineapples and they have a discussion on the big spider inside. They turn back around and the mother points to the wall explaining to the child that it is the inside surface of a container. Then the seed packets are inspected and as they are looking at a mouse hole which is beside them there is a rattle from the box above their head 'Did you hear that!' they say and proceed for a while to debate what is in the box. The bio-hazard vials are read and opened, the button on the mask is punched and lastly a child asks about the termite tracks on the

desk, before they leave the container and turn right to look at the insect display outside. Here the mother has a long discussion with the child about the bugs in the case. This family's visit lasts about eight minutes, during which time they have interacted with all the components in the container. When questioned just after the visit, the mother states confidently that the container is about being an immigration officer. Asked what emotions she associates with the space, she acknowledges feeling curious, interested, intrigued, surprised, apprehensive, suspicious and disgusted, when in the space.

A month later during the telephone interview, those negative emotions seem to have faded and she is quite forthcoming about her positive memories of the space. 'Um, I think it was quite interesting because it was so interactive, I think that's what we found, rather than just standing and looking, seeing the interactives was the draw card really and seeing aspects of things that weren't, you know, [that I] hadn't seen before, that you never really think about and [the] surprise element, well for me and the children that is really it'. She is also able to recall the emotions she felt in the space, 'Anticipation, um, inquisitiveness, um, surprise and an eagerness to keep going and, you know, [to] find out everything, what does this one do? The children were looking to see how they actually work rather than just skimming past, we wanted to stop at each exhibit and find out what was hidden in it'. The conversations she recollects as taking place at the time, were about how they (the children) thought it is scary, spooky and surprising. The 'surprise' feature of the encounter appears to have been an important aspect at this time, just after their visit.

A year later, when being interviewed for a second time, this mother says she feels it was the *impression* (my italics) of the place that has stayed with her:

Yes you went from Te Papa which is a big lofty museum, light and full of space, as far as I remember you went in and I went through a door and the roof is lower, it was more enclosed, it was more sort of tunnel cave like and I think it was darker like and the things that you wanted to see were spotlighted, highlighted so it was more, it was more of an enclosed [space] and you could feel it sort of on your back ... and I think that sort of concentrated you on each step, you looked at something and you sort of slowed down and went from sort of exhibit to exhibit taking it in, that's the sort of impression I get now, a capsule inside a big space.

The reference to the enclosed space, obliging her to slow down and concentrate, is testament to the *power* of the space. She remembers feeling curious and surprised and having a desire to investigate. She continues to express these feelings, 'how a child would feel at a birthday party, more expecting really, unwrapping presents type of feeling, there is no stress there, it is more an excitement'. She recalls that, after a TV programme about border security, the family had mentioned the container in conversation but at this time she has nothing in particular to relate about that conversation. She does however, recall a situation when bio-security had come up in connection with a conversation. It was whilst talking to a visiting Japanese student about exporting Manuka honey back to Japan and she thought about the fact that we can not import honey, due to the risk to our bee industry and she had then thought about the container, in that context.

It is interesting to note the shift in consciousness with this visitor. The container, which when first visited elicited some negative emotions, had now changed and it had become an exciting experience. It is noted by the researcher that the visitor seemed a little detached at the time of the visit and yet the subsequent interviews reveal a depth of engagement and connectedness with the exhibit that would otherwise have been missed. This is an excellent example of the theme of an enclosed space eliciting a strong affective response (McCarthy, 2004).

Mother #2

This 50-year-old caterer visits Wellington from Tauranga with her 13-year-old daughter late morning, on a Thursday during the school holidays. From observation, she does not interact a great deal with the exhibit, except for the banana box and the mask display. However, she says it was the desk with the termites that made the most impression on her. She cannot remember what prompted discussions between them. She indicates that she felt interested, intrigued, amazed, astonished and shocked. At the first interview, she describes how her and her daughter thought it was very interesting. She does not understand the question about how she felt in the space but goes on to reveal that she felt claustrophobic and so was looking forward to getting out of the container! Initially she thinks there had not been any conversations between them as a family after the visit but then she surprises me by relating the following:

No, well only with her Dad, my husband when we got home we spoke to him about it and our eldest daughter actually works for a container firm and she spoke to her sister and said about it, and she said yes that's what they, you know, they know about that, when containers come from overseas they have all got to be MAF checked and stuff like that. My husband has actually done a MAF course, he spoke to our daughter about it and said, you know, the importance of admitting what you have got and making sure you go through the proper channels when you send bits and pieces overseas.

At the second interview, a year later, she reveals a great deal more and she tells me how, on this visit to Wellington, she had made the trip to the museum because it would be a special time for the two of them. She has very strong memories of how she felt at the time 'Terrible actually because I suffer from claustrophobia, I didn't actually enjoy being in there so it was a case of getting in there and having a look and getting out the other end'. She clarifies this by saying that she consciously went into a confined space because her daughter was:

... interested in that sort of thing and we're down there looking at different things in the museum and it's a good thing that we can talk about [it] together, I mean I wouldn't have gone into that space unless I had specifically had her to sort of distract me you know, I think when you [have] got a teenager you do these sort of things, spend some time with them.

I thought it was particularly interesting to learn that her intention was to create an opportunity for her and her daughter to have special time together, which is a significant social engagement. She talks again about how her older daughter was working for a container firm at the time of the visit and how she was very interested in learning about how bugs can get into New Zealand in containers. She also mentions that her younger daughter really enjoyed the visit. She cites a TV programme about border security, as being a trigger for memories of the container and conversations with her husband, relating to how the containers (he sends away at his work) have to be very carefully cleaned and she is now able to visualise those containers because of the visit. She says that she found the container 'more interesting' than other parts of BEF, which she confesses to not remembering a great deal.

On the surface, judging only by the information received at the time of the visit, it would appear that there was not a large amount of engagement with the exhibit and yet more extensive information is revealed about her motivation for the visit, at the subsequent interviews. This study demonstrates an interesting phenomenon, in that a

basic human reaction is being consciously over-ridden. The mother puts aside her own fear of enclosed spaces, in order to foster a social situation, where she can connect with her teenage daughter. I was surprised at the strong impression *Stowaways* had on this visitor, perhaps due to her fear of enclosed spaces. This example suggests that observational studies may be limited in assessing visitor response, since people may only reveal their thoughts and reactions during further in-depth research.

Mother #3

This woman, aged 51 visits from Auckland with her 11 year-old daughter at midday on a Thursday in the school holidays. The visit starts with her asking if the child wants to go into the container. It is noted at the time that quite an amount of talking takes place between the mother and child, which begins with the mother reading aloud the entrance information. Then they go straight in to see the mango box, which is already open and this elicits 'uhh yuck maggots'. She interacts with the banana box and the mask display. The mangos and the bats in the bananas are the areas that make the most impression on them, with the bats prompting the most discussion. They are 'intrigued about them being brought in'. At the interview she remembers that it was dark and there were 'a lot of things that I thought were quite creepy' and she feels 'A bit [pause] squeamish isn't the word but um ... horrified about the things that might come in on containers'. She says they had 'quite a conversation about all the different kind of bugs that do come in from overseas'. Later at home she talks with her husband about the container whilst watching a TV programme about Customs.

A year later she recalls that the dark container made her feel uneasy, 'er it gave me the creeps ... ooh yuck, it made me feel uncomfortable I suppose ... [but] I was kind of fascinated by it at the time'. From all the objects she recalls seeing at Te Papa that day, she says that this was the one that stuck out in her mind 'because I think it brought to light all those creepy crawly horrible things that do come in from overseas if people aren't careful um, but things happening all around, it made me feel quite creepy thinking about it really'. She stresses that she remembers the container well and it stuck in her mind because 'you did experience it' and 'because you were actually in that container and feel[ing] those creatures, it felt real'.

She talks about how she knew the visit also stood out quite vividly in her daughter's mind, because her daughter mentioned being really 'grossed out' by it, immediately after and on subsequent occasions. As a family, they recently talked about the container and the subject of people bringing items into the country, while they were watching a TV programme about border control. Again it is the 'ooh yuck' aspect that she mentions as the catalyst for the memory. Here we have an example of potentially negative and uncomfortable environments effectively engaging with the visitor. Despite (or perhaps because of) their fears and anxieties, the space contributed to long-lasting memories and lessons after the visit, as suggested in other research (Selinda Research, 2002).

Mother #4

This woman in her 50s visits with her 13-year-old son from the outer Wellington region, late on a Friday afternoon during the school holidays. There is no direct interaction or even touching any part of the exhibit, during the visit. However they do talk about the mosquito larvae, the seed packets, the termites and the end panel. The desk is the area that makes the most impression on her 'I'm a wood person', she comments. She talks with another adult about the items on the end panel. The emotions she relates are that she felt worried, irritated, uncomfortable, uneasy, unnerved, anxious, and insecure. This is the only study where the person's emotions, were all negative. Her sense of irritation at the general complacency of people, with regard to the subject of the environment, is one of her main points offered at the first interview.

At the interview I conducted a year later, she stresses that the protection of the environment is very important to her. She reports again that she felt a strong sense of frustration in the container, because of how much more could and should be done. I received the impression she was not very comfortable in the space, since she later comments:

I prefer the big open wide spaces so possibly if I hadn't had [name] there showing the interest that he did I might not have spent so much time there. I'm an outdoorsy person myself...the puzzle aspect of it...having to find things of course increased the educational value of it because children remember.

Here we have another demonstration of a visitor going against her natural instinct, since she would possibly have not gone into the space, were it not to accompany her son, who had an interest in the subject. She also talks about her conversation with someone, the previous night, when she remembered the container and the subject of creatures sneaking into the country:

I work in a rest home and we were busy vacuuming the floor, I was showing the new person around, they were putting up Christmas decorations and I presume [the box was] where this came from - a white tail spider, now this woman was an English lady [and I] showed her and commented it's only very recently that we have had a white tail spider problem in New Zealand, that they've come from else where.

I see this as evidence that, even a year after the visit, the essence of the exhibit was still very much in her mind. She also mentions that her son has been back twice to see the *BEF* exhibition, including *Stowaways*, and on these occasions he also took his father. Thus, the first visit generated two subsequent museum visits, by the son with his father, which is a significant fact, since teenagers are often a difficult audience to engage and as a result they are frequently under-represented in museums.

Woman

This woman is an office administrator in her 30s. She and her partner are from Christchurch and they visit the museum on a Saturday morning. They stop outside the entrance to the container, read the sign and then they have a short discussion and enter the container. They give the exhibits only cursory attention, not touching anything but they do read over half of the illuminated labels. However they do see the maggots in the mangos, because the box was already open. They are having a discussion between themselves, at the desk with the termite tracks, when their attention is caught by a loud rattling noise 'There's something in the box!' they turn around to investigate it. Then they walk straight out of the container. Their visit lasts only 2.5 minutes. When asked about the visit, she says the maggots have made the most impression on her and she thinks it (the exhibit) was very well put together. She says that the seed packets prompted a discussion between them and they talked about the sounds (the bubbling of the vials). On an emotional level, she felt curious, interested, involved, stimulated and comfortable in the space. When interviewed a month later, she is enthusiastic about the visit. Recalling her memories she has this to say:

I remember being intrigued and interested enough to stop going past and walk on in and I remember the display and I was fascinated by the beetles that were in there and umm all of the little things that get found in fruit and I think probably of all of what I saw, apart from the earthquake room thing, that is the thing that I remember the most ... I felt like I was in a separate room with lots of little goodies, I liked the fact that it was a small space and that it actually added to the exhibition. I felt like I had gone into someone's um old cupboard or someone's underground storage area (Allan, 2006).

The 'earthquake room' she talks about is the immersive interactive, which is mentioned in Chapter 2 and it was hoped, by Te Papa that *Stowaways* would be as memorable and it clearly is a strong memory with this visitor. As a couple, they have not talked about the exhibit, since the visit. However she has mentioned it to her mother as something worth seeing on a visit to Wellington. At this point, we get a sense that the visit has had a definite affect on this visitor and consequently when she is interviewed a year later, it is not surprising to hear her say she was captivated by the container:

It just intrigued my senses because it actually made me go in there and actually stop and have a look around it, everything that there was ... I remember thinking it was different and it made me stop and look more closely because everything was confined, it was like I was actually *in* the exhibit.

She mentions that it is her 'kind of favourite little thing'. She then goes on to relate an instance connected with the container, which demonstrates in a very graphic way, the impact of the visit on both her and her partner:

We had a dead bird that got trapped into the chimney cavity in our house and um we didn't know about it and it became flyblown and they all came alive one Sunday night we had about 20 flies in there and um I would think that it was only time later that we kind of, that we remembered [the container] and we were talking about that whole um diseases and all that sort of thing so that would have probably been one of the times that it did come up spontaneously like that, that was a trigger memory, it was a couple of hours later after we had both calmed down that I kind of said ... 'it was like being back in the room wasn't it', it had the *emotion* (my italics) attached to it.

I was amazed (but not surprised) to be hearing a story such as this one, where an everyday occurrence could be so infused with the emotional association that occurred in a *very brief* visit to a *very small* part of an exhibition.

Father

This group lives in the Wellington region. The father, a systems analyst, originally from Germany, visits with his two sons (11 and 14) on a Saturday morning. They are observed walking straight past the entrance sign and the moth suitcase and they start looking at the pineapple box, which they open. This group moves backward and forwards inside the container, mainly interacting with the objects in the centre (the mango box and the banana box) which the man successfully investigated by sliding the box over and lifting the bananas to reveal the bat. One boy notices the 'eye' between the boxes and shows his father. There is laughter when they hear the rattling box and a discussion ensues. He later explains that they were wondering what might be making the rattling sounds and was it a small or big creature and would it be possible to open up the box? They move on to open the desk and read the sign. Then after a brief return to the pineapple box, they leave - the visit lasted three minutes. When questioned he remarks that seeing the bat (in the bananas) was unexpected, and it was something he had not thought about (in connection with bio security). He is quite comfortable in the space and lists friendly, safe, curious, interested and amused, as the emotions he associates with the inside of the container. Unsurprisingly, when asked a month later about what he recalls, he reiterates that 'it is an interesting, fun experience' and that he had enjoyed the hands on way it informed the visitor about the importance of bio security, 'it was a good start off for a talk with the kids about that [bio security]'. This is a follow-on social connection, prompted by the visit.

A year later, I conduct a longer face to face interview, since the visitor lives in Wellington and during this interview I learn that they have visited the museum, at weekends, every one or two months. These visits are usually unstructured and they just turn up and find something to explore on the day. The theme of searching came up, as we discussed their visit in September and how he remembered feeling in the space:

There was a little bit of excitement, the discovery ... I think if I was a grown up and didn't have children that might have been ... I don't know if tacky is the right word, I know the kids enjoyed the search thing and so do I, because I participate in something with my children and so that makes it a joy ... but if I was a grown up and had long forgotten that excitement that comes out of doing these things, the search and the look around and discovery then I might just have walked through without touching anything and without actually getting to that level of *engagement* (my italics) so for me it is positive ...

It is interesting to note that the word ‘tacky’ is one word that the team had in mind, when they were brainstorming the exhibit. From this quote, we obtain a clear picture of the family enjoying the experience together. The interviewee believes it was the discovery process that made the visit more interesting and memorable. That strong memory imprint is made evident in another comment, when he talks about times when he thought about the container:

Um occasionally in the papers and there’d be stuff in [on] this little trade war between Australia and New Zealand in some agricultural area ... *and so every time that comes up I do think back about this room* (my italics) because yeah there was a very strong relationship there and, er, I think also when flying in and out of the country there is the odd flashback ... do you remember that when they actually sprayed you? And that was a significant ‘woops’ we’re going to this island thing and they are spraying us to make sure that no bugs, so yeah, and I think that in those instances ... I remember it still and that made me flash back about the container space because even though I did enjoy the experience.

Once again we see how, in the midst of an enjoyable experience, there is an appreciation of the serious nature of the subject matter. Regarding the following quote, it is pertinent to note that Wellington harbour is very close to the life of the city and it can be seen from many of the suburbs that climb the hills surrounding it:

... the other day I saw a container ship in the harbour and I looked at it and I’m sure Wellington doesn’t cater for the largest of the kind, but it was still massive, and you think well how do you avoid pests or, or any other negative influence coming in, it must be just an enormous task we’re at such risk, but it made me think of that ...

His final comment speaks about the importance he places on the social significance of the museum visit and the power of recollection:

It’s apparent I think part of visit was sharing that experience with the kids, if the kids are having a good time somewhere and you’re there, you will also have a positive memory of the place.

From this particular interview, I gain an insight into the full nature of his experience: physical (with the lifting of lids); social (the sharing with children); emotional (the excitement and joy); and intellectual (the concern for the subject). These factors are all present and none is more or less important than the others.

Grandmother

This woman, a teacher (59) from Geraldine in the South Island, visits with her granddaughter (5) on a Thursday afternoon, during the school holidays. Whilst they walk straight past the entrance sign, once they are inside they read and interact with everything. There is a great deal of talking and moving backwards and forwards between the exhibits, including going all the way back to have another look at the mango box before leaving. When asked, she talks about the maggots making a big impression on her (she had taken another look) but it was the rattling box that had caused the most discussion between her and her granddaughter. She recollects how she felt curious, engrossed, fascinated, intrigued, involved, amused, apprehensive and hesitant about the space. She likes the serious nature of the subject but also the spookiness and the 'ooh yuck' atmosphere. This is clearly a demonstration of the allure of the gross! She talks about the relationship she has with her grand daughter, who she lives some distance away from and about how she talks to her about a wide range of subjects, even though she is quite young. Immediately after the visit, they had spoken about the noises in the box and she related this to how she had controlled pests (possums) where she lives (possibly in box-like traps). The opportunity for intergenerational connections between visitors is one of the special features of the museum visit.

When I interviewed her a year later, she remembers feeling slightly perplexed, a bit irritable and quite intrigued by the visit, but since she did not read the introduction panel or even hesitate at the entrance to the exhibit, it could be these omissions that possibly account for her puzzlement about the container. She talks again of conversations with her granddaughter two months previously this time, about bananas and how they have a lot of spray on them:

Oh I can't remember which one of us remembered the bat but we were talking about whether we should be getting bananas because of all the bugs and chemicals and all the other things that go with them ... I know she remembers the exhibition and the bat because she says 'ooh yuk', I got the feeling it may have made her feel a bit yucky about bananas.

It was not only her granddaughter that she talked to about the exhibition, she also told me about other conversations:

We talk a lot amongst family and friends about our responsibility towards, er you know, looking after the land, ecology and sustainability and all that sort of

thing and so there have been a lot of conversations over the last year about what our responsibilities are ... each small step is valuable, that is the sort of theme, and from that, I think several times I will have talked about each persons responsibility and that would be linked to things like imports, and from that linked to things like the display ... *I've used it as an example when I'm talking to others* (my italics).

The container has taken on a presence in her psyche. She speaks of the emotions associated with the visit adding to her memory and how it makes her remember things more. She then told me of two trigger instances. Firstly, after a trip to Rarotonga, she brought some papaya back into the country, which had to be fumigated at customs and the second instance was:

A trip to Fiji with our son who is a bit disorganised ... he forgot about some stuff in his luggage and um I did think about the display at Te Papa when we was going through a rather nasty time at customs when we got back, some of them, they're very [pause] intimidating.

For this woman the short visit to the container has produced strong memories which, it would seem, come back to her, in a variety of everyday situations, four of which she is able to bring to mind very easily during this short telephone interview. I wonder how many more instances there are still hidden in this visitor's memory and in the memories of the many other visitors, whose experiences of the museum are not explored.

Summary

My objective, in this study, is to go beyond an evaluation of the cognitive objectives of an exhibition, to the affective and the long-term impressions of being in exhibition spaces. The results of this research show that the enclosed physical space has a high impact and deep influence on visitors, which has been overlooked in the past and therefore it warrants further investigation. I started this research wondering how the physical environment affected the visitor and what impact it had on what the visitor took from the exhibition. I was also interested if what they did remember had a bearing on their lives. When the *BEF* exhibition was created there were specific objectives, which the interactive *Stowaways* was aiming to achieve. By studying the evaluations reports, with these other questions in mind, I was able to gain additional information that gave me an insight into how much more the visitor is taking away from the exhibition. Since it is also important, when assessing the nature of the visitor

experience in an exhibition, to examine the ways in which these visitors engage with the exhibits, objects and content, I then went on to conduct a longitudinal study of the visitors. I observed that the visitors have continued to talk about their experience over time and even up to one year later. These visitors appear to have all ‘got something’ out of the exhibition and it now has a ‘presence’ in their memory. This finding should not have come as a surprise, since an earlier evaluation actually hinted at visitor preference for close involvement and a concrete presence.

Using the results of these interviews, I am able to demonstrate the breadth and variety of a particular engagement – a visit to the *Stowaways* container - for these few visitors. They talk about all the aspects of their connection and give examples of physical, social, intellectual and emotional engagement with the subject. From this evidence, verification can be established that the visitor is not only ‘getting it’ in the sense of the cognitive objectives but there are also various examples of visitors making their own meanings from it and developing or integrating the memory of the visit into their own lives. In educational theory, the development of this meaning-making is called ‘scaffolding’. Through the interviews I saw examples of that building of significance, how the visit is like a ripple, which flows out to include not only the visitor’s social group but also her/his wider society. These seven narratives demonstrate the fact that the visit made a strong impression on the interviewees, due to some of the *physical features and the physical environment*, which included the small dark space, the solid floor, the high piles of boxes, the low roof, the suitcase with moths, the sliding mango box, the lifting bananas, the rattling box, the desk lid to lift and the bio-hazard box lid, which also could be lifted. The visitor’s comments about the immersive environment, and their extraordinary recall and long-term impact, in terms of trigger memories and conversations with family members, show quite clearly the influence of the container and its objects on visitors to the *BEF* exhibition.

This chapter reveals that the visitor gains from the exhibition in many ways of which the museum is not aware, despite problems associated with the development of the exhibition, which are discussed in Chapter 2. In the following chapter, I will examine how a combination of insights from the visitors and the museum staff could allow for more effective communication within the museum.

CONCLUSION

This dissertation considers the question ‘How does the physical environment affect the meanings that the visitor makes in and after visiting the exhibition?’ Through a detailed case study of the *Stowaways* segment, within the exhibition *Blood, Earth, Fire - Whāngai, Whenua, Ahi Kā* at Te Papa, the research investigated the nature of the visitor experience within the *environment* of the exhibition. The qualitative approach allowed for analysis of the topic from the dual perspectives of museum and public and exhibitor and visitor. An analysis of the themes and patterns, which have emerged from the three research methods, is offered in Chapter 1 and this allows me to cross reference and comment on the current state of the communication circle at Te Papa, which reflects the gap between creation and reception, identified at that institution some years ago (Wizevich, 1993).

An explanation is offered in Chapter 2, as to how the physical environment of the exhibition is created from the museum’s perspective, through an analysis not only of the official documentation but also from the viewpoints of the professionals, who were members of the exhibition team. This team had developed impressive plans for the exhibition, particularly in terms of communicating with children. In addition, in this chapter, it can be seen how the team members envisioned the exhibit, but also how they ran out of time and resources for formative evaluation before the exhibition opened. Therefore the end product was not what they had hoped. However, since an evaluation was undertaken very soon after opening, the museum staff members were able to revamp the exhibit and ended up giving the visitor an exhibit that was closer to their original vision.

In Chapter 3, there is an analysis of the visitors’ reception of the *Stowaways* exhibit. Seven narratives outline the visitors experience in the exhibit and their subsequent memories associated with it. The research demonstrates that the visit resulted in a strong impression and a clear memory for these visitors, due to some of the *physical features and the physical environment*. Their comments about the immersive environment, their extraordinary recall of the experience and the long-term impact on

their lives in terms of trigger memories and conversations with family members, clearly demonstrate the influence of the built environment on visitor response.

This conclusion now considers the implication of these findings for further research in museum visitor studies and also for museum practice. This dissertation makes a contribution to museum studies, by helping the reader to acquire a broader understanding of the creation and design of the exhibition space, combined with an understanding of how and why the physical environment of the exhibition affected the visitor. Further museum visitor research, of a broad exploratory type, it is suggested, could result in changes to the process of exhibition development and it may facilitate more effective communication. If more qualitative research and summative evaluation were undertaken after exhibitions opened and this information was fed back to concept developers, the communication could be more complete and it would be possible for the museum to build on any experience gained, for the benefit of future exhibitions.

By building on Wizevich's findings (mentioned in the Introduction) and by using her dual approach of museum and visitor, this minor study has demonstrated that, to a degree, the gap has closed and positive changes in the communication circle of the museum have already taken place, at least in this one institution under investigation. Overall, the study provides clear evidence that the enclosed space did, indeed, affect the memory of those visitors who entered it, which lingered long after their visit and a ripple effect went out into their lives and family groups. I believe that the built environment does shape visitors responses but currently, since the style of evaluation that assesses this type of response is not incorporated into the process of exhibition development, the conceptual-interpretation process does not acknowledge it or take account of it.

The findings of this study, particularly the qualitative analysis of visitor meaning-making, revealed through in-depth interviews after the visit, demonstrate the value of the integrated, overall understanding of visiting exhibitions as a complex process, rather than quantitative, short term, cognitive ones. However, there are problems if too many conclusions are drawn from the data, since it is a very limited study. It was not possible to obtain a representative sample for all visitors to the exhibition but, because

of the interesting nature of the results, there are some areas where I can recommend that further research be carried out, albeit with a larger scale study.

The first recommendation is in the area of long-term, qualitative research relating to the visitors experience in the museum. Both aspects of this research are important: qualitative research because the thoughts, emotions and meanings of the visitor are being exploring and long term because, as demonstrated in Chapter 3, it is only over a period of time that it is possible to assess the range of occurrences and significances that their 'trigger memories' produce. The phenomenon seen in this research is that one person's visit can have a 'ripple effect' on a wider social circle and as a result generate subsequent visitations by several family and friends.

One of the important points, which arise from this study, is the value of undertaking qualitative research, not only on the visitor but also on the team members who create the exhibition. So often, there is insufficient time to reflect, 'debrief' and document the process of the exhibition and I believe that this dissertation demonstrates that this process could be a valuable re-iterative experience, for people to advance their understanding, improve their performance and meet their objectives. Research of this type could be a useful adjunct to the archival material, such as the development documents pertaining to the exhibition, since (if necessary) it could be referred to at a later stage and it could help inform future exhibitions and assist the museum in their mission to communicate more effectively with the visitors. One of the key findings, which emerge from the staff member interviews, is the fact that what had happened with the process and production of this exhibition component also informed aspects of programming, in a subsequent exhibition.

Lastly, this study demonstrates the important role that the researcher/evaluator holds when mediating between the exhibition providers and the visiting public. I believe that, if the exhibition development process was restructured to allow the evaluator to be part of the team, instead of an advisor brought in at a later date, then the team members could acquire a better understanding of how the exhibition is 'read' by the visitor. If there is a growing awareness in the museum field of the value of the dialogue with the visitor, then this is an opportunity for a significant new step in

incorporating that dialogue into the internal processes of exhibition development and not, as so often happens, as just a crude check that the audience 'got' the message.

In the last two decades, changes in the expectations of the public, opinions within the museum profession and approaches to governance have resulted in a paradigm shift in communication within the museum. This dissertation suggests that more research into the museum-visitor interaction could help to further improve the communication between museums and their public. I advocate for an increase in 'listening' to the public (qualitative research), greater involvement with the museum's professionals (advocating for the audience) and the provision of evidence to managers and stakeholders (the value of the museum to the public and society in general). I believe that museum researchers/evaluators have a key role to play in measuring the in-depth and longitudinal response of the visiting public to exhibitions, through which the museum's impact on the community is realised, embodied and amplified.

APPENDIX 1

Stowaways Communication Objectives

Audience: Stowaways will have a strong appeal to children but will also be engaging for the whole family.

Objective

To show that the natural environment of Aotearoa New Zealand is still at risk from the accidental introduction of alien species.

Visitors will:

- Learn how government agencies such as MAF try to protect our environment from the accidental introduction of alien species.
- Be shocked at how many species are intercepted at our borders every year.
- Enjoy discovering examples of these species 'hiding' within Stowaways interactive container.

Stowaways will:

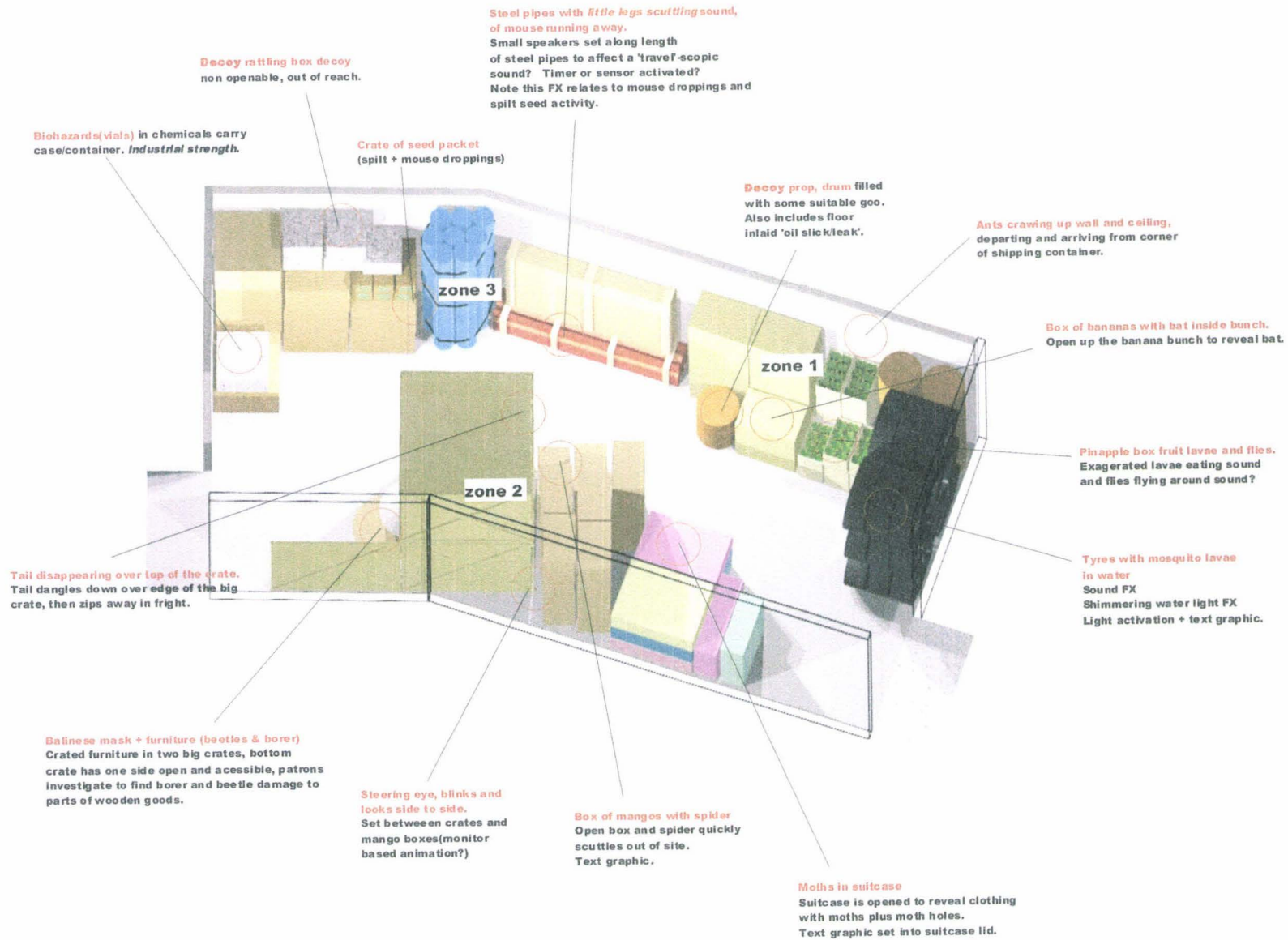
- Be a FUN, immersive experience
- Encourage interaction and discussion in-between visitor groups
- Encourage repeat visitation

Visitors will understand that:

- There is a great variety of 'stowaways'
- They hide in all sorts of places – they are very hard to find
- They are mostly small
- There are lots of them
- They come from a variety of countries
- It is IMPORTANT to our country that they are intercepted at our borders

APPENDIX 2

Isometric drawing of *Slowways* container in *BEF* exhibition Te Papa



APPENDIX 3



The entrance to the *Stowaways* container in *BEF* at Te Papa



A box of mangos is pushed aside to reveal the maggoty ones below!

APPENDIX 4

Observation sheet

9 Mask and beetle holes

Saw ☐ Read ☐ Button ☐

Discussion

7 Desk & termite tracks

Saw ☐ Read ☐ Opened ☐

Discussion

5 Spider in pineapple

Saw ☐ Read ☐ Opened ☐

Discussion

11 End List

Saw ☐ Read ☐

Discussion

12 Insect display

Saw ☐ Read ☐

Discussion

10 Bio-hazard vials

Saw ☐ Read ☐ Opened ☐

Discussion

8 Seed packets

Saw ☐ Read ☐

Discussion

6 Bats under bananas

Saw ☐ Read ☐ Lifted ☐

Discussion

3 Maggots in mangoes

Saw ☐ Read ☐ Open box ☐

Discussion

2 Mosquito larvae in tyre

Saw ☐ Read ☐

Discussion

4 Suitcase with moths

Saw ☐ Read ☐ Opened ☐

Discussion

1 Entrance attactor

Saw ☐ Read ☐ Entered ☐

Discussion

Stowaways Visitor Survey

Observation No.

Date Time

Group

Observer

59

APPENDIX 5



Interview checklist for Te Papa staff

NamePosition (at the time).....

Contact telephone..... Date.....

Please will you read and sign the consent form.

I would now like to ask you some questions about your professional role in the exhibition creation process. This interview will last about an hour, I will be making notes and recording the interview to transcribe at a later stage.

1. Please explain to me your role in the exhibition creation process.
2. Explain your involvement in the initial concept discussions for this exhibition.
3. Tell me about your initial ideas for the segment of the exhibition that is being studied.
4. Explain how the ideas evolved as the design process developed.
5. Explain if the segment, as finally built, is as you envisioned it.
6. Is there anything that you feel was missed out?
7. Tell me about discussions you had with other team members about this segment of the exhibition.
8. Having read the report of the summative evaluation are there any visitor responses that you would like to comment on?
9. Is there anything else that you would like to mention regarding the exhibition?

Thank you for your time.

Lynne Carmichael Allan (researcher)

APPENDIX 6



Verbal consent and interview questions for visitors:

Name.....

Contact telephone Date

It is now over 12 months since you visited the 'Stowaways' segment of Blood, Fire – Whangai, Whenua, Ahi Ka at Te Papa and took part in a Summative evaluation.

I am conducting research for my MA thesis and would like your permission to ask some further questions related to that visit, it will take about 5 minutes.

1. I'd like you to tell me about your memories of the space.
2. Now tell me how you felt whilst you were in the space.
3. Tell me about any conversations that you have had about the display with the group that you visited with.
4. What about conversations with other people on what you saw?
5. Can you give any examples of instances that have reminded you of the exhibition?

Thank-you for your time

Lynne Carmichael Allan (researcher)

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