

**MUSEUM LITERACY:
A SOCIOMATERIAL STUDY OF
FAMILIES, LITERACIES AND
MUSEUM OBJECTS**

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as part of the collaborative doctoral degree and/or fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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PREFACE

Museums matter to the public. The investment in museums, expenditure and visitation is considerable and continues to grow with around 2,500 museums and galleries in Australia and 3.5 million people visiting national cultural institutions in 2013¹. Museums matter to me. I worked in a Sydney museum of international standing for over 20 years. During this period I cherished my twin passions of creating public programs and making connections between the collection and its public owners. The germination for this study was in my questioning in the 1990s of the best ways to encourage young visitors to engage with objects. Children were observed rallying between screen-based interactives with scant attention to collection objects or their stories. Now related to 'zigging and zooming' (Hackett 2012, p.13), as a form of literacy this behaviour worried me as I believed it to be the seduction by electronic interactives predicated on answers which were either correct or incorrect. Although electronic interactives were then an innovative feature, I saw them not as part of a multimodal assemblage, but powerful actors distracting visitors from the core museum experience – the stories and wonder on offer from the collection. As initiator and coordinator of the 'Kids, Customs and Culture Education Kit' project (Schaffer & Vytrhlik 1995), I led a team working with children to document their favourite home artifact and place using a disposal camera and a diary as well as sourcing museum objects relating to their culture. As later theorised within *Artifactual Critical Literacy* (Pahl & Rowsell 2003; Pahl & Rowsell 2010; Walsh 2011) the artifacts proved an excellent stimulus to the children writing and illuminating connections between their homes, their histories and the museum itself.

After my role in preparing the Educational Kit, I authored 30 museum publications for children and a suite of public programs and exhibitions for families.

¹ The peak representative body representing the industry collated national figures from credible sources (pers. communication with Alex Marsden, 5 July 2016) to prepare 'Raise your voice' (Museums Galleries Australia 2016) an advocacy document for the sector.

Wherever possible my work was characterised by the tracing of links to objects back through to the creators and makers; association with authentic experiences; opportunities for creative self-expression and reflection by the visitor; and enjoyment by the family audience. The projects most aligned with this research were the series of collaborations with Australian children's authors who wrote fictional narratives as labels for collection objects.² Visitors were also invited to write their own labels to be temporarily in the exhibition. So many labels were written that staff had to retire labels to make room for more. These exhibitions did not, and I would argue could not, arise from curatorial practices which by nature are specialised and disciplined based. The selection of objects was based on the criteria that they were affectively compelling and had an interesting 'back story', which did not have to conform to the larger display narrative. It was simply interesting. The projects were grounded in partnerships with artists and the audience. They utilised interpretive techniques that were from the educator's toolbox. As an example, I briefly describe one of the projects called *The Odditorem* as it here my interest in the spaces between families, objects and literacy commenced.

The Odditorem

Exhibited in 2009 and 2010, *The Odditorem* was a small exhibition (book, program, website and travelling show) developed in collaboration with children's author-illustrator Shaun Tan³. His response to my brief was not simply to write the fantastical but to ornament the possible in a kind of bricolage, where materials are combined to create new ideas (Turkle 2011). The label entitled 'Guide Dog testing device 6' (Figure 1) is an example of this bricolage which combines factual information with fanciful descriptions.

² *The Odditorem* project (exhibition, book and website) paved the way for *The Tinytorem* exhibition and book (with Jackie French and Bruce Whately); *reveal trail* (with Morris Gleitzman) and *The Oopstoreum* with Shaun Tan.

³ Shaun Tan is an author, illustrator and animator. Receiving an Academy Award in 2011 for Best Short animated films for his novel *The Lost Thing*, Tan also received the prestigious Astrid Lingren Literary Award. See <http://www.shauntan.net/>

Guide Dog testing device number 6⁴

This enormous liquorice all-sorts shoe is one of several outlandish objects used to test young guide dogs for their susceptibility to distraction while on duty. A tricycle inside the shoe allows a rider to manoeuvre this colourful vehicle while prospective guide dogs are put through their paces. The shoe appears at the moment an important task needs to be performed, such as crossing a road, laying quietly in a restaurant, or entering a lift. Dogs are then assessed on their ability to maintain composure and focus, thus preparing them for the challenges of the real world. Other 'canine distracters' commonly used by training staff include a Volkswagen covered in sausages, an ice-cream van that spills colourful rubber balls, and a litter of kittens riding on a miniature steam train.

Figure 1: Label authored by Shaun Tan for The Oopsatorium exhibition

Seven labels were written by young children from a local school as part of my practice of visitor collaboration and I treated these with the same production values as those written by Shaun Tan. I invited visitors to write and publish their labels in the exhibition space. Visitors produced work they were satisfied with, frequently recording their pride on cameras and smartphones. The constantly changing display became one of the most popular aspects of the exhibition. A selection of the writings was scanned and posted to be viewed online⁵. Below are samples taken from visitors' writing inspired by a museum object, a ball of puree⁶.

A ball of hippogriff ear wax. (Abby, aged 18 yrs)

They would use this to dye clothes yellow. (Emily 6–7 years)

⁴ High-heeled shoe on a tricycle called *Liquorice Allsorts*, designed by Ross Wallace for the Sydney 2000 Olympic Games closing ceremony.

⁵ See

http://www.flickr.com/photos/powerhouse_museum_photography/sets/72157621891871473/

⁶ The ball of puree is museum object 17431-1. Puree is yellow pigment used to dye fabrics and is recorded to have been made in India about 1887. The original file record stating that 'the puree was made from the wee of an elephant (or a cow) fed only on mango leaves', makes the fictitious label as plausible as museum documentation.

This potato is the oldest one in the modern days of the plant. (Kathrine, 9 years)

This is a fairy's house disguised as a rock. (Samantha, 10 years)

This rocks helps you if you are hot, its smooth surface cools the skin. (Izzy, 13 years)

The object information was posted nearby so that curious visitors could seek it out. Visitors' responses often referred to the information provided on these text panels. The exhibition proved that adults and children were equally engaged by the unconventional approach of invented narratives and stories. Visitors were as much inspired by a well-known author as they were by much lesser known child authors with visitor labels sometimes including variations of both the child's and adult's authored museum labels. Visitors would also write variations of other visitor labels. I was alerted to the interplay of objects, text, adults and children within the exhibition space with Nina Simon, museum commentator best known for her influential blog entitled *Museum 2.0*,⁷ who maintained:

While many Museums have experimented with "write your own label" campaigns, the *Odditorem* was unique in its request that visitors write imaginative, not descriptive, labels. While many visitors may feel intimidated by the challenge to properly describe an object, everyone can imagine what it might be. The speculative nature of the exhibition let visitors at all knowledge levels into the game of making meaning out of the objects. And yet the imaginative activity still required visitors to focus on the artifacts. Every visitor who wrote a label had to engage with the objects deeply to look for details that might support various ideas and develop a story that reasonably fit the object at hand. (Simon 2010, p.162)

The Odditorem appealed to all ages, despite the long and conceptually challenging object labels. The labels provoked interest and I questioned whether this interest arose because the author had not reframed curatorial research into a simpler form but re-created it into a fictional mini-narrative. Did the appeal come from

⁷ <http://museumtwo.blogspot.com.au/>

discarding the anonymous curatorial voice? Was it the use of humour? Was it the objects, or as Tan suggested, a new hybrid form for text and object? The hybrid novel is described as the combination of word and image to create a new text (Sadokierski 2010), and I wondered whether *The Odditoreum* was an exhibition of new texts made up of hybridised object-texts.

This exhibition turned objects from purely mnemonics or memory tokens into 'thinking' devices. And this thinking was powerfully manifested in conversation, drawing and writing. How could museums drill into those moments? Literacy had begun to surface as a linking motif across these queries. My interest in the concept had been to forge another avenue for visitor engagement with objects and in doing so a series of observations were made about museum practices. These observations became the impetus for the study.

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ABSTRACT

This research explores a new museum space which connects literacy, museum objects and families. I argue that this space presents opportunity for transformative encounters for visitors when literacy can encompass affect and is amplified through literacy mediators and the resources different generations visiting together bring to each museum visit. The study uncovers ways that cultural institutions can recognise the potential for literacy within their collections when they look beyond the achievement of the meanings they would like acquired to an appreciation of literacy practices by family groups. Museums through their collections are strongholds of the material and semiotic realm yet the relationship between literacy, objects and visitors remains largely unexamined, limiting literacy to visitor comprehension of museum content generally conveyed in print. I introduce theoretical tools, including concepts of materiality, spatiality, affect and mediation to help understand key dimensions in the literacy interactions between families and museum objects.

Adults with dependent children are a large visitor group to museums. Their representation in museum studies has had little impact on mainstream exhibition programming beyond exhibitions for children. Non-mainstream visitors from less well-resourced demographics can be streamed into the museum via worthy and justifiable access programs, but to date these visitors have had few opportunities to influence the accessibility of the museum's core offering.

In this study nine families were recruited from community agencies that assist marginalised or vulnerable groups to visit the Tasmanian Museum and Art Gallery and the Museum of Old and New. Through positioning the literacies of these families as a benefit, rather than liability, and literacy as socially and materially assembled, the study expands the number of actors within the museum research assemblage. A mosaic of methods was used to identify literacy practices, including observation, guided discussion, photography, onsite recorded conversations, and participation in programs such as drawing, writing and other documentary or creative activities that did not privilege age, ability or background. Literacy became a set of theories, methods, products and actors within a material semiotic framing. Experimental writing

of tiny fictional vignettes by the researcher gives life to things in the research and opens up different patterns of thinking. These writings are study motifs, being emblematic of the theoretical approach taken.

Collections of objects are the essence of a museum and pivotal to its public face. Each object is a significant currency of its institution, yet the economy between families, objects and other previously unrecognised actors is little understood. By specifically interrogating the intersection between families and objects, this study argues that museums can develop new partnerships and practice directions. Overall, the findings of this research extend the opportunity for museums to reshape their interpretative relationships and see their collections and visitors in new ways.

1.

INTRODUCTION

This chapter describes the research contribution made through theorising and examining three material entities – families, literacies and museum objects. The rationale for such a combination is outlined within the study's positioning. The literature review confirms that combining these three entities is rarely documented. Bridging between where the thesis is headed and how it was assembled is a range of drivers synthesised as research aims. I give an overview of the research accompanied by an outline of how each chapter serves the thesis. As a platform for the remainder of the study I show the research as growing out of my experience of the museum field, with the interplay between theory and practice a constant throughout the study.

1.1 Contributions

The essential premise of this thesis is that museums are transformative spaces, a claim validated through research that identifies the dynamic between material entities that are not commonly combined within the field of museology. Through a close focus on practice aided by socio material theories objects are shown to be complex, literacy as multiple and family visitors as an asset to scholarship rather than simply a museum audience to be catered for. But first, *imagine* what literacy looks like in a museum. One might first think of a solo adult reading an object label and looking at an object. If that adult cannot understand that label, it must be changed as otherwise that adult is unwelcome; but now other adults are no longer interested in that object as the label has become so simplified that it tells them nothing new. Could the extent and outcome of the search for museum literacy simply be an exercise in disappointment, the result of an unsatisfying matching exercise between limited literacy repertoires that have the vexed aim of achieving an agreeable content linked to the reading level of the adult visitor? Museums are rich, social, multimodal environments, and assuming this simplistic notion of literacy is a disservice to any potential recipient of the theoretical

resource it represents. This research extends this *material imagining* (Anderson & Wylie 2009; Winthereik & Verran 2012) through enrolling families and objects to enable consideration of an ecology of literacies within a sociomaterial framework.

Museums are struggling to position themselves as places of education, research, culture and/or tourism (Griffin et al. 2011; Merritt 2012, 2013, 2014, 2015, 2016b; Newman 2013; O'Neill 2006) in an external landscape wracked by fiscal, environmental, social and community concerns. Museums find themselves in enviable switching positions between scholarship and access; between an authoritative or participatory culture.⁸ An understanding of the actual and potential array of literacies within a museums' remit is presented by this research as a way to overcome this identity crisis. Museum collections become a literacy resource.

To assist this understanding, nine families were recruited from community agencies that assist marginalised or vulnerable groups in Tasmania. Families visited the museum of their choice twice over a period of between two to eight weeks. The everyday or home literacies of the families were uncovered during recruitment and informed the observation and analysis of their visits to either the Tasmanian Museum and Art Gallery (TMAG) or the Museum of Old and New Art (MONA). Through positioning the literacies of these families as a benefit, rather than liability, and literacy as socially and materially assembled, the study expanded the number of actors within its research assemblage to include the researcher, museum staff, objects on display, things brought into the museum, technologies, systems and ideas. A mosaic of

⁸ These conflicting positions can be seen in museum conference themes and blogs. For example, a key theme for Museums Australia 2015 conference was 'Message – People have Agency' with this descriptor, 'There are many different voices demanding access to the heart of the public realm, who decides which voices occupy that space? The audience has been empowered in recent years, are we too obsessed with audience needs? Does the public expert still have a role in the modern museum or is the audience the new curator? How much of these changes have been driven by new digital technologies and how much has been driven by new socio-economic realities? Has our love affair with the audience divorced us from our collections?' from <http://www.ma2015.org.au/> accessed 20 February 2015. Blogs such as <http://museumtwo.blogspot.com.au/>; <https://incluseum.com/>; <http://futureofmuseums.blogspot.com.au/>, <http://www.freshandnew.org/>; <http://themuseumofthefuture.com/> refer to this tension between access and scholarship.

methods was put to use to identify literacy practices in the museum. Methods included observation, guided discussion, photography, onsite recorded conversations and participation in programs such as drawing, writing and other documentary or creative activities that did not privilege age, ability or background.

To achieve meaning in the study a research *machine* coherently linked the data collection phase with the analytic phase (Fox & Alldred 2015). This machine is called a praxiographic strategy (Bueger 2014; Gherardi, Nicolini & Strati 2007; Mol 2002) acknowledging that research as a practice is accompanied by inherent uncertainties requiring constant tinkering within its methodological bracing⁹. This study is informed by a group of theories or sensitivities termed *material semiotics* (Law 2008; 2009a; 2009b), which has its origins within Actor Network Theory. Praxiography was attuned to the theoretical demands of both literacy and material semiotics in their alignment with practice. Practice, however is a messy business. Faced with the fieldwork clutter and the complexities of the primary entities of museum objects, families and literacy, I streamed the theory and the practice iteratively through four key concepts: materiality, spatiality, affect and mediation to generate meanings or 'collateral' (Law 2012) as they cannot be separated from the minutiae of practice assembled within the museum and in many instances drawing from practices originating from different times and spaces. A focus of attention is the group of literacy practices transported from home and those disrupted through the research intervention. The four significant meanings demonstrated by the fieldwork are: literacy in the museum is an affective encounter, with the child emerging as a powerful actor within each encounter; literacy as a boundary object can be an opening for productive dialogue between the home and the

⁹ I use the term 'methodological bracing' despite Latour's apparent distaste for it. Latour, (one of the originator's of Actor Network Theory, often shortened to ANT) in his fictional account of a discussion between a professor and a student is critical of the expression accusing it of turning actors into placeholders. 'P: I would leave aside all 'underlying frameworks', if I were you. S: But, your sort of 'science', it seems to me, means breaking all the rules of social science training. P: I prefer to break them and follow my actors ...As you said, I am, in the end, a naïve realist' (2005; p156). I understand that Latour is arguing against a routinised use of the precepts of ANT. My fluid application of my bracing is presented as Interlude #2 (p.127).

museum; literacy can be literacies; and whether singular or plural, literacy would be enhanced through the deployment of literacy mediators.

In summary, this study's contribution to museum practice is in moving literacy within a museum from a static to a dynamic being that arises from a group of actors, including visitors, objects, artifacts and ideas. Literacy is theorised within the Ideological Model (Street 1984) and is no longer confined to being a portable and limited range of skills or set of techniques transported into and out of the museum, but is expanded to something dynamically created. The concept of affect and the existence of a parallel, rather than alternate, space in which to experience the museum are shown as valuable, creative and relevant to literacy practice. Literacy mediators can be fashioned by museums from within existing and available resources.

This research links the multiplicity of literacy theories to the sensitivities of material semiotics (Law 2009a) through patterning each within concepts of materiality, spatiality, affect and mediation. The study applies the *thingness* of Artifactual Literacies (Pahl & Rowsell 2003) in identifying home literacies then extends Artifactuality into materiality within the museum. Instances of literacy as 'literacy-in-action nets'¹⁰ are used as empirical units rather than literacy events (Baynham 1987). The vitality of objects is aired and becomes a tool (rather than a belief) contributing to the reconceptualisation of objects as agents within a material semiotic framing. The key concepts of materiality, spatiality, affect and mediation arose through initial coding of the fieldwork and in turn informed the distilling of the theory and the writing back into the data.

I approached this study by recognising that any view of reality is brought into being through the relationships of the participating elements or actors. As a prominent thinker in the MS arena writes 'Realities are not real outside the chains of practices that perform them' (Law 2009c, p. 242). Meanings associated with this complement the sociomaterial framings, making them more 'user friendly' to future researchers, museums and other educational providers.

¹⁰ A study specific variation of the term 'action nets' (Czarniswska 2004)

1.2 Research aims

1.2.1 Aims

The aim of this thesis is to identify a performative relationship between museum objects and families. Performativity emphasises practice that arises, is enacted or is made between entities. In this case the practice of interest is the literacies as exercised and generated by family visitors, the potential impact on the museum practices of public programs and exhibitions and, in turn, the influence upon changing the communication practices and priorities of the museum itself. This interest emerged from the factors that drove the study and influenced the research aims. The factors were its ethics and values; personal motivation; and worth to the sector, and these are outlined in sub-section 1.2.2. The aims distilled from this discussion are to:

- a. Trace the interactions between families and objects through an exploration of the realised literacy practices of visitors rather than any expectations of what those literacies may be.
- b. Embrace the imaginative and unexpected in the relationship between objects and visitors rather than solely capture the museum's intended messages and meanings.
- c. Champion social and material inclusion within museums by drawing on the notion of symmetry or equivalence between adults and children and between people and things.

1.2.2 Values

Ethics and values

Ethical considerations assisted in making key research design decisions. The three main ethical values are those of social inclusion, visitors as citizens, and the rights of the child.

The first consideration is that of equity and social inclusion. 'No matter what a museum's legal structure, whether publicly funded, or authorised by society to function as a charity, it is expected to contribute to the common good' (Sandell & Nightingale 2013, p. xxi). This sentiment is a continuation of the trend towards equity

and access in museums commenced in the 1980s (American Association of Museums Education 1992). It is questionable whether this inclusive zeal is current across the industry, and debates continue over the best way to achieve it (O'Neill 2006, 2008). A powerful perspective is that museums construct and reproduce a particular view of society (Sandell 2003) condoning elite groups to affirm their authority (O'Neill 2006; Newman 2013). The argument continues that instead museums could become a vehicle for social change by taking up issues of climate change, health, unemployment and so on. One problem with this approach is that the exclusion of certain groups may be amplified by the discourse surrounding problems confronting these groups unless they can represent themselves (O'Neill 2006). Or simply, many people may not want to engage with difficult issues in their leisure time.

The content response to social inclusion is either a boutique program or a blockbuster exhibition. The populist and much maligned 'blockbusters'¹¹ are secured to attract a range of groups, including families. Inclusivity is an argument for this 'product'. Access, with undertones of entertainment, can then result in the transmission model of museum communication pitched at a perceived level of universality. Access can alternatively be aligned with 'audience development' whilst amplifying museums as sites of social value (Scott 2006). In the case of boutique programs, access can mean adoption of business model terminology where visitors are segmented and catered for accordingly (Falk 2011; Grek 2004; Morris Hargreaves McIntyre 2012). These are often specialised programs for the disadvantaged or non-traditional audiences, such as families (Yakusawa et al 2013), which are applauded while the organisation maintains unwavering control of its artistic and scholarly autonomy (Dawson 2014; Tlili 2008). A research aim is to facilitate social inclusion through addressing core museum communications rather than the grand or small project.

The family is the focus, not the child. Nevertheless a values position was that each child should be accorded equal respect to that of an adult within their cultural and social lives. Consideration of participatory research methods for children was

¹¹ A recent thesis identified the four key characteristics of the blockbuster: celebrity; spectacle; inclusivity; and authenticity (Rentschler, Bridson, Evans 2014: Abstract). An example of Australian blockbusters are 'Harry Potter™: the exhibition' at Sydney's Powerhouse Museum (now the Museum of Applied Arts and Sciences) in 2012

therefore appropriate. These methods recommend seeing children as acting with intention and agency (Hill, Greene & Hogan 2004; Thomas & O'Kane 1998).

Researchers from the specialised field of Children's Geography (Morrow 2008; Skelton 2008) stress the existence of the 'social child' who has different competencies and interests to adults yet are comparable research subjects. Therefore fieldwork activities should ensure that all competencies exist within the family (Christensen & Proust 2002), including representing and reinforcing the authority of the child (Midgley et al. 2014). For this study, I retrieved data using methods that did not privilege age, personal abilities and backgrounds. I assert the research's participatory nature through using family-friendly materials, choice and feedback during data collection (Franks 2011), as well as the analysis placing 'high value on the stories and feedback of research participants' (Deacon 2000, abstract).

The visitor-as-citizen is another ethical issue at play in this study. A primary aim is that the participants (adults and children) be regarded as citizens with rights to shape their own experience of the museum, rather than consumers with rights conferred. Recruitment from community agencies that worked with adults who were self-identified as having low literacy and/or poor social/cultural capital was not undertaken to identify participant needs in order to devise remedial literacy programs but to inform the museum industry. Educational programs could benefit from this study, but these programs would not be based on a deficit view of learners or literacy. Each of the participant's literacy encounters are not described as a benchmark to compare with the literary practices of others. Changes in literary practices may come from unexpected quarters, including the interactions with other actors, which in this study include new technologies and people of different ages and abilities. In this way meaning could be achieved by valuing, interrogating and applying differences rather than external standards (Law 2009c, 2012, 2016).

It was not a research aim to create a passive recipient base (Levitas 2004). Both Standpoint Theory and New Literacy Studies (Chapter 2) granted authority to this decision. Material semiotics (Chapter 3) is used as a critical theory in dispensing with a priori categories of macro and micro, rich and poor, literate and illiterate. Families are an important yet diverse group, visiting a museum outside of school hours – and the

values focus is their collective, actualised and potential strengths as contemporary communicators. The analysis avoided retracing familiar and elitist pathways, thereby averting 'correct' museum behaviours and literacies set externally (Compton-Lilly, Rogers & Lewis 2012; Rogers & Elias 2012; Whitehouse & Colvin 2001). In combination the values outlined in this section helped shape the research methodology and research methods through establishing a series of inclusionary aims.

Worth to the sector

Museums are products of the societies that create them and so they change. The museum sector is still living with many of the significant changes from the 1980s that are nested under the term 'the new museology' (Vergo 1989). Whilst that decade is popularly represented as overblown and greedy, its wealth meant an expansive and innovative period for museums, giving rise to the polysemic museum (Bennett 1995). The traditionally taxonomic categorisation and depiction of collections, at least in the major or well-funded institutions, became thematic exhibitions integrating object, text, graphics and multimedia in a highly orchestrated way (Hooper-Greenhill, 1992). Thirty years on, the increased usage of electronic technology has resulted in complex displays of material culture¹². As a result there is an identifiable shift in the ways museums use their collections and relate to their visitors. The museum industry's hope for the new 'new' has been updated into labels such as the 'responsive museum' (Lang, Reeve & Woollard, 2006); 'transformative museum' (Kristiansen 2012) and 'participatory museum' (Simon 2010), yet the institutions struggle with the potential loss of authority these changes may represent (O'Neill 2006, 2008). Literacy goes to the heart of communication and so exploring literacy theories grants new insights for museums wanting to transform from the old transmission model of communication to a new transactional one.

The Programme for the International Assessment of Adult Competencies (Australian Bureau of Statistics 2013) reported a significant number of adult

¹² The recent American Alliance of Museums Awards for media and technology in exhibitions has twelve categories including multimedia installations, video, film and computer animation, audio tours and podcasts, games and augmented reality, interactive kiosks, interpretive interactive installations and mobile applications (Merritt 2016a).

Australians' language, literacy and numeracy skills were below a level required to cope with a range of printed material in daily life and work.¹³ Literacy is a difficult concept to pin down due to the pedagogical landscape where the dominant skills-based approach is pitted against another more ideologically informed perspective on literacy. Therefore numeric measuring and reporting on literacy levels is contentious yet nevertheless cannot be dismissed or ignored. Museums as knowledge agents should have a position on literacy so that they can understand the implications of any survey that generates such community concern.

Museums are in the process of re-positioning themselves in an attempt to retain relevance and vitality in the new millennium. It is likely that bids for the grand and expensive capital renewal of galleries may be increasingly challenging for governments to fund, so what would a sustainable museum of the future look like? One response to this question from a United Kingdom review is worth quoting in full in light of the research aims:

The best museum displays aim to simultaneously serve children of varied ages and adults from novice to expert. But museum display spaces tend to offer little beyond learning largely predetermined things. Children's art carts and in-gallery handling sessions show there is far more potential for varied activity within displays. Museums could *rethink* the ways they allocate their space, with less occupied with fixed display and more available for a wider range of activities: for workshops, for short-term pop-up displays, for performances, for discussions, for people and groups to come together [emphasis added] (Trevelyan 2012, p. 18).

Literacy and material culture united on a theoretically informed base provide a valuable contribution to the recommended *rethink* and *repositioning*, not just for current

¹³ One of the international tests used to measure literacy and numeracy is the Programme for the International Assessment of Adult Competencies (PIAAC). For literacy and numeracy, proficiency scores are grouped into six skill levels with Below Level 1 being the lowest level and Level 5 the highest. About 43% (7.32 million) of Australians aged 15 to 74 years had literacy skills below Level 3 and only 1.2% (200,000) at Level 5. For numeracy, the figures were somewhat lower. About 53% (9 million) of Australians aged 15 to 74 years had numeracy skills below Level 3 and only 1.4% (230,000) at Level 5 (Australian Bureau of Statistics 2013).

family audiences but also for a broader audience base. Curators, registrars and conservators assume ownership over the collection and though their roles are not as instrumental as they once were (Anderson 2005; McCall & Gray 2013) they are a significant group to influence. Regardless of object 'ownership', all museum workers have coverage over the collection so that speaking directly to public interaction with objects also speaks directly to a museum's core business. Literacy may be of such community concern that it attracts broad stakeholder interest and provides the platforms for new partnerships between museums and literacy providers and between visitors and the museum.

Motivation for the research

Whilst I encouraged the voices of the participant families to be the strongest in the account (Latour 2005; Nagar-Ron & Motzafi-Haller 2011; Weibel 2007) my writing into the data is essential to the research story and my motivation for undertaking the study is therefore salient. Three aspects of my work intrigued me and each was important in framing the research.

The first aspect was the intersection between exhibitions and public programs. As a rule, exhibitions are assembled by curators and programs by educators. The exhibition program drives a cultural institution; its needs are those of the organisation and in turn these institutional needs are used as collateral to attract sponsorship and other stakeholder support. Exhibitions, whether short or long term, are both tangible and prestigious. Conceived as micro worlds they are conceptually and occasionally akin to theatre pieces, yet by repute they reflect the museum's curatorial expertise and specialist knowledge. Generally the associations made by the curator during content development are between content peers, including artists likely to be validated via their works being collected. After the exhibition has opened, the curator typically has little or no contact with the public unless they lead exhibition tours, which are almost always for adults. By contrast, public programs generally involve people in performance or presentation. These programs are produced by staff that have public contact and confront and enjoy visitors' responses to their efforts. This moves their work beyond visitor counts to more visceral engagement. Producers and educators expect to work with a diverse range of visitors and indeed are often responsible for

non-mainstream audiences developing boutique programs in addition to large-scale events that can become signature programs for the host institution. Not surprisingly education and programming staff sees families as mainstream in their work, whilst families are not a priority for the curatorial staff,¹⁴ despite them being a significant audience group¹⁵. As can be seen, programs and exhibitions occupy overlapping yet distinct territory and the locus of my intrigue became the exact nature of these spaces and how they might enrich the visitor experience rather than compete for sovereignty.

My second area of interest generated by working within the sector was the dynamic between families and the museum. When representing the collections I was allowed to work in spaces previously occupied by curatorial staff. This was in part an acknowledgement of my skills and experience, but intuitively I felt these attributes would be of less consequence if I had not chosen to apply them explicitly to the family audience, including children. Family visits are heavily negotiated yet undertaken in the spirit of anticipation and adventure within the museum environment. Families are of interest to the museum as a visitor segment and they are analysed as learning units (Kelly et al. 2004; Morris Hargreaves McIntyre 2012) but not generally seen as informative to other visitor segments.

The creative influence of children on adults within families in settings outside the home seems largely ignored or discounted. My observation of a child's effect within a museum visit is expressed by the curators of MoMA's survey of 20th century design for children in saying that as 'an embodiment of what might be, children help us to mediate between the ideal and the real: they propel our thoughts forward' (Kinchin &

¹⁴ This assertion is based on my experience within the museum sector.

¹⁵ Families are a significant audience group for museums with 40% of art gallery visitors from households with dependent children and 47.5% of visitors attending museums. The adults in these household may have visited the museum or gallery with or without their children nevertheless the fact that they are part of families will have some impact on the planning or nature of their visit (Australian Bureau of Statistics 2015).

According to Children's Participation in Cultural and Leisure Activities, April 2009 (cat. no. 4901.0), just over 1.1 million children (41%) aged 5 to 14 years had visited a museum or art gallery outside of school hours in the 12 months prior to interview. In 2012 this figure grew to 1.2 million children (43%) (Australian Bureau of Statistics 2015).

O'Connor 2012, p. 15). Yet children do not arrive at a museum alone. Children are with a family or as part of an excursion and legally under adult 'supervision' and interaction of varying degrees. Consistent with material semiotics, how these relationships work is of greater interest to me than investigating the child-only reactions. Very early on in visitor research, families were recognised as energetic learning units. The literature bias is towards the parent as teachers and mentor within interactive teaching-learning set pieces (Ellenbogen, Luke & Dierking 2004; Piscitelli & Anderson 2000; Falk 2012). Rather than a priori assumptions, my interest is within a family relationship where actors *become* dominant rather than have their dominance assured by their age or family role, such as father.

The third area of interest is museum objects. I am enchanted by them. Before or after opening hours, I would walk through the museum and amongst the hidden stores looking for objects to display or write about and I would feel 'the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle' (Bennett 2004, p. 351). Treating this as a romantic notion, I would nevertheless include references to the liveliness of matter when writing about objects or speaking to visitors. I would tell visitors that the objects danced at night when no one was watching and that visitor and staff conversations were animating spaces already alive with object 'voices'. I use these 'voices' within the theatre of the museum to promote visitor interest in the object. I respect the specialist curatorial voice, and this is not the issue. My interest is in considering what objects could offer beyond being a mouthpiece for the museum.

In summary, as a practitioner my curiosity is piqued by wondering how public programs and exhibitions can use the space between these practices to promote literacy practices, and how museums can better utilise the participatory engagement engendered by activities for families and thus better understand the agency of objects.

1.3 Positioning

1.3.1 Literature

Research into museums and families is not uncommon. However, literacy and families and literacy and objects are not usually celebrated as partners in the literature.

The results of my literature review are arrayed in two groups, which I describe as 'the gap' and 'the opening'. The former comprises studies of interest which were nevertheless insufficiently aligned with one or more of the study's priority areas to have significant impact on this study. Readings noted in 'the opening' are instructive to either the research methods or the methodology.

The gap

During the 1980s museum studies focussed on learning continued to increase as museums sought funding justification (Hooper-Greenhill 2004). Learning and families were a common pairing, particularly in research into science museums (Crowley et al 2001; Dierking & Falk 1994; Ellenbogen, Luke & Dierking 2004; Haden 2010; Hike 1989; Hooper-Greenhill & Moussouri 2001; Sanford, Knutson & Crowley 2007; Sterry & Beamont 2006; Tennebaum et al. 2010; Zimmerman, Reeve & Bell 2010). Learning dominated the literature groups, with common keywords and topics including personal agenda; narrative; identity and learning; shared learning, gender and learning; fun and learning; choice and learning; attention, interest and learning; and recall and learning (Kelly et al., 2004). Literacy is not named in visitor studies, nor is the intergenerational group dynamic a central focus. Learning is positioned as a process of construction from the basis of experience and prior knowledge in a learning-centred model. Museum learning theory draws primarily from socio-cultural theorists such as Vygotsky, Csikszentmihalyi Gardner and Dewey (Ebitz 2008; Moussouri 2002; Rennie & Johnston 2004) with a focus on constructivism (Hein, 1998; Durbin, 1996; Falk and Dierking, 1992) within communities of learning (Lave and Wenger 1991) and hermeneutics (Hooper-Greenhill, 2000). Except for informal learning in science museums and centres (Gutwill & Allen 2010), scant academic research has been published since 2004 about families in museums. Generally the families in these studies are sourced from within the museum or institution. In any event, the focus on learning and families in science museums and centres in this literature is unhelpful to this study because these venues do not hold or interpret ideas via a collection. Nevertheless, this focus could indicate an untested assumption that object-rich exhibitions would not be suitable for families.

The learning studies verify that families are a unique 'learning group of mixed ages and backgrounds bound together by a complex shared system of past experiences, beliefs, and values' (Ellenbogen, Luke & Dierking 2004, p. 49). The literature also points to potentially valuable research methods, including time and tracking studies; following family conversation (Allen 2002; Griffith et al., 2005; Leinhardt & Knutson, 2004); video and audio recording of moment-by-moment interactions, pre-and post-interviewing; journaling; talk-aloud cued visits; providing family members with cameras as a documentation and meaning (Ellenbogen, Luke & Dierking 2004) and unpacking patterns of meaning across all museum interpretive media through use of socio-linguistic tools (Blunden 2016).

Objects and literacy are combined in one-off or boutique museum programs with limited links to explicit literacy theories or documentation in the literature. Children's museums in the United States of America (USA) and the United Kingdom (UK) target families and address literacy through literary projects deploying the lives and work of prominent authors¹⁶. Generally an exhibition's focus is on promoting the discipline of identifying the alphabet and related sounds and/or embracing the familiar tenets expressed in Family Literacy programs such as adults reading to children.

The terms Museum Literacy, Object Based Learning and Critical Literacy have been used by museum educators. Museum Literacy has been used in museum studies (Stapp 1998; 1984) although is little used now. It was introduced as part of the positioning of museums as sites of lifelong learning whose aim was to enculturate visitors into the museum discourse as 'knowers' with the experience and expertise to read the museum space, including label texts, interactives and objects. At that time the sector was attentive to barriers to participation (Falk & Dierking 1998) and Museum Literacy was seen as a way of being inclusive, as any adult with the right training could be a 'knower'. A series of pan-European public programs are used as exemplars

¹⁶ Examples of exhibitions with a literacy theme are Treehouse Museum, 'Wordplay', 'Wild About Reading', 'Arthur', 'Where the Wild Things Are' and 'The Magic School Bus' in the United States of America. In the United Kingdom the Discover Children's Story Centre's Story Studio bases its exhibitions on the work of picture book illustrators. Seven Stories, the National Centre for Children's Books take a picture book from two dimensions into a three dimensional exhibition spaces. There are no known comparable examples in Australia.

to help people with conventional low literacy levels decode museum collections and the museum environment (Gazzari & Brown 2010). Whilst calling this approach 'museum literacy', these boutique public programs (admirably) addressed cultural literacy. The Gazzari and Brown paper addressed conflicting values between visitors and museum, promoting openness to different interpretations in a bid to sensitise staff to diverse audiences. Such an approach could be called upon in developing literacy mediators.

The approach of Object Based Learning has similar accessibility aims to Museum Literacy through training visitors to decode objects in a systematic way so that those groups with less cultural capital can better understand museum exhibitions (Borun 2002; Leinhardt & Crowley 2002; Leinhardt, Crowley & Knutson 2003; Paris 2002; Reid & Naylor 2005; Gazzari & Brown 2010). Many museum education staff thought of objects as too complex for children to understand and so they promulgated formulaic pedagogic scaffolding (Durbin 1990; 1999). Other staff believed objects to be easy to read, even by those without conventional language and literacy: 'The range of reading and writing ability within a class can divide it across a very wide spectrum, the range of ability in dealing with objects will divide them much less' (Barwell, cited in Kerrigan 2009, p. 2). Visual Literacy, like Object Based Learning, is used to enable the visitor to understand the meaning of the work or object as the museum intended, analyse cognitively what it may mean to the visitor or critically analyse the content of works but not the work's presence in the gallery (Jacobs et al. 2009). Object Based Learning, Visual Literacy, and Museum Literacy advance the argument of this thesis in acknowledging that objects can be seen as texts able to be 'read' for meaning. Yet they are limited by being framed within a transmission model that is predicated on a deficit model of the visitor and far from participatory.

There are documented examples of using museum objects to activate writing and reading, and occasionally to make something related to the object. Many of these programs focus on children and teachers in formal schooling (Barry 2012; Dodd & Jones 2009; Randi Korn & Associates 2007) and use methods that enable testing and benchmarking against curriculum outcomes. Critical literacy applied within museums could take literacy beyond the transmission model through encouraging visitors to

explore ways the museum represents each object and its meaning (Grek 2004, 2005, 2009). Critical literacy, however, is an underutilised space in the museum field (Liang 2013). The key precepts of New Literacy Studies have found application within museum learning frameworks such as Falk and Dierking's (2000a) Contextual Model of Learning, which makes learning local and situated; the use of literacy practices and events (Bhatt 2014; Chauvin 2005); and multi literacies to justify broader curriculum goals for museum school excursions (Eakle 2009; Eakle & Chauvez-Eakle 2013; Eakle & Dalesio 2008). The connection between home and school for adult students identified by Bhatt (2014) in his study of digital literacies has proved to be instructive in its methodology and depth study of practices.

Generally these studies have provided useful background whilst justifying the research as filling a gap in the literature. Literacy was found to be circulating around rather than central to the documented projects.

The opening

Recent writings linking literacy and museums are relevant to the study. Vergeront (2011, 2012) is an influential commentator in the United States children's museum sector who has disrupted the conventional wisdom that literacy in museums can only be manifested through promoting reading and writing print books. Instead she blogs that literate staff not only model and prompt questions they also provide opportunities for engagement with language; promote environmental and other authentic uses of print; provide literacy materials such as pen, pencils, paper, computers; allocate creative materials; display rare and unusual objects that spark curiosity; and design multiple imaginative and/or authentic social settings including those that encourage talk and play. A literacy partnership initiative in the United Kingdom was published as an online resource for school students as 'every object tells a story' (Hackett et al. 2008). The folkloric tradition of integrating talk within a multimodal context in a museum program provokes literacy through the making of objects for a museum exhibition (Kozar 2001). Each of these programs foregrounded my research interest in artifacts and story making, made connections between home and museum objects, and legitimised multimodal forms of literacy.

Three key papers in the literature share the view that museums can become transformative spaces through using literacy as a lens. An examination of reading museum objects in relation to the socio-critical Four Resources Model of literacy (Freebody & Luke 2003; Luke & Freebody 1999; Serafini 2012) was undertaken by Kraayenoord and Paris (2002) and recently applied within the context of museum access (Yakusawa & Widin 2016). This model and its application is one of the few that theoretically immerses understanding of objects within literacy studies. Kraayenoord and Paris (2002) base their analysis on 'more than the visual analysis of words and objects because we emphasise how texts and objects position readers/viewers, provide stances to examine texts or objects, and promote specific kinds of transactions' (p. 216). Of particular interest is that objects and viewers are held in relation to each other; objects are acknowledged as texts and the analysis focuses on what the reader does with the texts, not only what it means. This model departs from the transmission model in accepting that 'reading may be variable, idiosyncratic and contradictory among people exposed to the same text' (p. 218) and encourages the visitor to make something anew at the conclusion of this process. This model aligns with this study in encouraging the sharing of emotions as part of analysing an object, although it is a human-centred rather than a sociomaterial study.

The other two papers are more fully described in Chapters 2 and 3. The first looks into children's movement in museums as a way to make meaning but also to claim the space (Hackett 2012). This becomes pertinent in revealing the use of bodies to mediate and understand the world. Mulcahy (2016) has explored the role of affect as an effective actor within museums. Whilst her research is about learning not literacy, my study shares and utilises many of the concepts she deploys, including its methodology, positing that 'learning at the museum involves an entanglement with objects (affective and otherwise)' (2016 p. 4). This statement is a short step away from the focus of my thesis, which is literacy and its ensuing webs.

1.3.2 Focus

My research focus is firmly with the field of museum studies, but it enters the fields of education and philosophy via its theoretical framing. The study responds to these overlapping fields through sharpening its focus and giving the background as

well as utility of the selected theories. The latter is necessary to impart the value of the research across these disciplinary domains.

The study focus includes:

- Literacy rather than learning is introduced as an actor within the relationships between families.
- Collection objects, rather than the total museum experience.
- Mainstream museums, and their mainstream exhibitions, are preferred over exhibitions for children. Children's museum or science centres are not specifically addressed,¹⁷ nor does the research draw extensively on the literature covering school excursions.
- The participants were recruited from non-traditional audiences and were not mainstream museum visitors.
- The interests of the adult are not privileged over those of the child, with each being treated as part of the family assemblage.
- The sociomaterial is a theoretical basis, rather than the socio-cultural theories that are more commonly applied in museum studies.

The research offers creative methods to highlight the literacy practices of the families. These methods were shaped in the research methodology, which is based in sociomaterial theory. It is through theory that meanings are revealed and validated (Johri 2011). This is the legacy of the theoretical platforms that will be introduced in the next section and further outlined in Chapters 2 and 3.

1.3.3 Theories

Objects are central to museums but are in danger of being relegated to the status of a prop serving the power of the story permitted to be told by the museum. One core premise of this study is that an object has an alternate voice to that bestowed upon

¹⁷ Many of the large state-funded museums locally and internationally have spaces dedicated to children (Kelly et al. 2004) and public programs for family audiences. This study does not survey research from the children's museum movement nor children's exhibitions. Until 2015 when Early Start at the University of Wollongong opened, there was not a children's museum in Australia (Mayfield 2005).

them by the museum. Another premise is that families engage with objects as identified by the literacies they use and enact. Both are situated within assemblages that bring any relationship into being. This is a complicated scenario which requires help to understand. The study draws on theoretical resources from literacy, material culture and approaches associated with Actor Network Theory. However, rather than Actor Network Theory I use the term *material semiotics* (Law 2009) with its invitation into understanding the meanings made between things. As a set of tools to investigate practice, material semiotics lends itself to looking into the effects of displaying objects to families rather than starting with limitations imposed by socially attributed causes.

Consideration of materiality has been infiltrating the educational arena for at least a decade (Fenwick 2010; Fenwick, Edwards & Sawchuk 2011; Fenwick & Landri 2012), yet the material turn into the museum field has been slow to take off. Until recent years studies of material culture focused on meanings rather than materiality in the heterogeneous museum spaces (Clark 2014; Miller 2005). An aim of this study is to stimulate creativity and critical thinking rather than the capacity of objects to convey specific information. Therefore literature accounting for the material as a player rather than bystander, tool, or determinant within the social realm aligns with my research interests. Material semiotics (MS) and related theories (Anderson & Wylie 2009; Barad 2003; Fox & Alldred 2014; Gad & Jensen 2010; Latour 2005; Law 2009a; Mol 2010; Taguchi 2012) combine the materiality of the world, which can be any *thing*. MS rejects pre-ordained definitions for the social, natural and material and so is a comfortable companion for museums full of objects that can be tangible or intangible, animate or inanimate and a study that sees family members as having equal potential authority.

This study departs from other MS research where existing relationships in an existing situation are put under review (Latour 1996, 2002; Law 1992, 1999; Law & Urry 2004, 2005). In this study I staged a research intervention by recruiting participants into the fieldwork. A research aim is to consider the imaginative as well as the pragmatic realm. To embrace the liveliness of the spaces I draw upon the New Materialists and in doing so often privilege the actions of the human actor whilst tracing the activities of all actors (Fox 2015; Fox & Alldred 2014, 2015). These modifications made within the needs of the study retain theoretical integrity as this is the fluid nature of material

semiotics. It is a theory (or sensitivity) that is always in the thrall of becoming through academic application (Law 2016).

MS stresses interconnections between people and things whilst disrupting previously accepted homogeneous domains, such as home and museum (Latour 2012). Reality is the result of heterogeneous assemblages (Latour 2005), forever incomplete (Masny 2013) and enacted through overlapping and coexisting realities of 'more than one and less than many' (Law 2004, p. 162). Sociality and materiality, subject and object are symmetrical and mutually constitutive. Reality is 'crafted through practices of knowing and doing, and different practices assemble different realities' (Mol 2002, p. 11). While there is a danger here in finding what you seek, there is also the opportunity for museums to bring forward realities and accept surprises (Mol 2010).

Literacies within the Ideological Model align with MS in making practice central to understanding. Literacy can be social, material and (im)material, based in New Literacy Studies (Barton & Hamilton 1998, 2000; Barton, Hamilton & Ivanič 2005; Gee 1998; Street 1984, 1995) and its journeying to Artifactual Critical Literacies (Pahl & Rowsell 2003, 2010, 2011); Multiliteracies (New London Group 1996; Kalantzis, Cope & Cloonan 2010); and Multiple Literacies Theory (Masny 2010; Masny and Cole 2009; Masny and Waterhouse 2011). An important departure across all theories is made by Multiple Literacies Theory (MLT). MLT no longer privileges reading and writing as the preferred outcome of literacy but rather looks to the transformative power of each literacy encounter, thus aligning it with my study aims. My study does not claim MLT as the best match for museum literacy but instead offers museums a variety of theoretical tools in which to assemble new realities of practice. Mediation was found to be common across both key theories and was instrumental in the identifying not only the role and worth of literacy mediators (Baynham 1987, 1993, 2000) but also the concept of a boundary object (Akkerman & Bakker 2011; Edwards 2005; Star & Griesemer 1989).

The four key themes of materiality, spatiality, affect and mediation arose through coding the fieldwork and was re-applied in subsequent analysis. Coding may have momentarily distanced me from the actors, but the related demands of questioning, continuous memos and experimental writing strengthened my resolve to channel all

voices in the data, including the human, non-human, symbolic and discursive elements (Clark 2005). The themes developed understandings of the data that might otherwise have been underwhelming and overwhelming in equal parts.

1.3.4 Methodology

Material semiotics is shy on method (Gad & Jenson 2010) yet clearly expects the minutiae of interactions to be accorded respect, as it is through rich descriptions where the nature of assemblages can be best identified (Latour 2005, 2012). Figure 2 illustrates the 'affect economy in the research assemblage' (Fox & Alldred 2015, p. 404) and helps justify the writing and analysis, which aims to accommodate the doctoral form whilst retaining methodological integrity. E represents the fieldwork event identifies relationships between families, objects and literacies (termed A,B,C) through close and detailed observation. R is for Research, with its own relationships between academic conventions, methods, methodologies, theories, protocols and so on as (X,Y,Z). The R/E space acts as a mediator between E and R, changing both so that A,B,C is not merely anecdotal and X,Y,Z is stopped from being purely aggregative. This will be described further in Chapter 3.

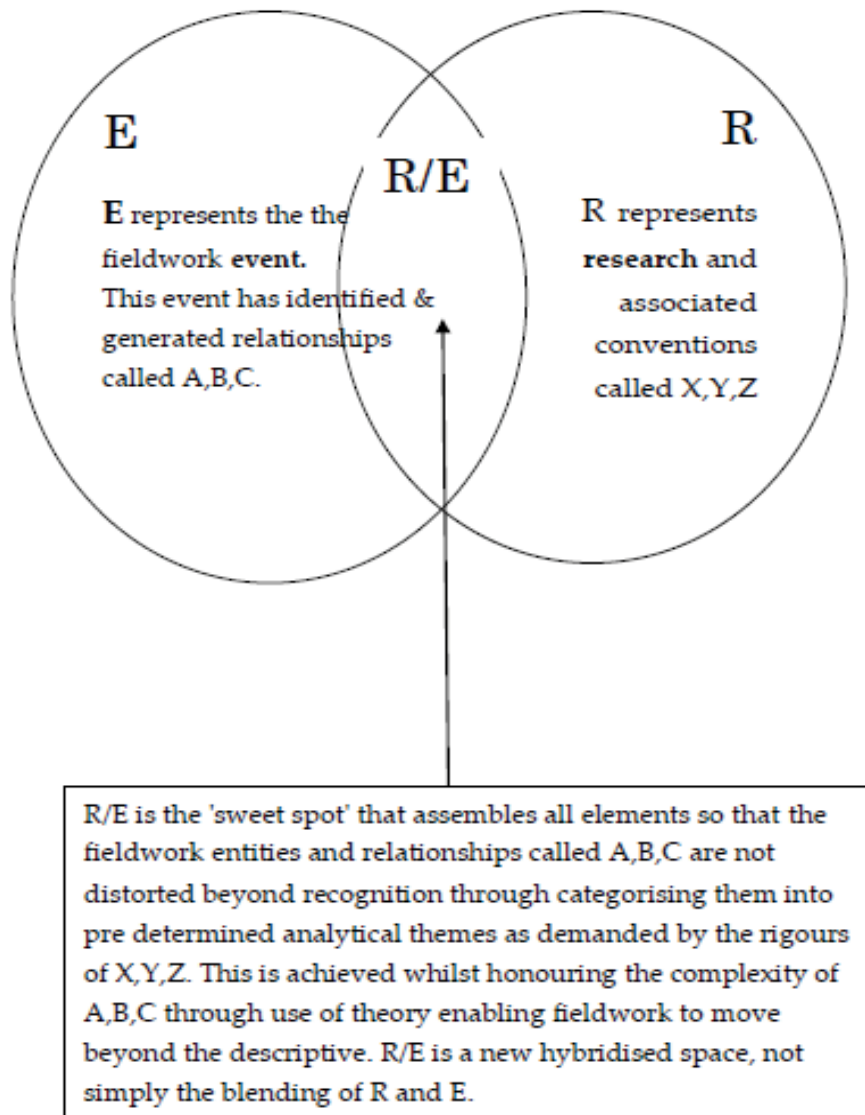


Figure 2: Research model

The model is devised by the researcher based on Fox & Alldred (2015, pp. 404-405)

Despite the elegance of any figure including Figure 2, the actual process is not smooth, and this too is consistent with the MS sensibilities (Barad 2003, Coole 2013; Kirsch & Mitchell 2004; Law 2012). Materialist enquiry resists following the conventions of previous models of qualitative research (St Pierre & Jackson 2014; McCoy 2012). It relies on looking for trouble, both within the data and within the researchers own encounters with the data. Discomfort, unpredictability and space for opportunities play a role in this type of research, where stable patterns are not necessarily dispensed with, although it is acknowledged that spaces of interest occur in the tension between the dynamic and routine (Law 2011).

The key question is 'how whatever is under study works and who it works for' (Deleuze 1995, cited in Mulcahy 2015, p. 5). The key tool is to attune to the world, to see and hear and feel and taste it' (Mol 2010, p. 262) and this was captured through the writing process.

A note on excesses and experimental writing

This thesis follows the academic convention of organising the complexity of its ideas, research design and fieldwork into a linear scheme (Mol & Law 2002). I disrupt the sequence occasionally with 'excesses and overflows' (Al-Mahmood 2011, p. 283) through use of footnotes; appendices of data and methods; and six *stories* I call Interludes, which shimmy between chapters to mark and emphasise the possible. MS invites the hybrid, including creative writing (Latour (1996, 2005; Muecke 2012, 2016; Law 2015). Five of the Interludes are fictional narratives written on behalf of non-human actors adopting Latour's (2005) last resort for honouring the material in a textual account 'through the use of counterfactual history, thought experiments, and "scientification" – the solid objects of today into the fluid states where their connections with humans may make sense'(p. 82). The final interlude reorientates a small guide called 're-set Modernity' (Latour 2016) produced to accompany the exhibition of the same name. 're-set Modernity' aims is to express the changes in thinking required to reunite humanity with nature, science and culture. The aim of Interlude #6 is to honour Latour's contribution to my own relationship rethink within a museum setting. Writing these Interludes helped me see past the obvious and have greater sensitivity to the data (Mol 2010: abstract). And whilst the writing may be

excessively lyrical (Muecke 2012, p. 47), an unexpected result was my own affective encounters with the data and theory. My application of experimental writing was in the spirit of vitalism and speculation, and indeed it functioned as a signature for selected actors (Muecke 2012). As Haxell, a member of the closed Actor Network Theory Facebook group outlined as part of an extended thread of comments relating to the use of metaphor:

Such story telling is not new in research ... Latour (1996) in *Aramis* describes the genre as scientification, Law (2002) in *Aircraft Stories* writes of text as a performance in fractional coherence, Mol (2002) in *The Body Multiple*, considers her writing to be an exercise in empirical philosophy. For Patti Lather (1997) discontinuous stories provide a means to provoke engagement with imaginaries. And for Haraway (1994) taking an overtly political stance, she describes materialised refiguration; stories where metaphor and materiality implode. (A. Haxell, personal communication 26 May 2016)

4.1 Overview of the thesis

1.4.1 Questions

The gestation of my research questions started with my work in a museum as outlined in the Preamble. This curiosity is leavened by the selected theories combined with the opportunities presented by the literature review and the preliminary fieldwork. This combination resulted in three research questions:

1. What can the understanding of literacy offer to museums and galleries?
2. Which resources are of use in identifying and mobilising this literacy?
3. How are the concepts of materiality, affect, spatiality and mediation useful in accounting for literacy relationships between people and objects in museums?

1.4.2 Chapter overview

Chapter 2: Context covers the three major entities of the research – the objects, literacy, and selection of participant families. The history, identity and authority of objects is the groundwork for their activation later in the study and will be a timely reminder to those in the museum field that these entities are complex, potent and

capable. Consideration of what non mainstream visitors offered to the study changed from museums helping people with low literacy, to the capacity of these families to offer changes in thinking to museums. Literacy is outlined in its many theoretical versions, and whilst each description will be familiar to those in the field of literacy, my critique of their relevance to museums and research will be new to the museum field.

Chapter 3: Theoretical framing is about the key theories nesting within material semiotics (MS) that support the research and will be valuable to both museum staff and those working in literacy education. Background is given for this selection to identify the application of MS within the research methodology. MS is synthesised for application within the key themes identified as part of the preliminary analysis of the fieldwork. These theme are materiality, affect, spatiality and mediation and they used within a series of heuristics applied throughout the study.

Chapter 4: Research design outlines methods in relation to the opportunities and issues presented by the research problems. These methods are familiar to me as a museum professional but may be seen as novel to other educators. I outline the five phases of the fieldwork that reflect the study's theoretical antecedents. These methods include participant observation; participant interviews; participant photography; onsite recorded conversations; and participant drawings, writings and other creative activities (Clark 2005, 2011). Also covered here are data authenticity and trustworthiness, including privacy, integrity and ethical dimensions, as well as the more prosaic yet still significant use of technology in the data collection.

Chapter 5: Stories from home and museum analyses the literacies of the two museum sites and that of the families. The research network is not cut at the door of the museum (Strathern 1996, cited in Gad & Bruun Jensen 2010) but sees an understanding of family literacy practices (or constituent practices) as strengthening identification of literacy practices within the museum. The identification of these family, home or everyday literacy practices draws on methods used in *Artifactual Critical Literacies* (Pahl & Rowsell 2010). The study then looks to what the museums may be demanding of the participants in terms of their literacy repertoire. The research adopts a variation of Hetherington's (1997) exploration of different spatial forms to

investigate the complexity of each museum as a potential actor in literacy assemblages. The chapter introduces literacy as a Matter of Concern, which is a particular sort of object or actor that is actually a gathering of actors (Latour 2005). Identifying literacy as an object from the outset was not intended to tidy it up but to illuminate the many forms or shapes it can take within and across domains of practice, including as a potential boundary object (Star 2010) between home and the museum (Law 2002).

Chapters 6 and 7: Stories from the museums are accounts of the families selected from instances of literacy called literacy-in-action-nets, as identified from the audio transcripts of family conversations, family photographs and other creative activities during museum visits. The families and museums in Chapter 5 were treated as local sites in terms of their existing and potential literacies. Traces of these literacies are incorporated into the analysis gathered from the families visiting MONA at Chapter 6 and TMAG at Chapter 7. All families and both museums contributed to a greater or lesser degree to this analysis and so the contribution of each family warrants exposure. These detailed descriptions are choreographed so that each actor's voice becomes the loudest whilst referencing the study's four key themes. Each step is critical for understanding subsequent distillation of these observations culminating in Chapter 8.

Chapter 8: Conclusion reveals the realities, including the surprising and intrusive meanings (Law 2012), through combining elements within this purpose-built praxiographic research machine. The four key concepts of materiality, spatiality, affect and mediation working with the heuristic devices shaped thinking about the research; their deployment shaped stories and their adoption revealed a series of significant meanings. Application of these meanings by museums could influence their own literacy repertoire and practice. These meanings within museums are:

1. Literacy can be an affective encounter.
2. Literacy can be produced via literacy mediators.
3. Literacy can be pursued as a boundary object
4. Literacy can be multiple.

1.4.3 Terms used in this study

Families

The definition of a family adopted in this study is based on 'the general rule is that if a group defines itself as a family they are one' (Dierking 2013, par. 3). For fieldwork purposes, recruited families were any small inter-generational group with at least one child between three and 12 years of age.

Family literacy

Family literacy is the everyday literacy or literacies as practised within families. This description is one of two accepted interpretations. The other, which is more commonly used, is a remedial literacy program that involves all or part of the family (Bird 2009; Auerbach 1989, 1995). The focus of this study is on the literacy choices activated and made by families within the museum environment rather than a review of interventionist Family Literacy Programs (Whitehouse & Colvin 2001).

Literacy

I accept there are many definitions of literacy that reflect the study's values beyond, yet including, reading and writing. Literacy is explored in greater depth in Chapter 2, but the following perspectives are included here to flavour subsequent reading:

- Literacy is 'not a technology made up of a set of transferable cognitive skills, but a constellation of practices which differ from one social setting to another' (Ivanič 1998, quoted in Bhatt 2014, p. 48).
- Literacy is 'a set of social practices associated with particular symbol systems and their related technologies' (Barton, 2007, quoted Bhatt 2014, p. 48).
- Literacies are 'a construct (social, cultural, historical, physical assemblage [consisting of] words, gestures, attitudes, ways of speaking, writing, valuing: ways of becoming with the world' (Masny 2010, p. 338).

Material semiotics

Material semiotics (MS) as a term has been favoured by the prominent Science Technology Studies philosopher John Law (2009) to offer a broad cover to the range of

sociomaterial theories I gathered from Actor-Network Theory (ANT), post-ANT and other non-humanist approaches (Law 2009b). MS is a set of tools or theoretical resources that constantly change through application in practice (Law 2009). ANT is the most commonly known application of these tools, with the following quotation illuminating rather than capturing the study's key methodology:

Actor-network theory is what resulted when a non-humanist and post-structuralist sensibility to relationality, materiality, process, enactment and the possibility of alternative epistemic framings bumped into the theoretically informed, materially-grounded, practice-oriented empirical case-study tradition of English language Studies of Science and Technology (Law 2008, p. 10).

The methodology is outlined at Chapter 3.

Museum

The study is informed by the International Council of Museums definition of a museum, which is 'a non-profit making permanent institution in the service of society and of its development, open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, the tangible and intangible evidence of people and their environment'¹⁸ (ICOM n.d). Therefore any collection-based cultural institution could benefit from this study's remit, including museums, zoos, aquariums, historic houses, art galleries and libraries.

Objects

The 'objects' referred to in the thesis title are Heritage Assets, a 'document, picture, artifact, specimen or artwork that has been acquired by a museum for its collection' (National Standards for Australian Museums and Galleries, p. 79). Whilst art galleries tend to call their assets 'works' and libraries 'holdings', in this study the term used is 'objects', which is most commonly used in museums. This self-defining definition is more fully explored in Chapter 2. The term 'object' becomes complicated

¹⁸ This definition is taken as a guide as the field is rapidly changing. One of the research sites, The Museum of Old and New Art, is a privately owned gallery and whilst very little profit is reportedly made it would not be regarded as a social enterprise.

by its use within MS and in reference to boundary objects and this is clarified in Chapter 3.

1.4.4 Summary

The study's scope of interest in literacy is wider than electronically generated words and images and addresses the embodied practices involved in creating and negotiating a range of texts within a very particular setting. The research offers alternate values to those inherent in autonomous and school-based models of literacy and provides a platform to survey a range of literacies that dominate or co-locate within museum spaces. It enables participatory relationships between families, the museum and the collection to be considered within a new theoretical framing. My research agenda includes making a contribution beyond the museum sector to other educational providers with an interest in the nexus between literacy and material culture through strengthening scholarship that looks to the materiality of literacy.

2.

CONTEXT

Objects, families and literacy (or literacies) are major research interests and potential actors in this research. Close attention to objects seems unwarranted as they are so familiar to museums yet a review of their history, identity and authority highlights a potent and complicated nature, which speaks directly to the material semiotics of Chapter 3. Literacy initially beckoned as the mundane, yet it too is found to be a dynamic entity, a territory of becoming, rather than a state of being as literate or illiterate. The rationale for the selection of the participant families is outlined in this chapter. This selection promotes consideration of what the margins (socially, politically, economically and geographically) can offer to different ways of thinking about relationships within museums. Whilst the margins are made visible in this chapter, they are later subsumed within the symmetry of material semiotics where objects, literacies and family members become actors with their power and authority demonstrated rather than assumed.

PART A: THE MUSEUM OBJECT

2.1 What is an object?

2.1.1 Introduction

The idea of things as inanimate and passive carriers of meaning or “props” of master narratives has been abandoned in favour of theories of agency deriving from a range of theoretical perspectives. (Clark 2014, p. 19)

It is a truism that museum objects are objects held in a museum, yet limiting them in this way hides their complexity. Understanding the nature of objects is a step towards theorising them within literacy assemblages as potentially powerful actors.

Traces of an object's history are sedimented within their existing identities (Pahl & Pollard 2010; Pahl & Pool 2011; Rowsell & Pahl 2007) and theories of materiality are emerging through recent writings about objects (Bennett 2010a; Bennett & Joyce 2010; Candlin & Guins 2008; Clarke 2014; Dudley 2015; Miller 2007; Navaro-Yashin 2009; Pels, Hetherington & Vandenberghe 2002). From the time when collections, buildings and public access began to collide in the 18th century as a museum (Bennett 1995, Pearce 1992, Hooper Greenhill 1992, Schubert 2000), they have been the exemplars of the modern era's 'world of things, of objects and material goods' (Pearce 1992, p. 3). In coalescing around the act of collecting, a museum could be seen as either a 'vessel for the bundle of relationships enacted through each of the thousands of specimens on display and in store' (Alberti 2005, p. 561) or a receptacle for stories generated by those specimens (Heuman-Gurian 1999, p. 2). Yet museum studies subsume collection objects as either as part of a museum's august history (Fyfe 2006) or as props to support the story of competing claims of democracy versus elitism through their display (O'Neill 2008). Considering the museum's role through its collection acknowledges that objects have their own trajectories of existence and identities where 'even apparently stable objects [such] as scientific specimens [are] mutable and polysemic' (Alberti 2005, p. 571). Although tightly bound, the terms objects and museums are not interchangeable.

The answer to the question of 'What is an object?' may seem straightforward, but any consideration of what a document, picture, artifact, specimen or artwork as heritage assets could be ignites uncertainty (Pels, Hetherington & Vandenberghe 2002). Museums conveniently dodge any dilemma by defining an object as anything they choose to display. From current definitions of museums the offer is generous and includes the tangible and intangible heritage of humanity (ICOM n.d). Objects, like reality, have been animating numerous disciplines related to the museum field such as history, sociology, anthropology, science studies, literature, geography and philosophy for some time. These disciplines lead away from the relatively straightforward explanation of 'lumps of the physical world to which cultural value is ascribed' (Pearce 1992, p. 4) into a contested yet fertile realm. The following sub-sections confirm that objects sit within complex networks of values, ideas, technologies, webs, texts, nature,

and people, the animate and inanimate presenting a resonating platform for the study's sociomaterial framework.

2.1.2 Value and values

Collecting objects in a systematic way was first practised within hoards, temples and treasuries, predating the concept of a museum but nevertheless contributing to their reputation as repositories of treasures, relics, dedications, accumulations and other expressions of social surplus (Pearce 1992, p. 91). Yet museum objects, whilst treasured are not always treasures. Collecting items prized by ordinary people, rather than the elite, during the 20th century meant the prosaic became valuable (Moore 2000) with its interest in domestic, rural, and industrial material (Griffith et al. 2011; Anderson 1991; Bennett 1998). These collections are part of the continuously changing field of social history.¹⁹ Value in museum is often linked to the 'real' or authentic object (Conn 2010; Heuman-Gurian 1999; Leinhardt & Crowley 2002), yet copies of objects were a feature of 19th century museums (to complete a survey collection or for teaching purposes), and to this day natural history museums display dinosaurs with a combination of 'real' and surmised or replacement bones. Due to software ubiquity in design processes museums now commonly collect the end result of algorithmic processes, notably the recent advent of 3D printed objects that can be almost endlessly generated. This in effect, anoints the idea with value and the product practically worthless.

Experiencing objects also has an exchange value attached to it. The 18th century cabinets of curiosities²⁰, recognised as one precursor to what we recognise as a museum (Hooper-Greenhill 1999), became the mark of the educated individual. These cabinets housed and promoted the collection of artworks, religious relics, fine arts and natural history straddling the boundary between theology and what later became the sciences;

¹⁹ The Museum of Broken Relationships in Croatia and winner of a 2011 award for the most innovative museum in Europe has recently opened a second permanent display in Los Angeles showcasing donated items which become part of its collection of ephemera now objects (Museum of Broken Relationships n.d.).

²⁰ Similar to the English 'Cabinet of curiosities' is the German Wunderkammer or 'Wonder Room'. The Kunsthhammer is for the appreciation of (primarily) fine art pieces.

the appreciation of art with antiques; the ethnographic and the natural world collected as specimens²¹ (Pearce 1992; Hooper Greenhill 1992). Museums with their collections moved from private viewings in the 18th century to being established as places of public assembly, allowing the elite and popular to intermingle, a novelty at that time, establishing the ethos of democratic collection access. Museums have functioned as a social space in which to 'collect' people to view each other with pleasure concurrent to experiencing the objects on display (Bennett 2007). The rise in 'selfie' culture using data-enabled smartphones within museums has given this trend wider audiences and opportunities to move it beyond documentation to a creative application²².

Attaching value to a museum object is as much about tracing the relationships it has within and beyond the museum, including the way visitors may relate to it and, indeed, how this valuing is reciprocated.

2.1.3 Inanimate and animate

Objects are not always inanimate. Objects are sometimes clearly animate, arriving from extensive internal and external networks. It is accepted that zoos, aquariums, botanical gardens and arboreta are all collections-based institutions with self-replicating living objects²³ (Michener & Schultz 2002; Miller et al.2004; Rennie & McClafferty 1995; Lucas & Osborne 1995). At other times the museums have had to contend with beliefs when dealing with the care and storage of what have been termed ethnographic objects²⁴.

Thus, the view that, 'mana', fields of power, and life sources could live within an object regardless of the material from which it was made. And that being so, the care for these living things, it was argued, is, and should

²¹ Whilst collections organised into showpieces (such as cabinets of curiosities) were museum-like they were nevertheless socially enclosed spaces with restricted rather than public access (Bennett 1995 p. 93).

²² A recent weblog documents the rise of the 'selfie' and use of 'face swap' software in museums (Burness n.d).

²³ The Museums Australia Constitution recognises 'institutions holding collections of and displaying specimens of plants and animals, such as botanical and zoological gardens, herbaria, aquaria and vivaria' (Museums Australia 2013, p .3)

²⁴ 'Objects are made ethnographic by the act of detaching them from their original critical context' (Dudley 2012, p. 284)

be, quite different from the care of dead or never alive things (Heuman-Gurian 1999, paragraph 42).

Documentation attached to objects previously collected during the 18th century's age of (European) exploration are reviewed by Indigenous people; and in the case of those collected by Cook in New Zealand, they now have Maori inanimate and animate genealogy, with restricted access to some items and their descriptors according to social protocols (Hogsden and Poulter 2012).

Art galleries have always dealt with changing art practices and forms, yet the 20th century was particularly challenging to collecting through the advent of electronically or created art forms or site-specific installations that have a human performance aspect. In these cases what becomes the object? Some artists have used genetic engineering and bioengineering to generate works, prompting the comment that an art exhibition becomes more like 'a zoo with live animals' (Morris 2001, p. 10). The Cooper Hewitt (a museum of design) recently acquired a piece of source code for Planetary, the iPad music application, along with permission to publicly release the now object so anyone could use the code and re-purpose it. The code makes the object capable of self-replication and change through adaptation. 'We liken this situation to that of a specimen in a zoo ... Planetary and other software like it are living objects' (Chan 2013, p. 7).

Objects can be people, animals or self-replicating code, in other words objects can be animate, inanimate and occasionally both.

2.1.4 Meanings

Objects can be intangible or tangible. Tangibility is tantalisingly obvious, suggesting something solid. The intangible component of the International Council of Museums' definition covers traditional knowledge, rituals and myths, ephemeral gestures, and some aspects of contemporary art as manifested in performances and oral recounts (Desvallées, Mairesse & de Mariemont 2010; Kirshenblatt-Gimblett 2004). The tangible and intangible are united beneath the cloak of meanings bestowed by museum staff or the originating community. Museums have largely relegated objects

to the subject category through making them serve the museum story whether by a transmission or constructivist model of learning (Hein 1998; 2002).

One of the ways that objects carry this semiotic load is through the texts as mediators that accompany it creating an 'objecttext' (Saunderson 2012) or 'object-information' package, a hybrid of 'data in material and ideational form' (Dudley 2015, p. 5). Depending on whether the role of the museum is as the instrument of governmentality to carry social policy or as diffuser of symbolic meaning sharable within a community of knowers (Merriam et al. 2001), object-texts are recruited as epistemic carriers conveying information, engendering learning, and/or as a source of civic and personal pride (Bennett 2005; Falk, Dierking & Foutz 2007; Weil 1999). The idea becomes the object and the object relegated (or translated) to the status of a prop in a learning situation (Paris 2002, p. 303).

The meanings attributed to these objects are fluid rather than stable. Any object's biography is subject to various incarnations, despite efforts to categorise and stabilise them within the dictates of a collection management system (Cameron 2008). Various meanings ascribed to objects change in line with curatorial perspectives or research interests, or indeed their role in the meta-narrative of exhibitions and research projects (Bennett 2005; Bennett et al. 2013). In the closing decade of the 20th century Australian museums were commended to grant an object a 'statement of significance' in terms of its provenance and biography, and to a certain extent, its value or importance to the institution (Russell & Winkworth 2009). Significance is part of the acquisition assessment process and many objects are retro-fitted with such statements, which are subject to continual review. Objects and their documentation sit within networks that extend from the local to global but are subject to social and cultural schemas.

2.1.5 Technology

Objects, even as artworks, are examples of technology. But they are also subject to technological systems such as collection management and classification and changed because of the technologies that are used to display them. Object classification is an old and arcane practice legitimating the sorts of objects deemed collectible, their means of acquisition as well as display. Camillo's Memory Theatre was a Renaissance organising system that established the lineage between objects and mnemonics but also suggested

complex relationships between object and symbolism, the imagination and the occult (Hooper Greenhill 1992). Two centuries later Neikelius' three creation realms of regno animali, regno vegetabili, regno mineralia as well as artificilia (art) streamlined a system which has lasted almost to the present day. Museums 'inherited the universal or encyclopaedic idea of the world-in-microcosm ... as they had inherited the collections themselves' (Pearce 1992, p. 99). Objects represent world orders that have included objects with mystical properties and powers of transformation. These orderings are converted to documentation, including an acquisition number (at times inscribed upon the object and so materially changing it) accompanying an object in perpetuity. Systems of classification promote collections. Display and collecting of natural history aligning with the Linnaeus system took hold in the 18th century and gathered force in the 19th century due to growing networks of local societies and amateur naturalists which continue to this day (Flemons n.d; Pearce 1992).

The use of new materials and changing technologies allow objects to be safely showcased and therefore for the display to change. For example, the manufacture of plate glass after World War II allowed for clear, open, secure and controlled public display (Pearce 2000). Prior to this ordinary glass restricted the size of the object which could be displayed due to distortion in the glass. Electronic safeguards now allow object display without glass barriers (ASIS International 2011).

Museum labels arguably are as part of the object as is the object's collection documentation, with a 19th commentator declaring that a museum should be 'a collection of instructive labels illustrated by well-selected specimens' (Bennett 1995, p. 42). In the 18th century museum labels initially worked as a kind of 'room announcement' in art museums to reflect national school and art historical periods groupings of objects. Later label hierarchies were introduced in the late 19th century using the skeuomorph of a non-fiction text with chapter headings to guide movement and understanding through the text. As a book requires each page to be turned, under this new arrangement the visitor was required to make good this timeline narrative through moving from object to object to gather the story. Fast forward to the Museum of Old and New (MONA) in Tasmania where labels are electronic and portable and therefore changing the requirement to spotlight the label adjacent to each object.

2.1.6 Networks

The circulation of practice 'from the private sphere to the public sphere is a key element to understanding the culture of museums' (Poulet 2013, p. 36) and their collections. Things and people were not only at work inside the museum being represented or working upon that representation but also between the museum and the outside world. The network of collectors and sites connecting objects to museums is far reaching and diverse (Alberti 2005, p. 564) and includes curators, collectors, universities, makers, users, philanthropists and the relationships between them as they impact upon the acquisition process and object display.

Repatriation of cultural property from museums and art galleries as a result of war and/or disruption has meant significant changes in collections, particularly in major museums during the 20th century. Objects can be great travellers even after acquisition within the museum world. Once acquired objects can be loaned to other institutions or they can be recalled to their former life and identity under repatriation laws. Another striking case of the peripatetic object is the online distribution of object images and in some cases audio visuals. Digitised images of the collection are distributed across the internet from the museum's own site or aggregated into public and private themes on sites such as google art project (Cameron 2008). This network has been accompanied and extended through the facility to add personal descriptive terms to the object images including the use of 'folksonomic tags' (such as 'blue') for idiosyncratic searches (Chan 2007). With digitisation having had such an impact, an industry view is that unless an object has an online presence it would no longer exist for formal education groups wanting to build lesson plans around a museum visit and follow-up (J. Hews 2015, personal communication 25 May). The Rijksmuseum encourages creative re-use and commercialisation of its collection such that the digitised image detail from a 17th century portrait is now sold as a beanbag (Rijksstudio 2015).

2.1.7 Summary

Objects in museums can be anything: alive or dead; animate or inanimate; original or copies; tangible or intangible; from the size of whale to nothing (as in the case of Cooper-Hewitt's acquisition of code for the Planetary software). Despite being

placed on a shelf in a museum, their networks beyond this location are considerable, even if they never see the light of display. Objects can be multiple versions of themselves subject to classification, statements and descriptions, some echoing practices from the 16th century. Once displayed, objects become part of another network of technology, texts and systems; and then the visitors in all their diversity add another set of complications. The answer to the question 'What is an object?' clearly cannot be definitive. Indeed the fieldwork participants in my study were often curious about the nature of an object, not simply what it meant. This curiosity is highlighted in the vignettes of Chapters 6 and 7. In corralling their properties, the object question can be approached in a different way. The question 'What does an object do?' commences the process of addressing objects' contingent agency within the museum space and networks within their own right, laying the groundwork for the use of MS (Chapter 3) as a guiding theory.

2.2 What does an object do?

Closely inspecting collection objects contributes to this thesis through foreshadowing theoretical alignment within theories of sociomateriality. Delving into the history of objects and their collecting earlier in this chapter expands thinking about objects beyond situating them as a lump of inert material into a much more complex entity. Objects muddy the divide between 'the natural and artificial world, the material from the immaterial, the animate from the inanimate, or the human from the non-human' (Candlin & Guins 2008, p. 2). An object's agency to transfer, translate, confer or even inspire meaning has now become indeterminate, extensive and theoretically loaded. Objects are no longer simply commodities with their value in trade. They exist in relation to a host of other factors as hybrids or 'a continuously enacted relational effect' (Laws 2004, p. 161). Objects instigate action and interaction in order to exist. Addressing the question 'What does an object do?' suggests action and interaction, with objects becoming actors that are observable within practice.

Does this mean that objects have intentionality? I take the view that objects have agency and that the causal power of physical museum objects has until recently been ignored in studies of material culture (Griswold, Mangione & McDonnell 2013).

Speaking on behalf of objects, their agency and intentionality could come from one of three ontological and epistemological systems. Objects can have agency bestowed by human consciousness; in other words, objects can only ever be a subject, as is currently the case with museum objects. Or another reality for objects is that they have an independent agency. This view positions objects as unpredictable, even mischievous, in order to emphasise that they are not merely human tools but have a vitality that may be capable of blocking or directing human endeavour (Bennett 2010a). These 'noumenal objects', which are potentially any 'thing', emit a peculiar combination of physical, sensory, emotive forces (Otter 2013, p. 45). These forces may be dormant or active, yet be unpredictable. The third system attributes agency as arising in the relationships between human and non-human entities. The study endorses the third approach although qualifies its acceptance in two key ways. Chapter 3 is better situated to provide a fuller discussion of agency within this relational approach, which is expanded upon in section 3.2.3.

Rather than pursue the question of whether objects have feelings, I found the literature about emotions and affects *surrounding* objects more worthwhile to explore. Objects are attached to identities, values and social relationships (Hackett et al. 2008; Kouhia 2012; Pahl 2004; Paris 2002; Pearce 1992; Rekrut 2003). The link between affect (as emotion) and social history collections has become sedimented in museum practices, with memories of an object's useage (Miller 2005) arguably taking pre-eminence over its production where the physicality inherent in the making is emphasised (Ingold 2007).

Whilst objects can be positioned as excellent resources in promoting dialogue, one view is that objects do not speak for themselves 'particularly in the case of children, parents and teachers are the ones who need to speak for the objects' (Leinhardt and Crowley 2002, p. 314). Another respected commentator in the museum space, Nina Simon, argues for the capacity of objects to promote intergenerational dialogue. She draws on the network theories of Engeström to promote 'social objects' as those that encourage conversation (Simon 2010, Chapter 4) regardless of the collection group or mediator. This could be seen to infer object vitality where active objects are those 'that directly and physically insert themselves into the spaces between strangers'

(Simon 2010, Chapter 4, paragraph 11) and relational objects (such as games or participatory sculptures 'explicitly invite interpersonal use' (Simon 2010, Chapter 4, paragraph 14). Objects can be static and still invite engagement.

Physical expression of engagement with an object by the visitor, such as hands crossed behind the body whilst studying an artwork from a distance, has been used to chronicle acceptance of the museum discourse (Leahy 2012). This bodily expression can change according to ethnicity, class gender, age, leisure patterns, building design spaces and individual objects, but nevertheless is part of an affective repertoire of observed responses to an object. Objects can promote the inexplicable (Paris 2002) through mobilising resonance and wonder (Greenblatt 1990), where resonant objects have the power 'to stop the viewer in his or her tracks, to convey an arresting sense of uniqueness, to evoke an exalted attention' (p. 42). The term 'numinous objects' was introduced into the museum lexicon by Cameron and Gatewood (Latham 2013) naming the force of emotional impact that an object can carry, project or evoke, depending on your ontological perspective. Initially relating to the connection some people felt with religious icons, numinous refers to the visceral inherent within an object, a kind of transcendence where the emotional response is momentous, continuous and embodied (Latham 2013).

The term 'praesentia' originated with pilgrimages and holy relics, where touching an artifact could connect a person to another time, place or plane of experience (Hetherington 1999, 2003). Touch can give confirmation of something absent now present, sometimes as a memory but at other times as a connection to a feeling of routine, familiarity, strangeness or peace. Within praesentia are two knowledges which utilise space metaphors – proximal and distal – with proximal at the forefront. Proximal is haptic and as close as a stroke of the hand, whilst distal is as distant as the pinnacle of a classification hierarchy. Proximal is performative, context specific, incomplete and dialogic in that we are touched by what we touch. This knowledge is open and subject to change. Distal is representational and therefore abstracted into concepts capable of being distilled into outcomes. The experience of a vision-impaired museum visitor who is allowed to touch certain works is such that:

It enacts heterogeneous bodily expression in a space not particularly designed for the performative skills of that body. Her performative repertoires, moving, touching, hearing, speaking to others or listening to them (rather than engaging in the more usual form of silent and reflective contemplation only brought to a noisy closure afterwards in the cafe or shop), are held together in more provisional ways to create an experience of the museum as a place in which the body, notably the hand, and an art object come together in a moment of both connection and dispersion (Hetherington 2003, p. 1935)

Use of proximal knowledge and kinaesthetic experience of museum objects changes the nature of experiences in a museum. These more intimate and uncertain experiences promote opening up to the new rather than restricting engagement to the closed off and complete. In allowing the heterogeneity of the body to be expressed and become performative, new insights about the collection are made. 'The way I touch is identification with something somewhere inside of you; you have got a relationship with it' (Sarah, interview, 5 May 1998, quoted in Hetherington 2003, p. 1934).

These unplanned or visceral reactions support later exploration of affect and its impact within the family visitors. The physicality of the children in the families as they resonate with objects arises throughout the fieldwork. Embodied engagement with objects supports the vision of an alternate space existing in tandem with the rational planned museum (Baker 2008, 2010b; Witcomb 2013). This other space can be an unsettling rather than confirmatory through evoking visitor imagination, building empathy and rupturing space and time. This hypothesis aligns with both the 'noumenal' object and intentional affective interpretive strategies deployed by museums. Baker (2010b) refers to the planned affective response as 'didactic' and the unintended, accidental and chaotic as 'delirious' (p. 26). This delirious state results in the visitor not knowing what was intended for them to know but instead being liberated by not knowing. 'Rather than a subject formed by established knowledge, the museum visitor is in a constant state of becoming, breaking strategy apart, and assembling alternative meanings' (Baker 2008, p. 28).

Museums have sought to solidify and express power relations through the selection and display of objects. Yet objects still appear capable of disrupting these power relations through engendering the unexpected. Visitors seem to collude in this disruption. They enter museums carrying technology that can take them into and out of the space (via their smart phones) along with capabilities, interests and interpretations. Rather than solely focusing on the visitor and their concomitant baggage of audience segmentation; descriptors; and engagement/non-engagement, full control of any engagement sits beyond both the institution and the visitor. Even if concepts such as 'noumenal', 'numinous' and 'praesentia' are received as fanciful, the argument is put that 'for all the social, cultural, personal and historic baggage visitors bring to the experience ... their reactions would not be as they are (whatever that may be) if the object were not what it is' (Dudley 2012, p. 7). The existence of a parallel space of delirium and transformation supports a key direction and consequent meaning in this study and will be taken up fully in Chapter 8.

Meanwhile the study is now well placed to overcome the duel for sovereignty between object and subject (visitor); museum meaning and accessibility. Objects beckon for a new framework in which to consider what they are and how they how they work within their surroundings. As Cameron (2008) puts it: 'drawing on Latour's words, objects are more interesting, complicated, uncertain, open, risky, far reaching, heterogeneous, historical, local and networked (Latour 2005), than in the limited way presented by museums' (p. 235). I would argue that this could be reworded as 'than in the limited way as understood by museums'.

PART B: WHO ARE THE FAMILIES?

2.3 Margins

It has been documented that Australian museum-goers as knowers are highly educated, well-off, tend to live in cities and are English speaking²⁵. These are not the

²⁵ The highest attendance rates at art galleries/museums were reported by people who:

- were born overseas in a main English-speaking country (31%)
- were employed part-time (25%)
- had graduate diplomas and certificates (56%) or postgraduate degrees (47%)

characteristics of my participant families. As museum accessibility was a factor of interest, I recruited participants from agencies that represent those who are both marginalised and under-researched (Hesse-Biber & Yaiser 2004). The Autonomous Model of Literacy relies on testing to judge people through attaching labels such as 'literate' and 'illiterate'. The literacy practices of the family members were treated as a benefit to the study. This placed each participant into a position of strength and not one of deficit, rather like the Ideological Model that values people's literacy as situated and local. The geographic and physical settings selected resulted in a study positioned at the margins.

This section takes the gaze from objects and onto people through drawing on Standpoint Theory (Fricker 2006; Harding 2009; McCorkel & Myers 2003; Wylie 2011) to justify the recruitment from community agencies. Adopting this theoretical perspective shifted thinking to consideration of what those who are marginalised or at the margins (socially, politically, economically and geographically) could offer and be made visible. Arguably this discussion could sit within the next chapter (Chapter 3), but as this theory was used to justify recruitment it is included here to give a clearer focus on the social actors or participants in the study prior to any analysis.

Standpoint Theory is a subset of social epistemology (Haraway 1991, 1997; Quinlan 2012; Star 1991; Wajcman 2000) that disputes privileging to the point of entrenchment, certain forms of producing, consuming and validating knowledge, claiming these forms constitute epistemic injustice (Fricker 2006). Epistemic injustice has two strands that apply to this study. 'Testimonial injustice' is the knowledge held by a recognised category of people, known as the subdominant knowers (defined by

-
- were in the highest equivalised household income quintile (31%).
(Australian Bureau of Statistics 2011b)

People born overseas in a non-English speaking country have significantly lower levels of both creative and receptive participation compared to the total Australian population. People with a serious illness or disability experience significant difficulties accessing the various services offered by the arts. Regional areas have significantly lower levels of attendance at music events than inner metropolitan areas. Rural residents are more likely than inner and outer metropolitan residents to have had a below average year of receptive participation in the arts compared to the year before (instinct and reason 2010, p. 8).

gender, race or, arguably, location) yet discounted or undervalued despite being delivered via dominant literacies such as writing 'Hermeneutical injustice' takes it to another level where the subdominant knowers hold subdominant knowledge. The everyday literacy practices of certain groups may lack credibility because there is no match to the dominant literacies within powerful discourses (Gee 1998, Barton & Hamilton 1998; Maybin 2007). These forms are linked and mutually reinforcing, becoming the most impervious to change when the dominant knowers and dominant knowledges unite to establish social benchmarks. These social navigators are such that 'socially defined categories of people and their distinctive forms of knowledge are systematically excluded from participation in an epistemic practice – from the “rhetorical spaces” in which their claims could be heard and systematically adjudicated' (Wylie 2011, p. 162).

In terms of the validity of the locale through Standpoint Theory, the study transports us to the margins geographically and the locale of the fieldwork sites. Tasmania is Australia's smallest and only island state, sitting at the peripheral with an economy mostly typified as a 'basket case' (Stratford 2008). As noted by the Director of the Australian Innovation Research Centre at the University of Tasmania:

Tasmania ranks at the bottom among Australian states on virtually every dimension of economic, social, and cultural performance: highest unemployment, lowest incomes, languishing investment, lowest home prices, least educated, lowest literacy, most chronic disease, poorest longevity, most likely to smoke, greatest obesity, highest teenage pregnancy, highest petty crime, worst domestic violence. It seems not to matter which measure is chosen, Tasmania will likely finish last. (Schultz & Cica, 2013, p. 50)

That Tasmania demonstrates marginality beyond the Australian mainstream and the mainland can be confirmed in a myriad of socio-economic ways (Australian Bureau of Statistics 2011a). As a benefit, however, the small size of its capital, Hobart, contributed to the interconnectivity of otherwise diverse socio-spatial agencies in the recruitment of the participant families.

2.4 Study participants

Across the nine families recruited there were 31 participants in the study.²⁶ The 19 children ranged in age levels between three and 14 years old. The oldest adult was 50 years old and the youngest adult 26 years (see the summary of known demographics at Appendix A). Identifiable characteristics shared by the adults were:

- Unemployment at the time of the fieldwork (one exception).
- Recipients of a Centrelink benefit.
- Association with a community agency that assists people who are marginalised.
- Commitment to the researcher, if not the research.
- Home locations in or near Hobart, Tasmania.
- Smartphone users.
- A family focus.

Matters of difference were most easily observed in languages spoken. The shared language between all families, including the refugee families, was English, although the level of spoken English was Intermediate at best (P. Lucas 2013, personal communication 4 October). All but one of the families lived in areas with low socio-economic status. Home and family life emerged as central to the adult lives and a key motivation in their participation in the study. Many of the adults self-identified as having low literacy, whilst others had no cause to consider this status.

Standpoint theorists argue that members of a dominant group can only offer their limited privileged perspective, yet analysis of the lives of marginalised people can offer an alternate experience to those of the dominant group. This 'inversion thesis' runs the danger of bestowing yet another form of epistemic privilege onto those who were marginalised through claiming they know more simply through their social or political positioning (Harding 2009). This danger can be sidestepped if the application is made localised and contingent through establishing similarities in social experience

²⁶ Initially there were 10 families recruited with the unmet expectation that many would drop out. One family could not honour their initial commitment. Two children were less than three years of age and were not included in the data analysis. They accompanied the family on the museum visits and their impact is noted where relevant.

in a given context with 'respect to specific epistemic problems' (Wylie 201, p. 163) such as identifying and tracing literacy practices.

2.5 Summary

Standpoint theory was useful in honouring the study's inclusive values, not just in terms of the recruitment and geographical positioning in Tasmania but also in positioning participant strengths and contribution to the research. This position is not inconsistent with this study's material semiotic (MS) theoretical framing, but there are potential inconsistencies in need of clarification. First, my fieldwork may be localised and contingent, but it is not an investigation of a pre-existing site-specific system such as treating a disease in a hospital (Law & Singleton 2005) or farming scallops (Callon 1986). I selected participants using the a priori category of disadvantage and introduced them into the field via my fieldwork. Within the MS parlance, a priori categories disappear within practice. Second, Standpoint theory could be treated as a kind of perspectivalism (Mol 1999, p. 76), which in the MS arena closes down its performative essence. Reality is multiple, rather than single untouched and static, gazed upon from many directions and crafted as a specific version of the truth.

Recruiting outside the norm of museum visitor demographics has offered different ways of knowing as well as the opportunity to make or adopt distinctive 'metaphors, models, analogies, and narratives' (Wylie 2011, p. 164) – all of which are exploited within this study. Significantly, through observing the participants practices I found a way to consider the different forms of literacies arising. And whilst theoretically these literacies may be at odds with each other, the various performances of literacy at times collaborated or were co-dependent. The participants were diverse in their practices, with their points of difference, joys and occasional discomfort offering useful ways to investigate the data.

PART C: LITERACY

2.6 What is literacy?

2.6.1 Introduction

The answer to the question 'What is literacy?' is based in theory, and like any value-based proposition the theories are many. Various significant theories unite beneath the Ideological Model of Literacy and contribute to the study. New Literacy Studies, New Literacies, Artifactual Critical Literacy, Multiliteracies and Multiple Literacies Theory will be introduced in this section because they shaped the methodology and sharpened the fieldwork analysis. Their most productive contribution is their potential to act and inform within the museum space and this is taken up in Section 2.8. These theoretical models appear sequentially as they follow the impact of technological change upon literacy, yet they build on each other and hence all the theories are simultaneously evolving. By contrast, the Autonomous Model of Literacy contributed to the study through largely acting as a foil or point of departure for the others in its indifference to the localised nature of any literacy.

At the outset I thought that there may be a 'best fit' for museums with a particular literacy theory if each were reviewed and understood. I now consider that the best fit is the theory that will support the communication aims of the institution and the actual practices of their visitors. This approach is (reassuringly) a hallmark of the Ideological Model of Literacy, which moves the terminology from literacy to literacy practices. It is the practice within context that is the key to all theories surveyed after the Autonomous Model (Street 1984, 1995; Street & Lefstein 2007). Apart from the opposition to the positivist rigidity of the Autonomous Model (Perry 2012), other commonalities within the Ideological Model are its link to ethnography, studies of language and linguistics. Theories within the Ideological Model arose from careful observation in the field, where it became apparent that the previously considered view of literacy was no longer normative (Wells 1986; Heath 1983; Scribner & Cole 1981), and indeed different forms of literacy performed different functions. Alternate models of practice not only presented themselves outside the school classroom but these practices were not necessarily reliant on school-based skills (Clark 2008; Hamilton

2006). Orality becomes integral to literacy rather than only preparatory to it, and equal value was assigned to non-alphabetic sign systems and to script (Baker 2010; Street & Leung 2010).

This study frames literacy, like objects, as assembled from networks of influence into a range of realities uncovered through the ways they are investigated. The cavalcade of literacy theories surveyed supports the thesis through illuminating literacy as a dynamic actor rather than an intermediary or closed 'black box'²⁷. Understanding the components of literacy theories enables translation from volatility into pliancy – a tangible benefit to the museum field. Before these theories are reviewed it is prudent to deal with the Autonomous Model, a prominent model of literacy whose outcomes and impacts are encased in a 'black box'²⁸ and the one most likely to be assumed as literacy, even in a museum.

2.6.2 The Autonomous Model of literacy

The Autonomous Model narrows literacy down to holding a set of cognitive-based skills, in which some people excel and others do not. The Autonomous Model professes universality regardless of the social context. The model's theorists, such as Hildyard, Greenfield and Goody (Gee 2014), champion print over vernacular scripts, writing over oral traditions, and they attach positive achievements such as success, innovation, abstract thinking and active citizenship to this literacy type. In a setting where influential highly educated staff place high value on these choices, the Autonomous Model appears a sensible choice of bedfellow despite all these

²⁷ A 'black box' is an instrumental term for Actor Network Theory (Latour 1987) for an object that has inputs and outputs but its component parts/actors and workings are made invisible. Black boxes are untested and unquestioned so long as component remains compliant and/or it breaks down. Black boxes are made through acts of translation where various actors are enrolled in a program of agreement. All these alliances are hidden or forgotten when the agreement holds, but once the box is opened (often after controversy, strife or discomfort) the multiplicity of actors in any arrangement rather than a unified presence can be seen (Harman 2009).

²⁸ The basis for this claim is personal experience as a museum educator and producer. The Autonomous Model is the view of literacy that I commenced my candidature with and the view of curators and library staff who I consulted when preparing the 'Outline of intended research'.

associations being disputed (Black & Yakusawa 2011; De Castell, Luke & Egan 1986; Gee 1999, 2014; Heath 1984; Snyder 2008). This skill-based model retains its firepower in the community and teaching institutions because of the link with testing (and therefore provability), the simplicity of its 'brand' or ties with learning theories and teacher culture. This literacy model is comfortable with and is indeed supported by measurable outcomes expressed through international and localised testing (Grek 2009; Hamilton 2012) as well as guiding national educational agendas (Lonigan & Shanahan 2010a, 2010b). It is in the model's alignment with formal education that the partnership holds its greatest influence, although it is also the source of one its greatest limitations, but not the only one. Aside from the extent of opposition within the literature, there is a range of factors that should put museums on notice to look more closely at other literacy theories.

The Autonomous Model promotes a deficit model of the learner (Comber & Kamler 2004; Street 2003). Its heartland is the formal education sector that locks in reading and writing as the one true literacy, with related skills-based teaching methods focusing on phonemic awareness, fluency, and comprehension (Lankshear et al. 2000; Gee 2014), which would be difficult or inappropriate to apply within the museum setting. Leaving aside the confused position museums have around their own approaches to learning (such as following school curricula versus a museum-specific learning policy), cultural institutions are informal learning institutions with a range of visitors. Literacy that only focuses on the cognitive skill of the student learner within a tightly confined range of texts is not especially helpful and has limited the ways museums see and work with literacy. The Autonomous Model informs the research and is not discarded completely. But it should not be the default option for museums, especially in the absence of research to the contrary.

2.6.3 New Literacy Studies

New Literacy Studies (NLS) (Bartlett & Holland 2002; Barton, Hamilton & Ivanič 2005; Gee 1998; Ludwig 2003; Pahl & Rowsell 2012; Street 1984, 2003) shifted literacy from a focus on demonstrable skills in reading and writing to the meaning that different literacies holds for people as they adjust to different social settings. Literacy becomes plural and dynamic (Barton and Hamilton 2000, p. 8). NLS is theorised within

the sociologies of constructivism and culturalism, emphasising power relationships as expressed through the concepts of Dominant Literacies, Domains, and Discourse (Barton & Hamilton 2000; Gee 1996; Moje et al. 2004). It is in the a priori timing of when and how power is identified where NLS is at variance with MS, which addresses power through practice. Nevertheless, NLS relates to three key aspects relevant to the study, namely, mediation, identity and literacy events. Mediation is taken up in Chapter 3, with identity and literacy events discussed in this section.

Identity

Discourse is the defining qualities and identifiable series of traits between groups as expressed through identity and via activity (Gee 1998; Gee & Green 1998; Pahl 2008). With its links to literacy, Discourse foreshadows literacy as an assemblage of people, things and spaces, and throughout this study it licensed me to see changes in the participants' 'acting-interacting-thinking-believing-valuing-feeling, as well as ways of coordinating, and getting coordinated by, other people, various tools, technologies, objects, artifacts and various "appropriate" times and places' (Gee 2004, p. 24).

The concepts of literacy and identity are fashioned into 'figured worlds', which are emblematic representations of a parallel world that is carried by the individual into a learning situation (Bartlett & Holland 2002, p.12). A 'figured world' may be a label such as a 'good reader', a reference to an uneducated figure from popular culture such as Homer Simpson, or a stamp pad whose use for a signature confirms illiteracy. Through 'figured worlds' learners or readers become hybrids, humans with labels, who act in particular ways but can also change through the adoption of another figured world. Whilst not actively exercised in this study, these worlds made me more attentive to the use of boundary objects and changes in identity across the visits as observed in the fieldwork. These 'objects' are explored in greater detail later in the chapter but of relevance here is that boundaries exist to be crossed. Boundaries can be viewed as Domains such as schools, home, community and museums.

Literacies can both arise and be utilised across different Domains such as school and home (Bartlett & Hamilton 1998). Dominant Literacies, Domains, Discourse and discourse provide a social class-based interpretation of why middle-class children who excelled in reading and writing in the early years at school were not so much being

taught skills but rather refining previously acquired skills under an unacknowledged apprenticeship regime (Gee 1998; Collins & Blot 2003). Accepting this premise would be a cautionary note to explaining why training visitors in the literacies of the institution may only be successful with adults previously enculturated into correct museum protocols. This study does not enter the fieldwork arena carrying particular Discourses as markers where literacies are subject to the social institutions and their inherent authority (Barton, Hamilton & Ivanič 2000, p. 1). Instead it looks to what visitors are doing within the museum rather than what they are expected to be doing. New Literacy Studies endorses this observation through the concept of literacy events.

Literacy Events

Literacy practices and events are critical concepts within Literacy Studies. The significance of the NLS thinking around events and practices is important to the study in theorising literacy as a *process* of making meaning in various ways and places, including within a museum (Chauvin 2005); that this process is identifiable through observation of events and finally that the nature of an event can be collective and networked (Yasukawa et al 2013). Within Literacy Studies the term 'practice' marks the context surrounding literacy and the identity of the person or group performing literacy. The 'event' is an empirical occasion or instance 'where literacy plays a role' (Baynham 1995, pg 54). Bartlett neatly packages this interplay within NLS as 'Literacy is a social practice and can be described in terms of people's literacy practices which they draw upon in literacy events' (2007, pg 15). There are departures from Literacy Studies in this study in that I do not link any detailed investigations of language and/or texts within events to show how literacy varies across cultures and also within the same culture (Barton 200) and the dynamics surrounding events is expanded to involve the social *and the material*. The study's specific meaning of the term practice is taken up in the next chapter (3.2.5).

It is the nature of the literacy event that is of greatest interest in this section. Events are specific and concrete, they have a beginning and an end and are associated with identity, knowledge and power within the setting in which they occur (Heath 1994; Hull & Schultz 2001; Prinsloo & Breier 1996; Street 2003). The notable observable event here is families visiting a museum exhibition. Literacy events were initially

related to the centrality of speech but then transitioned to 'any attempt to comprehend graphic signs' (Anderson et. al., cited in Street 2003, p. 78); to 'occasions in which written language is integral to the nature of participants' interactions and their interpretive processes and strategies' (Heath, cited in Street 2003, p. 78) to an 'observed event in which literacy has a role, such as the making of a text, with writing and drawing included within it' (Pahl 2007, p. 86). Within NLS, texts are materialised embodiments of meanings and can be central, symbolic or implicit (Barton 2001, p. 98) and hence the researcher is licensed to use any number of textual forms as the kernel of an empirical unit of observation.

Relationships and use of technology are critical to this study. Yet while studies (such as Scribner & Cole 1981) include descriptions of skills and technologies, NLS tend to focus on the observable in social relationships, with individual and personal feelings being overshadowed by broader relations, such as social disadvantage within groups. Material relationships are under-theorised in NLS – a situation addressed in this study. The duration or frequency of a literacy event presents as an elusive characteristic, and while an event within NLS could be an instance or episode (Barton & Hamilton 2000), generally these events emerge from studying a particular social group rather than an un-constituted grouping of humans and non-humans. This study accordingly takes certain principles within literacy events and translates them into literacy-in-action nets. The time period for this empiric unit of study is an 'instance' of conversation or a materialised event such as a drawing. Literacy-in-action nets are more fully described in Chapter 3.

2.6.4 New Literacies

The widespread use of digital media (including the internet and gaming) has profoundly changed the literacy landscape²⁹ (Knobel & Lankshear 2004, 2007). The rise of computers, the internet and concomitant expansion of texts (as well as contexts) was adopted differently by each literacy model according to its underlying values.

²⁹ New Literacies also encompasses old forms of media literacies that emerged concurrently and independently of digital electronic media such as fan fiction (fanfic), manga comics and zines analysing how they changed the way reading was practiced (Lankshear & Knobel 2004)

Museums were quick to roll out electronic media into their exhibitions, with an example being the barcoding of texts to be read via smartphone as labels. The theory of New Literacies, which addresses the change in mindset that has accompanied the use of social media (Vestergaard, 2012) and not simply the use of the latest electronic technology, adds a pertinent dimension to this study through supporting participatory cultures within museums (Simon, 2010). Only some museums activated the 'New' in New Literacies through giving visitors the opportunity 'to build and participate in literacy practices that involve different kinds of values, sensibilities, norms and procedures' (Lankshear & Knobel 2007, p. 7). Museums digitised their collections and placed them online whilst inviting folksonomic tagging to disrupt the hegemony of previous taxonomic groupings. Those practices were participatory, inclusive, collaborative, and distributive, as well as author centric, with a significant manifestation being the phenomenon known as Web 2.0 and, in the case of museums, championed as Museum 2.0³⁰. Whilst not acknowledging the literacy framings being built around them, museums were mindful of the authority afforded by technology that promoted the diffusion of agency between museums and its audiences, even when they failed to pay more than lip service to it.

The plurality of New Literacies expresses the diversification beyond the written word, recognising the capacity of multimedia in its deployment of images and audio to convey meaning. This media has greater fluidity, with the practice of re-mixing and the use of bricolage becoming not just acceptable but expected with text manipulation, such as hyperlinking and multi-screens, now commonplace. 'People began to develop and to participate in text-mediated practices that simply did not exist before [and not] because they could not' [emphasis in original] (Lankshear & Knobel 2004, p. 23). Visitors navigating a museum space through their interests rather than any linear storyline under New Literacies would be an expression of this fluidity and also an expression of authority in the setting.

A study that informed my research explored this multimodal social semiotic through giving museum visitors a camera so they could 'frame aspects of the exhibition

³⁰ A leading proponent of the participatory museum movement is Nina Simon, author of the influential blog entitled 'museum 2.0' (<http://museumtwo.blogspot.com.au/>)

... to express her interest, attention and engagement during the visit' (Diamantopoulou et al. 2012, p. 11) or as a mnemonic to 'set the conditions of her own meaning-making later' (p.13). In foregrounding the agency of the visitor rather than including the potential agency of the technology, Diamantopoulou's study signals an inconsistency with my study. Despite New Literacies stressing a mindset that is 'decentered and flat as well as networked (Lankshear and Knobel 2007, p. 11), it remains human centred in addressing literacy as an assemblage of people and things.

2.6.5 Artifactual (Critical) Literacies Theory

Artifactual (Critical) Literacies Theory³¹ (Pahl and Rowsell 2010) gathers the 1990's material turn through incorporating the multimodal into New Literacy Studies and gracing material objects as texts which can be read (Dicks, Soyinka & Coffey 2006; Flewitt 2011; Pahl 2007). For example, a text could be a child's drawing (Pahl & Rowsell 2006, p. 8), as opposed to the drawing being preparatory for the validity of a written text. Multimodal ethnography takes the technology of literacy from traditional writing to valued artifacts in promoting both literacy and participant recollections (Rowsell 2011; Rowsell & Walsh 2011; Street, Pahl & Rowsell 2009). Within the theory is extensive work using the values ascribed to museum objects as a way to use home objects to inspire and generate literacy practices (Pahl 2009; Pahl & Pollard 2010; Pahl & Rowsell 2011). This study effectively retrofits use of these values to identify home literacies.

This study takes its inspiration from Artifactual (Critical) Literacies Theory and yet also departs from it. The acknowledgment of the relationship to *things* (including domestic and museum objects, symbols, narratives, 'labels' or images) over time to assist people develop their literate selves is directly relevant (Pahl & Allan 2010; Pahl 2008, 2009; Pahl & Rowsell 2011). Museums are situated as places that could exhibit (and as powerful Domains, certify) these personal objects/artifacts. These objects are able to trace changes in identity through sedimentations of meaning (Rowsell & Pahl 2007), with the claim that museum objects carry 'emotional resonance' to infuse stories (Pahl & Rowsell 2010, p. 10). Whilst museum objects can pattern meanings, this study

³¹ Artifactual Literacies was a conceptual starting point for the study demonstrating that objects could be incorporated into the study of literacy.

departs from the theory in extending the selection of objects beyond the domestic into objects capable of generating other meanings or indeed other histories such as the technological or scientific. This study aims to be not exclusively human centred and attempts to dispense with the object-subject orientation at play within Artifactual Critical Literacies Theory.

2.6.6 Multiliteracies and multimodality

Multiliteracies (Cazden et al.1996; New London Group 1996; Kalantzis, Cope & Cloonan 2010) and multimodality (Street, Pahl & Rowsell 2009; Kress & Van Leeuwen 2001) both impact on the study through widening the forms or actors (as texts) that create and sustain literacy and also framing how these actors might assemble. Materiality is present in the spoken texts which are actually inscribed such as a tweet meeting. The materiality of texts therefore has moved beyond the printed word (on the page or screen) into broader realms such as the materiality of a website and spoken language (Dicks et al. 2011) to encompass nonlinguistic features such as 'a visual, a sound, a word, a movement, animation, spatial dimensions' (Rowsell & Walsh 2011, p. 55). Texts can be understood as involving the interaction between the verbal and visual (Kress & Van Leeuwen 2001) such as images, symbols, signs and graphic devices.

The language and understanding of design principles resulted in consideration of text in terms of *production* as expressed by the theory of multimodality (Jewitt 2009; Kress & Van Leeuwen 2001; Rowsell & Walsh 2011). Design thinking impacted on Multiliteracies as a way of conceiving the progressive agenda of the multidisciplinary originating collective (New London Group 1996), where literacy teaching could be used not only to critically read existing texts but to compose and work towards social futures. Multiliteracies is clearly positioned as transformative for the individual within a collective achievable within a kind of design cycle or continuous process from a literacy aim to a literacy outcome. Multiliteracies could envision visitors *within groups* (such as families) redesigning an exhibition according to their agendas or responding to an issue presented in the exhibition.

2.7 Multiple Literacies Theory

Multiple Literacies Theory (MLT) is a distinctive ideological model of 'reading, reading the world and reading self' (Masny 2010, 2013; Masny & Cole 2009; Masny & Waterhouse 2011; Waterhouse 2012). It has as its primary concern *the process* of literacy. MLT is a creature of poststructuralism and draws sustenance from the writings of Deleuze, and Deleuze and Guattari (Masny & Cole 2009). It does not reject the importance of reading and writing but broadens literacy beyond their acquisition as the exclusive goal. In MLT's appreciation of the fluidity of modes; its situatedness; the fusion with the social, political, cultural and material; and its appreciation of the transformative power of literacies, it shares the aspirations and operating platform of Multiliteracies, yet it is distinctive in two key ways. First, MLT positions literacy as restless and creative, and second it does not see literacy as a social movement. MLT does not discount social change and social justice but sees them as indirect benefits rather than outcomes. Within MLT there is no endpoint; one is neither literate nor illiterate, nor in the continuum of moving from one state to another. One continues to practice literacy 'to be' and all literacies are legitimate (Masny 2009, p. 340). MLT aligns with personal transformation in a non-prescriptive way.

This line of thinking leads to events, or episodes, within MLT parlance. Events have much in common with NLS with some essential and relevant exceptions. A MLT episode (as for NLS) is an assemblage of relationships, but MLT explicitly includes objects, technologies and people with these assemblages. MLT events/episodes are assemblages of experiences that over time construct, de-construct and continually transform an individual (Waterhouse 2012) so that events are not only empirical but can change literacy practice through changing the person. An MLT event acts as 'moments that create ruptures and differences that allows for creation to take off along various unpredicted directions' (Deleuze 1990, quoted in Masny 2013, p. 341). Episodes emphasise being alert to the unknown, to something that 'forces us to think' (Deleuze 1994, quoted in Tafaghodtari 2009, p. 156), with 'us' being anyone or presumably anything within the assemblage. A literacy event for NLS research is where something happens within a largely existing construct. For MLT a literacy event is where

something happens, but instead of looking to what it means the interest is in what it *produces*. Events or encounters make changes.

Ontologically, for MLT the world is a text and so too is the self as 'through the MLT mantra of reading the world, the word and self as texts, literacies constitute ways of becoming with the world' (Masny & Cole 2009, p. 200). Texts have multiple meanings but these meanings are not representative and therefore awaiting interpretation. Instead they stimulate senses that emerge as an event. Texts are in Deleuzian terminology 'non signifying machines' (Masny 201, p. 84), which I conceive³² of as innovative technologies designed as transportation modes into limitless possibilities using instincts as component parts and fuelled by affect. MLT texts can be expressed via works such as 'music, art, physics, mathematics [that can] produce speakers, writers, artists: communities' (Masny & Cole 2009, p. 181).

The use of immersive and sensual experiences within museums resonates with key MLT concepts as museum visitors and visitor bodies can be seen as part of an ever-evolving textual resource, as they take up as 'visual, oral, written, tactile, olfactory and ... multimodal digital' artifacts (Masny & Waterhouse 2011, p. 291). The affective capacity MLT texts have for 'inspiration, experimentation, critique and art' (Masny & Cole 2009, p. 5) resonates with the transformative potential of museum objects. MLT texts are as ubiquitous as they are dynamic. MLT texts would be found throughout any museum.

2.8 Summary and theory applicability

Various literacy theories were presented in this section to overcome the false impression that any definition of literacy could be simplistic or straightforward and to demonstrate the portability of literacy theories for the research and museums. The review travelled from literacy being framed within the Autonomous Model as the cognitive ability of an individual to code and encode algebraic script to New Literacy Studies and its set of socially organised practices differentiated according to underlying social, cultural and political relationships. Literacy has been variously

³² I persist in the use of metaphor for my own clarity of thinking despite Deleuze's belief that the representational would stifle creative imagining (Patton 2010, cited in Masny 2009, p. 34).

translated to mean a singular omnipresent set of skills obtained in an instructional environment, or a social, fit-for-purpose practice with related activities into which people are apprenticed rather than taught. The creative and affective dynamism of Multiple Literacies Theory sits as an outlier to others in the Ideological Model camp but it too illustrates the increasing 'thingness' of literacy stamped into theory from New Literacies onwards. Along with an increasing appreciation of *thingness* the divide between the subject (reader) and object (what is read) starts to disappear, and assemblages appear with Multiliteracies and Multiple Literacies Theory. Literacy can be seen to emerge from networks of people, texts, technology and ideas rather than existing as something apart to be captured.

Instead of trying to fit one single theory of literacy into my study I have instead reached for strong common linking motifs within all Ideological theories of literacy. The four motifs or themes are materiality, spatiality, affect and mediation, and these are drawn together in Chapter 3 with the benefit of a MS account. The other elements looked into further in the remainder of this section are those of change and identification through practice.

Each literacy theory surveyed in the Ideological Model has a common goal with that of learning theories in that they lead to change. Application with an institutional environment could similarly lead to institutional change. New Literacies theory would support a participatory museum where expertise and authority is shared with the visitors. Multiliteracies could drive a museum mission of social change through critical and collective engagement with local and global issues. Multiple Literacy Theory illustrates personal transformation through literacy events demonstrating a different state of being often via activation of the senses. A museum could potentially provide environments that align with these various theories. Chapter 5, in part, analyses the fieldwork settings in this way. Yet any preliminary analysis is an incomplete picture without participants and an awareness of how literacy *works* in the space. A simple matching exercise would be doomed unless the actual literacy practices were understood. This was the value of the fieldwork, as indeed it was during close observations in the field when the relevance of literacies to museum became clearer.

Each of the Ideological Theories is an expression of practice with this empiricism expressed through literacy activities observed as events within social and cultural contexts. This strengthens the study's exploration of a local literacy practice and how this in turn would illuminate the role that different entities played in the setting in making this literacy. This leads to consideration of what those entities constituting practice might be.

Texts have multiplied rather than solidified as 'the forms and sites of [literacy] practice proliferate' (Lee n.d, p. 11). The acceptance of reproducible texts such as images, sounds and symbols is comfortable due to the ubiquity of electronic communication. It is the leap from the tangible into the intangible, such as the gesture as text, or accepting that animate or inanimate body as a signifying entity, where the ground seems to disappear, but this is indeed where the theories of literacy are starting to lead and it is here that this study ventures.

A study by Burnett et al. (2012) illustrates the theoretical journeying literacy is taking through its exploration between the material and (im)material spaces. The affordances of multimodality and digital literacies are illustrated via a detailed description of one class of students using Google Street View function. Literacy is positioned as subjective rather than purely situated, with meanings being constructed in both the material and immaterial realms through the four propositions of 'space, mediation, stuff and embodiment' (Burnett et al. 2012, p. 101). These propositions present a measure of overlap to my emergent analysis. The Burnett study reinforces my study's proposition that a visitor's own literacy practice could shape the museum space as much as being shaped by it. This resonates with Brandt and Clinton's (2002) proposal that it is as important to understand what literacy does with people as what people do with literacy; the multimodal environment of the museum is an eminent match to the Deleuzian reference to baroque complexity (Kaw 2002 cited in Burnett et al. 2012, p. 100). Museums appeal to and potentially ignite the senses and the imagination. In light of Baker's (2008; 2010b) rational and delirious museum spaces, any meaning making in museums can emerge in a myriad of ways. It is now possible to choose to locate these acts of navigation, with literacy becoming an actor or gathering of actors.

PART D: SYNTHESIS

This chapter has closely inspected three key actors in this study: the objects, families and literacies. It shows the study of material culture has moved from how and why things are made and used, to how things mediate social relations, to the granting inanimate objects a kind of agency, a voice. Objects are far from impotent entities. Rather than pawns, objects are active players; far from ascetic, they can be sensuous; far from singular, they can and have conjoined with other forms of materiality to be hybrids or even cyborgs as part human, part machine. Materiality takes objects beyond the inanimate three dimensional 'thing' into the immaterial, the animate and even the human (Candlin & Guins 2009). This explosion in thinking also lets questions about objects as purely props for human ideas segue into affect, the body and emotion. Objects can be considered in light of promoting dialogue and engagement through being socially 'active'. Objects can be alluring, with this theme continuing into spatiality where the term 'praesentia' is introduced. Objects as haptic entities represent the complex nature and affordance of objects with respect to space and time.

The spotlight on the participant families' recruitment from the margins, in terms of both location and status was given not to solidify the divide and the dichotomous nature of 'us' and 'them' in visitor research, but to enact different practices and highlight assumed practices.

Literacy is no longer monolingual, monomodal or separate from the complex and connected communities of practice brought about by changes in technology and the way contemporary society now makes meaning (Perry 2012). Texts take on the multiple hues of objects and can incorporate the living bodies of the families, with literacy using and being constructed by the interplay of texts. Museums offer visitors technologies to assist their visits such as print pamphlets and electronic handheld devices. People carry into the museum their own agency enabled by the technologies they bring, including their home literacies (Brandt & Clinton 2006). A source of excitement in the literature is that objects can support the vision of an alternate parallel space that exists in tandem to the rational museum (Baker 2008; Witcomb 2013) where multiple and unexpected meanings can arise.

The relationship between objects and families in a museum is little understood, so any literacy encounters must be imagined or closely observed. MS offers a way to trace networks of practice, including identifying the previously secret space of the 'delirious' museum that occurs through 'an unfolding of the self ... compelling as an expression of an affective museum visit or encounter' (Baker 2008, p. 23). As will be seen in the next chapter there are many ways that these actors can align within the museum. MS will reveal these relationships as sociomaterial assemblages where the number of actors of influence is not static but evolving and changing.

3.

THEORETICAL METHODOLOGY: MATERIAL SEMIOTICS

Material semiotics studies the meanings that arise in the relationships between material entities. These entities can be anything material such as a person or thing, and so within a museum the material could be the visitor and the object. With its primary focus on relationships, Material semiotics is well placed to reveal the processes of meaning making or literacies that arise within a museum. This chapter streams the four themes of materiality, spatiality, affect and mediation through the sensibilities of material semiotics in relation to the principal entities of the research, as explored in Chapter 2. This discussion becomes the research lens with which to position the fieldwork and its analysis. It establishes the methodological bracing that supports the praxiographic strategy used in the research to closely observe literacy, an object of interest.

PART A: MATERIAL SEMIOTICS

3.1 Introduction

Material semiotics (MS) is closely aligned with Actor Network Theory (ANT) and its variations such as post-ANT, Actant-Rhizome Ontology, and the Sociology of Translation (Latour 2005). This posse prides itself on studying the realities of the social in practice, and so as a methodology is short on method, preferring this to evolve from its central precept. Relationships within and between the social and natural worlds are what makes the world. Accordingly, the gathering of MS approaches does not try to explain why things act the way they do; rather it becomes a hyper-descriptive tool

outlining how things come together, stay together, fall apart, and make new connections, and the roles they generally play in the process.

Material semiotics is the term I selected for this study as it allows contributions from a range of theoretical resources within the sociomaterial pantheon (Law 2009). I initially read early ANT article that sharpened my material gaze. The fieldwork promoted an interest in the body, emotion, affect, spatiality and multiplicity within the material realm, and so I looked beyond ANT to contemporary material geographers (Anderson & Wylie 2009; Thrift 2004) and to the New Materialists (Coole 2013; Fox & Allred 2014, 2015; Fox 2005). Without these additions I would be left with ANT which 'has a flat view of human agents, reducing them to effects and denying the embodied, emotional nature of human existence' (Mutch 2002, cited in Al Mahmood 2012, p. 51). The term MS generates the capacity of ANT to become an adaptive portmanteau of sensibilities to practice.

MS is expanding as an unnamed undercover agent within research. In its various guises MS is deployed in studies of anthropology, history, philosophy, sociology, technological innovation and product design, education policy and practice, literacy and museum studies (Anderson & Wylie 2009; Baiocchi, Graizbord & Rodriguez-Muniz 2013; Dolwick 2009; Gad & Bruun Jensen 2010, Fenwick 2010). Of particular interest is the validation of sociomaterial theory in learning (Barab, Hay & Yamagata-Lynch 2001; Clark 2002, 2008; Fenwick & Edwards 2012; Fenwick, Edwards & Sawchuk 2011; Fenwick & Landri 2012; Rimpiläinen & Edwards 2009; Roehl 2012); researching issues such as the effects of 'affect' on education (Mulcahy 2012, 2015); learning processes (Raasch 2012; Sørensen 2007, 2009; Thompson 2010, 2012); education policy (Gorur 2011; Hamilton 2012a, 2012b); critique (Waltz 2006; Verran 2011; Verran, Kritt & Winegar 2007; Winthereik & Verran 2012); and exploration of digital literacy on literacy practices (Burnet et al. 2012; Bhatt in press; Bhatt & de Roock 2014).

In grappling with an actor that shares a denial of its existence and dislike of any misunderstanding in equal measure, I outline MS via the theories, theorists and key terms that informed its application in this study and where appropriate I incorporate the current application in relevant fields. In doing so I acknowledge that any systematic explanation of MS is likely to be unfaithful to a set of theories that hold

together as a cloud of moving, shrinking and stretching component parts (Fenwick & Edwards 2010) best honoured as a refined sensibility to networks of actual practice observed closely in the field.³³

3.2 Theory and theorists

3.2.1 Background

Consideration of the theoretical antecedents of MS is helpful in understanding it. MS is associated closely with ANT, which arose from the late 1970s as a re-thinking of sociology not as the 'science of the social' but as one of relationships between any and every 'thing' that could associate together (Callon 1986; Callon, Rip & Law 1986; Latour 1996b, 2005; Law & Hazzard 1999). These associations were positioned as a powerful and more direct way to elucidate the social rather than relying on existing and stable sociological constructs such as structure, cultural norms, class, and gender differences. Under this approach all realities are treated as '*simultaneously real, like nature, narrated, like discourse, and collective, like society*' [emphasis in original] (Latour 1993, p. 6), thereby eliminating artificial dichotomies such as culture and nature. ANT's ontology and epistemology produce a different version of the social where activities, including power and authority, are effects rather than causes of societal relations (Latour 1986). ANT proclaims to have taken a wrecking ball to the tenets of sociology and particularly any whiff of a dichotomy:

Truth and falsehood. Large and small. Agency and structure. Human and non-human. Before and after. Knowledge and power. Context and content. Materiality and sociality. Activity and passivity ... all of these divides have been rubbished in work undertaken in the name of actor-network theory.

(Law 1999, p. 3)

³³ The change in specific terms and emphasises in the theories' evolution is complicated by concepts changing from one theorist to another and for the same theorist in different applications' (Rimpiläinen 2009, p. 4). For the sake of focus and readability I avoid descriptions of any one term's iterations over the past thirty years and instead select the best alignment with literacy and visitor studies and activate these concepts. Where a quote uses a specific term such as Actor Network Theory it is kept, otherwise I use the term 'material semiotics' and frequently abbreviate it to MS.

The theories associated with MS are Science Technology Studies (STS)³⁴ and the Social Construction of Technology (SCOT) (Bijker 2010; Pinch 2009). These theories reject the rigidity of science and its methods along with its inherent dualities of nature and society; macros and micro; object and human. STS/SCOT works through qualitative case studies (Law & Singleton 2013, p. 185), a tradition which holds tight across MS variations whilst utilising the concept of symmetry between the animate and inanimate (Callon & Law 1995; Latour 1994). A range of theoretical antecedents outside the STS arena has contributed to this theory (Latour, 1995; Dolwick 2009), with Law declaring MS an empirical version of Deleuzian philosophy (Law 2008, p. 10). The influence of Deleuze and Guattari within the MS pantheon has become more apparent within the rise of New Materialism (Coole 2013; Coole & Frost 2010; Van der Tuin & Dolphin 2012). This is of particular value to this study due to my interest in the body, affect and social change.

Law and Hetherington's (2000) imagining of three kinds of actors in MS, or 'stuff', is also helpful for this study. The first imagining of stuff is something we can see existing in Euclidian space, such as 'machines, houses and supermarkets'. But the things we cannot see but know about such as satellite communications, subterranean pipes and 'the conditions of childbirth or the embodiments of child-rearing' (Law & Hetherington 2000, p. 35) are also included in the constellation of imaginings about stuff. Stuff can be a single entity or a collection of entities that make a recognisable technology, presumably one such as literacy. Bodies are material both in terms of adornment technologies (coats and shoes and bags and lipstick) and repair technologies (braces on teeth, artificial limbs, pharmaceuticals) where stuff is a fusion of technology and organic life (Thrift 2005). Callon's scallops (1986); natural geography such as reefs (Law, 1987); and hybrids of people and technology (Sørensen 2007) are all tucked up as stuff. Accordingly museum objects, the items visitors bring to the museum, the ways families may mobilise in the space, and the family members are stuff which has the capacity to create and engender relations. In MS the 'stuff' (Law

³⁴ Science Technology Studies is currently the preferred term for current writings by John Law (Law n.d).

2009) is one bookend and the other bookend is 'semiotics' and between them a clearer and more helpful view on how various combinations make meaning can be seen (p. 142).

This study extensively exercises the MS etiquette of using stories from observation as the basis for analysis. This etiquette may be seen within the literature, for example, Hamilton's (2012a) examination of public narratives about literacy, representations of literacy and how these disseminate through social imaginaries; McGregor's (2004) exploration of the spatiality of schools as workplaces; Sørensen's (2009) participant observation of Swedish and Danish Year 4 classes; and Bhatt's (2014) doctoral thesis, which deployed case studies to theorise digital curation by adult learners in further education classes.

In lieu of solidifying any theoretical definitions, MS is best considered a tool (or sensibility) to uncover practices and actors (Latour 1996b, 2005; Law 1999; Law & Singleton 2013; Orlikowski 2007; Sayes 2014). It can also be a tool for social change, as I will outline in the next section.

3.2.2 Material semiotics as critical theory

MS is actualised by close observation of a material world that eschews categorisation and instead operates as a changing series of relationships where the term semiotic has been shifted from language to reality (Mol 2010, p. 252). This means that the epistemological approach of close observation can be a strategy for change, not simply an endless string of stories. Despite Latour (2005) dismissing the grand narratives and power relations constructed by many sociologists as determinate phenomena, MS can be used as a critical tool to change macro level practices found at the micro level (Law 2004). The principle of relativism is used by MS, challenging not only the human and non-human divide but also traditional power bases. There are no a priori assumptions about classes or groups of people and/or any ordering such as God/Man/Nature (Coole 2013). This is not a rejection of hierarchies but an argument for tracing their production and the actors who produced them (Latour 2005) Relationships are the primary driver of significance, with strength or even status conferred through the temporary and shifting connections that can be identified between the stuff under scrutiny. This particular stuff arises as actors in their

relationships, which are called assemblages, networks and hybrids (depending on the flavour of MS applied).

Any agency or authority that actors may or may not project arise from their relationships and are not pre-ordained (Law 1992). Through identifying, selecting and describing networks, changes can be made and the real world done differently (Law & Singleton 2011, p. 493). New Materialism working within the MS sensibility explicitly adds critical theory to its political firepower (van der Tuin & Dolphijn 2012) through recognition of macro and micro levels so that it can integrate its detailed 'empirical, fine grained studies of the micro level' (Coole 2013, p. 453) with intermediate and broader level structures. The ontological politics (Mol 1999) is within this multiplicity of observed and hidden realities, including those enacted through research interventions (Barad 2003).

MS aligns with feminist research in that researchers play a performative role as part of the observable network (Harding 2009; Quinlan 2012; Barad 2003). The relevance to this study is that there is no neutral space from which to view the world, nor can we bestow, or be bestowed, with the grand overview (Haraway 1994; Law & Singleton 2013). Within this framing reality exists, but as multiple realities, not as one entity as seen from different sides or perspectives (Mol 2002). 'The critical task is ... mainly to create or recognise the material conditions that might be conducive to a different enactment of reality' (Postma 2012, p. 155). In a study where *matter* matters, pitching the voice as in who/what can speak, gets to speak, and the structures in which they are enabled to speak, are amongst the key methodological issues for this research (Rimpiläinen 2011).

The next section extends this discussion over how researchers can have greater sensitivity to how things get done via greater specificity as to who is acting, who or what has agency, and how they may be identified.

3.2.3 The question of agency

MS steps away from an exclusively human-centred view to one where humans and non-humans collectively constitute the world and in association manifest knowledge and processes. Latour (1993) initially demarcated humans and non-humans as actors and actants, with the latter as 'things, objects [and] beasts' (p. 13) but not

symbols or the supernatural. Over the years these distinctions have faded, with each becoming simply actors with potential agency. Museum objects can be living, such as Tattoo Tim³⁵, but does he have more or less agency than a steam train? Is use of MS as a theory contingent on granting this train a form of vital materialism (Bennett 2004; 2010b)? MS theory has been dismissed as the 'heresy of hylozoism, an attribution of purpose, will and life to inanimate matter, and of human interests to the nonhuman' (Schaffer 1991, p. 182, quoted in Sayes 2013, p. 135). Others argue that rather than heretical, the pathway's symmetry opens and leads us to the embedded human agency that we infer objects contain (Miller 2005). These questions are useful to explore, not in order to further refine 'stuff' but to better understand MS as a methodology in a study that is interested in both humans and non-humans within museums.

Within MS the agency of an actor arises in the relationships between humans and non-humans. I accept this position with two qualifications. The first dismisses any tacit endorsement of technological determinism where people become servants to their own machines and instead attributes agency as distributed across animate and inanimate entities (Otter 2013; Latour 2002; Bijker 2010) in a collective agency. In this way agency can be established through breaking down the subject-object divide without departing from an object's materiality. Second, foregrounding object agency (latent or enacted) is a tool to more closely identify actors in any literacy assemblage. It does not completely dismiss the noumenal, but rather allows its thinking to welcome an imaginary life for objects. Otherwise what are currently known about objects can become limited suppositions (Bennett 2010a, p. xv). This position is even more justifiable in the light of our expanded consideration of a museum object outlined in Chapter 2.

Sayes (2013) further dissects this agency as: the condition for the possibility of human society (such as technological innovation); mediators (or change agents); members of moral and political associations (the outsourcing of public safety to non-humans such as seat belts), and gatherings of actors of different temporal and spatial orders (p. 135). Each is relevant to museum objects, visitors and engagement, with the

³⁵ *Tattoo Tim* is a man with an original artwork on his body by Belgian artist Wim Delvoye, 'that once he's dead, is the property of Rik Reinking.' (Artshub 2011)

last of special interest in that museum objects are gathered up from other times and spaces. According to Sayes (2013), these gatherings enhance the strength of human groupings; a museum illustrates the potential of non-humans as gathering points 'of variable ontologies, of variable times, and of variable spaces' of human actors (p. 140). Objects, regardless of whether they are dead or alive, 'might authorise, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid and so on' (Latour 2005, p. 72). In other words objects have agency.

The possibility of the liveliness of matter can become a tool, rather than belief, at the disposal of research for tracing the effects of literacy between objects, bodies and texts. This tool does not dismiss what people say and do in relation to objects in their orbit, nor does it privilege humans because they speak the language of the researcher³⁶. Any tangible affect by non-humans could be projected from humans rather than being their response to some kind of vital energy emanating from things. This approach is not oppositional to vital materialism that grants things immanence (Coole 2013; Bennett 2010b; Navaro-Yashin 2009). Bennett and Joyce (2010a) sidestep the issue of attributing intentionality to the material through prioritising its effectivity in relation to the positions occupied in configured networks of relations. Latour (2005) pragmatically replaces the preoccupation with the intentionality of objects with an interest in tracing their effect within a network. This prioritising of the network and the dismissal of the object/subject divide is a position I share as part of the benefits of using MS as a sensitising tool to observing practice.

It seeks to shift our understanding and to attune to reality differently. It may well be that in the process ANT fails to protect humans from being treated as 'mere things', but it offers something else instead. It opens up the possibility of seeing, hearing, sensing and then analysing the social life of things – and thus of caring about, rather than neglecting them. (Mol 2010, p. 254)

³⁶ Latour (2005) seems to dismiss the vitality of non-humans saying their potential as actors 'does not designate little goblins with red hats acting at atomic levels' (p. 72).

3.2.4 The question of objects

The term 'object' is potentially confusing when it can be used in relation to so many things, particularly within an MS framing. This section clarifies the use of the term 'object' within the study as an acknowledgement that the term can be 'vague, ambiguous and overlapping' (Bueger & Stockbruegger 2016, p. 7). The concept called a Matter of Concern (MoC) was introduced by Latour (2004, 2005) as a foil to Science's positivist 'matters of fact' and to delineate an object. Whilst some facts are legitimately universal and stable, most other objects represent uncertainty and so become a platform on which something new can be built. A MoC can be the matter, issue or situation that researchers identify in practice and choose to call into question.

Where does this leave 'objects' in my research? To answer this question I look first within a museum and then into objects as 'matters of concern' and as 'boundary objects' (Akkerman & Bakker 2011; Star 2010; Star & Griesemer 1989). An object in a museum could be many things and not only a collection object, an object interpreting a museum object, and/or an object brought into the museum. As well as being part of the collection, objects could be part of a museum objects' interpretive network. A museum study focussing on 'portable objects' (pamphlet, animal suit and mobile phone) used MS as a sensitising perspective through detailed explanation and application of terms such as association, mediation, multiplicity and shift in tracing such objects throughout the museum (Svabo 2010a, 2010b). To avoid further confusion, objects collected, carried, displayed, or manifested within a museum in my study are hybridised and given terms such as 'text: museum object' or 'text: interpretation'. The priority remains the collection object.

A boundary object sits between realms of Discourse in material, emotional, social, symbolic and experiential knowledge networks. Such objects can make possible the framing and stabilisation of actions, while simultaneously providing an opening onto other worlds, thus constituting leakage points where overflowing can occur. Objects within a museum inhabit 'a border zone where different systems of representation meet' (Cameron 2008, p. 240) through their treatment by museum professionals with distinct roles, as well as the public with diverse abilities and

interests. These different systems of representation are incorporated into Interlude # 3 entitled 'I am TMAG label' (p. 64).

Museum objects can therefore also act as boundary objects when part of an open-ended network of interrelated Texts serves to convey different parts of the same message that may or not be mutating within and beyond the museum. Carr et al. (2012) take up the potential of any object as a boundary object, riding between the familiar and the unfamiliar in a museum project which explores young children's learning in museums. As these objects can be concrete, abstract or somewhere between, in my study a boundary object could be a museum object, literacy, home collections or the research camera, each taken between the home and museum and each managing 'multiple, divergent discourses and practices across social boundaries' (Walker & Nocon 2007, cited in Akkerman & Bakker 2010, p. 140).

MS has two relevant concepts in relation to boundary objects. The first concept is that of translation. Any collision of worlds is part of the process of translation and hence of interaction and change (Callan 1986; Latour 1994; Law 1992). The other concept is that of alterity (Latour 2005, p. 244), the potentially powerful space that occurs between or outside worlds. Alterity represents a potential transformative space through the imagery of the hinterlands (Law & Mol 2001). These territories are neither social nor unknown but rather present a landscape of possibilities. The approach to the hinterland is not one of 'filling in the blanks' but accepting the existence of the hinterlands and the multiplicity it offers. Boundary objects, as a 'transformation' type (Akkerman & Bakker 2010, p. 147), is consistent with the MS theorising of the 'between spaces'. This type promotes reconsideration of current practices within each overlapping realm. Particular attention can be directed at the in-between boundary space through engaging in collaborative dialogue. MS is well placed to trace that 'which is not yet formatted, measured, socialized, covered, surveyed, mobilized or subjectified or engaged in metrological chains' (Latour 2005, p. 244).

Within MS terminology, a Matter of Concern could be a museum object, but not necessarily if we do not notice it or it does not do anything. A museum object could also be a boundary object. The key difference is that MoC objects can be multiple rather than only individual. Literacy could be a boundary object or a MoC and I explore it

later within both guises. The hallmark of these multiple objects is their nonconformity within different spaces (Law 2002, p. 92). A boundary object can unhook from Euclidian tangibility to change, bend and distort in different typologies of space whilst still being the same object. The list of hybridised terms covering museum object as say 'text: museum object' may be found in Chapter 4, Table 1.

3.2.5 The question of practices

This study uses a variation on the term practice, informed by MS, as the empirical unit of analysis, rather than strictly adhering to its useage within literacy theory. Practice in this study is taken to be an observable pattern of relations as assembled in a particular location or 'scene of analytical interest' (Law 2012, p.1). By contrast, practices within New Literacy Studies are instantiated through events within the context of identity, knowledge and power. The scene of analytic interest is a museum and the reason to look into patterns of relationships is to identify how literacy may arise within practice, not to identify events as a way of theorising a practice.

Despite the study's specific application of the term practice, the NLS identification that practices happens in other places and at other times supports my interest in the home literacy as well as the museum literacy. Another overlap between MS and NLS is the iterative nature of relationships between events and practices. Whilst practices are not the simple accretion of events over time practices can be subject to modification as events and their coterie of social and material players impact on people' lives. How practices unfold as literacy depends upon where the activity leads. As Street and Rogers (2012) declare, 'what gives meaning to literacy events may actually be something that is not, in the first instance thought of in terms of literacy at all (p. 15). In other words practice is the outcome of close observation where the actors within observed networks cannot be taken for granted or assumed.

3.2.6 Summary

The intention of this part was to enable a study-specific application of MS through honouring its key tenets. The groundedness of MS coming from the use of case studies in Studies of Technology and Science, coupled with an appreciation of Deleuze and Guattari, was sufficiently compelling to override the overwhelming

confusion I often felt in the face of its large and shifting terminology. MS occupies a fluid space within its iterations and application. It invites innovation whilst retaining a familiar pathway advising us to wipe clean assumptions; look to the specificities of a relational world where humans and non-humans create agency through their relationships; follow these specificities to heterogeneity and multiplicity where different worlds are not only possible but may already exist.

Literacy, museum objects and families in this study are all material, and they can all have agency as actors. They maintain their pre-eminence in the study, but with the advent of boundary objects and MoC as analytic devices the term object takes on a study-specific hue. Literacy can be a boundary object or a MoC, with its nonconformity within spaces a potential tool to identify it. Objects and families are now sufficiently flattened relationally to be called 'object: text' hybrids. The two main theoretical sensitivities of literacy and MS are mixed within Part C as it looks to the four key thesis themes of materiality, spatiality, affect and mediation.

PART B CHOREOGRAPHY OF THE FOUR THEMES

Chapter 2 established museum objects as complex and relational, and literacy as situated and multiple, and therefore both sit coherently within the MS theoretical framing. I now explore literacy and objects within the four compelling themes that arose from the fieldwork: materiality, spatiality, affect and mediation.

3.2.7 Materiality

As literacy is not a static entity, neither is the material within museums. Museums are full of 'stuff' (Law & Hetherington 2000) that could be actors in their capacities to create and engender relations and indeed are materialised in their relationships to other actors, including literacy. This stuff is 'scored across states (solid, liquid, gaseous) and elements (air, fire, water and earth) ... perpetually beyond itself' (Anderson & Wylie 2009, p. 332), putting the material within and beyond our imagination as it is actualised by humans and non-humans.

A call to acknowledge the active role non-humans play in literacy came initially from within New Literacy Studies (Brandt & Clinton 2002, 2006; Clarke 2002). This acknowledgment leads towards redressing the human centredness of the theory.

Artifactual (Critical) Literacy (Pahl & Rowsell 2010, 2011) and to some extent 'figured worlds' (Bartlett & Holland 2002) address the breadth of materiality through inclusion of technologies not directly associated with reading and writing. This materiality includes objects in museums and is consistent with my decision to use the term texts when referring to museum objects. The material turn, already underway through incorporating the multimodal (including the electronic), nevertheless regards technology as an enabler rather than an actor.

Any lack of conceptual co-dependence of the material with agency, intention, subject and object within New Literacy Studies is at variance within MS. Materiality became actively addressed within literacy studies when concepts of place, space, local and global came under scrutiny. The affordances of networks composed of people and things, seen across time and space, offer fruitful ways to understand literacy (Lemke 2000). Only Multiple Literacy Theory, with its appreciation of spatiality and affect, completely embraces this material potentiality, although elements of all the Ideological Models contribute to greater understanding of museum engagement.

3.2.8 Spatiality

Spatiality is a feature of literacy theory to the extent that the treatment of time and space could be an indicator of the operating model. The Autonomous Model gives spatiality little consideration through claiming literacy as a skill set that can override or freeze both time and space (Brandt & Clinton 2002). This model's professed calling card is its transferability. In reality this 'go-anywhere' model does not stray far from the networks linking back to its homeland in the formal education sector. The Ideological Model on the other hand problematises 'what counts as literacy at any time and place' and asks 'whose literacies are dominant and whose are marginalised or resistant' (Street 2012, p. 27). The Multiple Literacies Theory is by definition multiple but with the multiplicity coming from the changing relationships to context (Masny & Waterhouse 2011, p. 291) rather than the number of literacies. Literacy within MLT, whilst subject to time and space, is unpredictably endless in the way it is actualised.

Spatiality within literacy can be bundled into three categories: as physical spaces or 'containers' – a theatre for activity; as social spaces where identities are brokered, developed and rendered; or as assemblages of sociomaterial elements identifiable in

relation to literacy practices. Viewed in the latter as assemblages, literacy is liberated from the analysis inherent in the NLS and Autonomous Model's relying on the macro determinants of the learners' status. Assemblages grant ways to identify all effects through tracing how actors are drafted into instances of literacy, actively use literacy, are changed through this interaction, and ultimately develop a literate identity (Leander & Lovvorn 2006). Research using spatial research methodology and terminology within literacy studies follows 'new routes of freedom and possibilities' (Deleuze and Guattari 1980/1987, cited in Eakle 2007, p. 475) such as data walking to avoid early interpretative closure (Chavez 2004, cited in Eakle 2007); territorial mapping techniques influenced by Foucault (Eakle 2007); and the use of dramatisation analysis techniques. Eakle deployed many of these approaches in museum studies (Eakle 2009; Eakle & Chavez-Eakle 2013). Deleuze and Guattari's rhizomatic analysis is similarly used within Leander and Rowe's (2006) analysis of literacy performances, shifting the focus away from fixed meanings to multiple 'becomings'. Spatiality shifts the emphasis in analysis to the 'how' and 'what', rather than meanings which may or may not be extracted. It also means that consideration of space-time allows the assemblage to be retrofitted to identify the type of literacy within the activity.

Hetherington (1997) identified three ways to consider objects in a museum space that overlap with ways to consider spatiality within literacy: as fixed within Euclidian geometry (Autonomous); as revealed discursive texts of power and agency (New Literacy Studies); and as the uncertainty of topological space which folds and distorts different spaces into a material assemblage (MLT). The latter 'fluid' topology is where the museum object is the most assertive in meaning making (p. 215)³⁷. This 'dance of agency' (Pickering 1993, quoted in Griswold, Mangione & McDonnell 2013, p. 348) between humans and non-humans can result in visitors subverting museum communication objectives and design ambitions. This echoes a relationist perspective on space-positioning encounters between space and users, not as orchestrated by the

³⁷ Hetherington (1999) explores these contours in fieldwork undertaken with the vision impaired and their sense of touch uncovering the relevance of 'praesentia', a quality that could equally apply to affect or spatiality.

design of the space but as a dynamic between them (Mulcahy, Cleveland & Aberton 2015).

MS has multiple strong concepts within spatiality that extends these introductory comments on literacy and museum objects. This definition of network is a starting point:

An assemblage of materials brought together and linked through processes of translation that perform a particular function. A network can continue to extend itself as more entities become connected to it. It often stabilizes dynamic events and negotiations into a black box that becomes durable (Fenwick & Edwards 2012, p. 12).

Yet stability is not the endgame within a network. Under MS an actor/object is a network which becomes an actor/object and so on.³⁸ Ultimately, actors must do something to be and keep being an actor (Latour 2005, p. 131). The relationally contingent property of matter is the primary tool to trace how these relationships are made within the network and what happens to them. To assist this identification a network can be seen in spatial terms.

A network as a *region* occupies a static physical space that can be plotted in two or three dimensions using conventional and cartographic coordinates and so can be autonomously located (Mol & Law 1994; Mol & Law 2001). McGregor (2004) focuses on the role of curriculum texts in carrying authority from afar and into the local setting, describing them as an immutable mobile – a MS leitmotif. Used as a tracking device with its super sensitisation to the potential sociomaterial diversity of actors as knowledge carriers, MS is used to trace children's literacy across spatial regions (neighbourhoods) and communities of practice (social communities) (Nichols et al. 2007). The issue then becomes where and when to incise the network in selecting which actors to follow and how far. This stable MS space is an obvious one to be

³⁸ A network is taken to be synonymous with an assemblage and it is the latter term which is mainly used in the study. The originating theories differentiate between them not on their contingent nature but on the basis that an assemblage 'has fewer topological presuppositions about the type of relations and the form and duration of the compositional unity' (Anderson & Wylie 2009, p. 320). The resultant simplicity of the assemblage form is appealing.

evoked by something as solid as a museum. In this study the primary site is the museum extending to the home, as a region and community of practice.

The network imagery can become a barrier stopping the capability to 'squat beyond the possible' (Law 2002, p. 92). To address this limitation, multiple forms of spatiality (including the im/possible) were introduced, in part, to underpin notions of alterity, or the non-considered and therefore unknown. Contemporary MS maintains objects within networks and regional spaces whilst looking to expressions of multiplicity and alterity. Sheehy (2004) offers a typology of space that echoes networks and creative tensions in the form of 'thick' and 'thin', where both weights reflect place-making in terms of ideas and text used in classrooms for teaching literacy. Increased teacher intervention resulted in the space thickening with less scope for intervention. The space thinned with the loosening of the boundaries between the students personal and classroom lives as well as a reduction of control of the networks taken. The experimental ideas flow the most energetically within the in-between spaces prior to the thin falling prey to the 'deeper space-time grooves' of the thick routinised spaces (Leander, Phillips & Taylor et al. 2010, p. 339). This typology could be transposed into the museum, where thick spaces are those with the greatest weight of museum interpretation and the porous more creative spaces sitting between the home and museum. Literacy as boundary object further explores this transposition.

MS has other typologies to deal with in the nether, intermezzo worlds – the *fluid* and *fire* spaces. Fluid space overcomes the hegemony of networks, which as fixed Euclidian entities do not capture the relational networks that exist in the immaterial spaces (Law & Singleton 2005). Regional, network and fluid spaces co-exist in intricate yet defined relationships:

... in a network things that go together depend on one another. If you take one away, the consequences are likely to be disastrous. But in a fluid there is no such inherent instability; no 'obligatory point of passage'; no place past which everything else has to file; no panopticon; no centre of translation; which means that every individual element may be superfluous. (Mol & Law 1994, p. 661)

Fluid spaces generally do not have clear boundaries; there is unconcern for standardisation, and one space can blend with another or circumvent an obstacle. In fluid space change is gradual (Law & Mol 2001).

The fire space on the other hand is sudden and transformative. Fire suggests the creative powers: it has passion and spirit as well as destruction. Fire burns as a romantic and visual notion of the flickering relationship between presence and absence, the single now and the alterity of multiple absent *others* (Law & Mol 2001). Fire can be constant and stable but only through identifying the gap between the present centre and multiple absent 'others' shooting off at the ends a star patterned imagery. Fire is within the categories of MS spaces and, like the imp, co-exists and disrupts Euclidean, network and fluid spaces.

A number of studies use MS to extend the spatial conceptualisation of cultural sites (Jóhannesson 2005)³⁹ beyond only solid and regional into fluid and fire spaces (Law 2002; Law and Mol 2001). Recent related research into students' digital literacies (Bhatt 2014, 2016; Bhatt & Roock 2014) combine MS-based structures of 'purification', 'naturalisation', and 'translation' (Bowker & Star 1999; Latour 1993, cited in Bhatt 2014, p. 81-82) together with Deleuze and Guattari's analytic metaphor of the 'rhizome' to recognise the tensions between formal school structures and students own practices. Bhatt adopts the term 'irruption' (via Baynham, 2006) as a variation on the term disruption where new technology replaces previous and acceptable ways of doing things. Irruption cuts a swath through school or 'pure' literacy practices bringing in unacceptable as well as acceptable practices in a boundary-crossing exercise between domains. This irruptive force, rather like alterity and the hinterlands, is traced through using MS translation. Bhatt's (2014) study follows networks within formal education as they generate and foreclose upon 'spatial alterities' (Law 2002, p. 102) or alternatively allow differences to enter.

Space can then be thought of in two broad generative ways. The first is that space is not out there to be experienced, but rather is co-constructed or performed relationally, constantly made and remade. The second is that the most dynamic space

³⁹ There is a commonality between tourism and museums as 'destinations' extending to shared terms such as visitors and product, economy and culture.

sits 'in between' the dominant spaces. Deleuze's concept of 'becoming' is the transient, iterative yet creative process and place of transformation between the virtual and actualised (Masny 2013, p. 340). The 'actual' is a type of assigned territory, similar to the unassailable black box, whilst the 'becoming' occupies the fire spaces. Law declares that network (or fixed) spaces still have their place whilst warning that fluid objects can often look 'unregulated, sloppy and sub-optimal' (Law 2002, p. 102) – like literacy sitting outside the Autonomous Model. One might imagine that the fire space would initially not look like any known literacies. This cautionary note serves the exploration of literacy as multiple occupying different spaces within the same setting. Spatiality is applied within the research as it moves the definition of literacy beyond the ability to read, write and process information to all literacy practices, including those not yet actualised, as they inhabit the virtual and the place of possibility.

3.2.9 Affect

Affect does not always operate under definitional equivalence. 'The problem that must be faced straight away is that there is no stable definition of affect. It can mean a lot of different things' (Thrift 2004, p. 59). I treat affect as an ongoing form of affective energy within a literacy assemblage rather than as a gateway to learning literacy through an enthusiastic teacher or students pursuing a ruling passion. Affect as part of an assemblage is not made explicit in literacy theories aside from Multiple Literacy Theories. Affect synonymous with emotion is associated with human consciousness and so would seem an uncomfortable companion to a theory that positions agency as distributed across human and non-human entities. This section reaches beyond MS and Literacy to better understand how I arrived at the optimal application of affect within the study and how it is not such a stranger to MS and Literacy.

Latour references the social as material assemblages in saying 'To understand the activity of subjects, their emotions, their passions, we must turn our attention to that which attaches and activates them – an obvious proposition but one normally overlooked' (Latour, quoted in Lassander & Ingman 2014, p. 201). A Matter of Concern can be shown to incorporate affectively animated forces through linking concern to trouble, worry and care in a kind of embodied sociality. Through revealing matter in certain ways there is the potential to generate care and change. Therefore emotional

words are human labels that can lead to considering the liveliness of things as well as people. Affect is validated as a form of engagement capable of representing any thing (De la Bellacasa 2011).

Affect is at the forefront of New Materialism within the theory's imagery of flow and entanglements.⁴⁰ Affect is what causes actors to act or be acted upon in this MS worldview. Affect within MS can be what circulates as an affective materialism, an inner state, and a signifier of activation. Regardless of the arguments in favour of either view, any consideration of affect resonates with the body, partly because it is understood and expressed physically.

Affect registers on the body. It is carried by facial expressions, tone of voice, breath and sounds, which do not operate as signs, yet are not mere epiphenomena. And, precisely because affect 'affects' bodies, it can be transmitted, and is intimately social (MacLure 2010, quoted in Mulcahy 2012, p. 14).

Affect can sidestep reason and act on other systems in the body aside from neural pathways (Thrift 2004, 2009). Affect can be marked as a kind of intensity that activates the body and 'makes the world intelligible by setting up a background of expectation' (Thrift 2000, p. 34). Children's movement in museums is a way to make meaning but also claim the space, thereby supporting a claim that bodies help to mediate and understand the world (Hackett 2012). Movement is their modal choice in the range of possible meaning-making modes. Citing Flewitt (2008), Hackett (2012) argues that 'children become literate in many ways, not just through language, but through learning to use combinations of different modes, such as gesture, gaze, movement, image, layout, music and sound effects' (p. 19). This argument links physicality to literacy and I use it in the fieldwork analysis after observing the physicality of children in relation to museum objects.

⁴⁰ There is an expansive and transformative use of the term 'affect' as understood by the New Materialist via its use in place of human agency. Affect 'marks the passage of an entity from one state to another' (Massumi 1988, p. xvi, as cited in Fox 2015, p. 310).

Language plays a contentious role in human-centred affect, resulting in emotion being regularly evicted from affect once it invites texts, symbols and representation into consideration. This potentially makes affect an awkward bedfellow with literacy. Emotion for some theorists becomes simply social and discursive rather than focussing purely on the magical moments of reaction that occur pre-cognitively (Wetherall 2013, 2014). Emotion in this viewpoint is tamed by reflection, recognition and cognition (Thrift 2009). Whilst I acknowledge that emotions are literally hard to read, I am reluctant to jettison emotion, agreeing that the body is a site for experience within a social and material context in the term of 're-membering' (Michelson 1998). Witcomb (2010) points out that affect 'experienced at the sensorial level, becomes part of the symbolic realm' (p. 41). Whether emotion is different to affect or its product (Massumi, cited in Zembylas 2007, p. 20) is not decided upon here, rather it is the effect of affect which is of primary interest.

The role of affect as an actor within museums is emerging (Baker 2008, 2010b; Mulcahy 2016; Witcomb, 2010, 2013). Mulcahy's work about learning shares many of the concepts I deploy in this research and it supports my methodology through positing that 'learning at the museum involves an entanglement with objects (affective and otherwise) and is best approached methodologically through new materialist social inquiry' [emphasis added] (citing Fox & Alldred, in Mulcahy 2016, p. 4). Mulcahy (2015) and Hackett (2012) read the use of the body as generating new affects and connections. Cognition becomes an optional beneficiary of affect rather than a determinant or superior player (Mulcahy 2016). Affect is something encountered through the senses and expressed via the emotions (Michelson 1998).

Affect can be put to work in considering passage from one state to another and so be readily transferable to considerations of literacy and transformation. Affect in its association with literacy means that literacy can extend beyond acquiring skills or improved cognition to being a new way to view and be in the world. A critical hook for this study is the link between affect and thinking via the concept of encounters. An encounter grants the body the capacity to be a more powerful actor and learning could easily be used in the place of literacy in this quote:

If encounters in and with the world force us to think, then learning should be understood as the outcome of those encounters which enable a body to expand or increase the array of bodies, objects and entities it may affect and be affected by. (Duff 2013, p. 195, as amended for this study)

In other words, affect arise in assemblages that can change the actors regardless of whether affect is regarded as purely of the inner world or circulating like a contagion in the outer.

Mulcahy (2012) speaks of the 'thingliness' of affect but also of it as a border crossing between one state and another, an expression of MS drawing on Latour, Tarde and Deleuze to consider affect not as a psychological state but an assemblage of energies, words, gestures, commitments, affections, artifacts, bodily feelings, routines and habits. The thingliness of affect speaks to the museum. As an experience it can be empowering, disempowering, transmittable and material. As intensities, sensations or energies that 'can be discharged through objects, affects make it possible to read many other things, such as space and the environment, as affective ...' (Navaro-Yashin 2009, p. 11).

Rather than guessing at subjective inner worlds, in this study I look to affect as manifested in a re-affected, objectified or a distributed, subjectified world. In so doing we can look away from what emotions are, and attend to what they do (Fox 2015). Affect is an important actor to identify in the complex assemblages that arise in the heterogeneous museum space. Emotions as 'the very visibility of a body' (Lingis 1999, in Anderson & Wylie 2009, p. 327) become significant as a marker of affect within the assemblage. In this study literacy, like knowledge, could be corporeally and emotionally generated, with both acting as markers for affect. Museums can be spaces of affective encounters where affect is shared, shareable, creative and associated with change.

3.2.10 Mediation

The term 'mediator' surfaced in marginalised communities (Mihut 2014) and was introduced by Baynham (1987, 1993). As 'helpers', mediators have carried a variety of labels from 'brokering' (as the 'go to' person in an institution or community) to 'guiding

lights' in family settings (to describe sibling-to-sibling literacy support) (Perry 2009, p. 257). Mediators assist the accomplishment 'of literacy purposes' or goals in a one-off or regular interaction (Baynham 1993, p. 294). Whilst seemingly straightforward, this can in fact be a complex task requiring a range of literacy funds (Perry 2009). Interactions in these situations can be both cooperative and conflicted (Baynham 1987, 1993). Conflict can be introduced from outside, and the mediator becomes the voice (albeit a helpful kindly one) from that formal and institutional arena. Conflict similarly can be introduced from the inside when say a child does not conform to assumed rules of a discourse. In the seminal work by Baynham (1987) the mediator was invited into a household which was part of a London Moroccan community and participated in what New Literacy Studies would term a literacy event involving an aunt, a niece, and a letter from the government. Through their understanding of the letter the mediator occupied an ambiguous space and could appear as both the message and the messenger.

Mediators therefore can bring the institutional or formal voice into an instance of literacy as invited and required. The role of a mediator becomes apparent in the fieldwork, where the 'text: museum object' under consideration presents as difficult to negotiate, and help is enlisted by the participant family on its terms. Mediators also negotiate the role of materialised or embodied texts, such as a letter or label, where 'oral language reinforces, denies, extends, or sets aside the written material' (Heath, quoted in Baynham 1993, p. 294). This can result in a sequence of switching between mode (talk and text), code (translating languages), and register (simplifying the language). My interest here is not to identify the type of switching but to inspect the 'detailed interactional patterns' (Baynham 1993, p. 303), noting that switching happens.

Instances of literacy (or literacy-in-action nets as I term them in this research) take in multi-modal texts that are made or pre-existing, oral or inscribed, and so it follows that talk, texts and technology can all play roles in varying degrees. The mediator role moves beyond the purely practical bridging of contexts to 'literacy as affinity, encompassing personal narratives, language of empathy, relations and partnerships built to support the literacy experience' (Mihut 2014, p. 74). MS in its guise as ANT uses 'mediation' and 'mediators' as linkage and transformational devices.

They are consistent as change agents but not directly interchangeable with Literacy Mediators.

When objects produce unpredictable and multiple meanings within MS they are acting as mediators (Latour 2005). Mediators 'transform, translate, distort, and modify the meaning or the elements they are supposed to carry' (Latour 2005, p. 39). Mediators can create something new within and between the parties they stand between, with association, translation and innovation becoming synonymous with the role. A mediator is an active agent creating what it translates as well as the entities it works upon (Latour 1993, pp. 77-78).

An intermediary acts as a kind of placeholder (Sayes 2014, p. 138) and is therefore the passive relative, relaying meaning without transforming it (Latour 2005, pp. 37-42). No matter how complex the internal dimensions of an intermediary, the meaning it carries as a 'black box' is clear, singular, and predictable (Latour 2005, p. 39). Intermediaries and mediators are material and not necessarily human. This is important in museums where objects can be more than a causal actor (Latour 2005, p. 70) black-boxed via their label or positioned with the gathering of objects. An MS object can add something to the chains of interactions between other actors becoming mediators, 'just as other actors are. They do not transmit our force faithfully, any more than we are faithful messengers of theirs' (Latour 1996, cited in Sayes 2014, p. 138).

Literacy Mediators acted as brokers in situations where literacy skills are required within the Domain of practice. By and large this is how I adopt the term in this study, although the spirit of MS adds dynamism to the interaction and assists consideration of the role of boundary objects as mediators. The distinction between mediators and intermediaries also assists me to look more closely at actors to decide whether or not their role leads to change or confirms and therefore stabilises interactions.

3.3 Summary of the four themes

Exploration of the four themes yields a better understanding of the theoretical framing of the study and also presents them as a series of valuable tools. None of the themes helped in definitively selecting a theory of literacy that I could subscribe to, but

regardless such a choice would be anti-MS as literacy would arise within the research assemblage rather than pre-set. The recognition of literacy will depend in part on whether it is to be used as purely reading and writing texts, or in mastery of the literacy spaces assembled, or as avenues into other realms of thinking and being. Each is recognisable within existing literacy theories and the fieldwork.

Materiality assisted me to conceive of the fieldwork and analysis holistically as regarding the contributions of humans and non-humans. It shifted the gaze to the how and what resulting from instances of literacy rather than purely focussing on the meanings the participants were able to decode. . The dimensions of space assist in considering how actors are drafted into literacy, how they use it and the changes that occur, including within their identities. Rather than gazing upon a mess of interactions there are now possible nuances. Affect, which could be synonymous with materiality, justifies the ways in which the body can be brought back into the analysis without jettisoning the idea of literacy arising in assemblages. Part C sharpens these themes into actual tools that were applied in preparing and presenting the narratives of people, places and things in Chapter 5 and beyond.

PART C: INTERVENTION

3.4 A praxiographic study

The term praxiographic surfaces in Mol's (2002) landmark MS study, *The body multiple*, as a way to encompass research that shares an interest in describing, writing, talking and observing but has a greater interest in practice ('praxis') than culture ('ethno'). Footage of bodily movement using audio recording devices; observation for non-spoken practices; use of artifacts and researcher participation are the corresponding methods of praxiography (Reckwitz 2008, p. 196, cited in Bueger 2014). In this system a museum would be an 'oligopticon' with narrow, powerful and robust views, and concomitant effects (Latour 2005, p. 181), and a sufficiently distinct space to apply the praxiographic lens. Praxiographic practices combine bodily and mental activities, and 'things' and their use with implicit or tacit knowledge that organises the practice and gives meaning to it (Bueger 2014, p. 387). These practices can be those of

literacy, with this quote from Law (2012) providing something close to a method for making literacy explicit:

First attend to practices. Look to see what is being done. In particular, attend empirically to how it is being done: how the relations are being assembled and ordered to produce objects, subjects and appropriate locations. Second, wash away the assumption that there is a reality out there beyond practice that is independent, definite, singular, coherent, and prior to that practice. Ask, instead, how it is that such a world is done in practice, and how it manages to hold steady. Third, ask how this process works to delete the way in which this sense of a definite exterior world is being done, to wash away the practices and turn representations into windows on the world. Four, remember that wherever you look whether this is a meeting hall, a talk, a laboratory, or a survey, there is no escape from practice. It is practices all the way down, contested or otherwise. Five, look for the gaps, the aporias and the tensions between the practices and their realities – for if you go looking for differences you will discover them (p. 171).

Praxiography argues for 'affect and discourse back where they should be within emergent pattern of situated activity, and make these patterns, as they need to be, the main research focus' (Wetherall 2013, p. 364). Goodwin's (2006) research traces affect and discourse within multimodal assemblages of situated activity via close observation using video and audio. This work engages bodies, talk, spaces and physical objects. Materials, patterns and processes of any object (including presumably those in a museum) can be sensed, felt and intuited resonant with object *praesentia* of Chapter 2. Yet this possibility should not mean either the dismissal of what people say and do in relation to objects in their orbit or privilege humans because they can speak the language of the researcher. Nevertheless, for practical purposes I adopt the position that affect emanating from humans, regardless of how it is generated, is best revealed through textured research incorporating discourse. And at the end of the day humans

are the weather vane here, regardless of beliefs, theories or otherwise (Laurier & Philo 2006). In practice I look to a human actor to identify that the assemblage exists.

The following key methodological MS concepts are folded into the study as heuristics that can usefully serve to facilitate the empirical investigation in the data analysis stage:

1. Set literacy-in-action nets as the empirical unit.
2. Follow the actors.
3. Systematically question the data.
4. Use translation as a descriptive tool.

3.5 Set literacy-in-action nets as the empirical unit

The 'literacy-in-action' framing (Brandt & Clinton 2002; Leander & Lovvorn 2006; Lenters 2014) with action-net variation (Czarniawska 2004) retains the mediating role of literacy in human activity whilst conceiving of literacy as an actant or actor within the situation to address concerns of the humans' biased anthropocentrism. Initially action-nets were developed to overcome limitations in studies of large organisations where despite expectations of certain practices, procedures or habits did not consistently happen where the researcher happened to be despite the length of time in the field. Instead looking into the location or phenomena as a series of events became legitimated as 'somewhere to put your findings until you know where to file them' (Latour, quoted in Czarniawska 2004, p. 783). Therefore use of literacy-in-action could capture instances in a museum as units of meaningful analysis rather than looking to episodic literacy events or indeed the totality of the visit.

Whilst I am mindful of the paradigm-specific use of the terms, aspects of both the NLS definition of a Literacy event and the MLT use of event will be incorporated into 'literacy-in-action nets' to capture instances of literacy. I developed this study-specific definition of these nets as 'an observable action or group of actions in which text plays a role'. And rather than a text being 'any kind of entity from which an individual makes meaning' (Pahl & Rowell 2010, p. 4), in this study my definition of a text is 'any entity that is part of an assemblage of entities from which meanings can arise and perspectives change'. A literacy-in-action net which may or may not be discernible

from the data at hand can be inferred from observable evidence, including visible and invisible resources such as knowledge and feelings embodying purposes, values and beliefs; and they are part of a constantly changing context encompassing the material, spatial and temporal.

3.6 Follow the actors

As a methodology, the MS mantra is to 'follow the actors' as they act, but not so much to see where they have come from as where the impact of their action goes (Mol 2010). Without reality being enacted and observed in practice, there is no actor. Ultimately something becomes material because it makes a difference and that difference is noticeable. Matter is a lively force regardless of whether it is alive. Actors do not act other than to bestow agency on one another, thereby enabling subjectivity and intentionality to emerge in assemblages (Latour 1986). Actors are transformed through practice and Translation is the process through which actors relate to each other. MS variations influenced by Deleuze and Guattari see matter in terms of its capacity to be affected or to affect and the intensity of that affect (Zembylas 2007). Therefore the practices surrounding matters are more critical than pegging the definition of matter. In the case of literacy, following the actor would mean considering what the practice is doing and what is it bringing into effect.

3.7 Systematically question the data

The nature of materiality is established through its relationships and therefore materiality can be seen as the answer to a series of questions about whom and what assembles in any network. Therefore framing questions where answers will be rendered through assemblages is another application of the MS sensibility (Bennett and Joyce 2010; Edwards & Fenwick 2014; Leander & Lovvorn 2006; Sørensen 2009; Thompson 2010). Questions become actors to help translate the overall research rather than to seek one-on-one answers to represent each empirical observation. A cautionary note accompanying this advice is to jettison any anthropocentric perspectives so 'instead of beginning with the question of whether technology does what humans want it to do, we should ask how materials participate in practice and what is thereby performed' (Sørensen 2009, p. 28). In this schema, questions are integral to the

approach as nothing is to be taken for granted. An empirical component of rhizoanalysis is to 'ask new kinds of questions' (Leander & Rowe 2006, p. 435) in order to think differently or nomadically. The purpose of questioning is to shine a spotlight on 'mediators making other mediators do things, human or non-human' (Latour 2005, p. 217, emphasis in the original). Given that change as the normal state is expected in the realms of MS, being attentive to points of stability and disturbance within a network is productive.

3.8 Use translation as a descriptive tool

Translation is an early ANT concept used to describe how relationships in networks change. Callon's (1986) hallmark study of translation was about scallops, fishers, scientists and innovative technology. Despite clear role definition set by the scientists' research agenda, other human and non-human actors instead followed their own interests. The translations intended by the scientists failed and hence the network they attempted to stabilise fell apart. Translation involves chance, even betrayal (Law 1992), whilst making the work of the net dynamic. It is where 'mixtures between entirely new types of beings, hybrids of nature and culture' (Latour 1993, p. 10) are made through negotiation, persuasion, mediation and/or violence by an actor or actor(s). Callon's translation plays out chronologically in four moments and can be considered as fulcrums around which activities gather (Hamilton 2012). Once these activities are played out the network stabilises, which could seem to be desirable but can result in actors disappearing and inertia setting into a black box.

The Autonomous Model of literacy is a black box of unquestioned assumptions, methods and protocols (Thompson 2012), where the process of translation has been completed and ossified. Hamilton (2012) deploys MS to expose the workings of demonstrating literacy as a skills set and the political motivation for such representation. She deploys Callon's four moments of translation to label literacy policy texts as 'stable mobiles'⁴¹ in a network packaging literacy into a transportable container, via international testing. Literacy is enacted as an unassailable black box in

⁴¹ The more commonly used MS term would be 'immutable mobile' which is a network of elements that holds its shape as it moves and has the capacity to know and act at a distance (Latour 2005).

the public sphere. Hamilton posits that through using a material approach identity could be viewed as an effect rather than a cause of action (2012). I take up this offer in this study in arousing literacy in the same way – as dynamic, dispersed, shaped by social and material relationships and spatially embedded, rather than a quality residing in an individual.

The restless, creative and democratic way that translation of actors performs the critical element of change could also be used to identify those who do not respond to any translation process, are ineffectual within a network, and to identify the unplanned. This aligns it with two key Deleuzian precepts in Multiple Literacy Theory. The first is the 'becoming' rather than 'being' (Masny 2013; Marres & Gerlitz n.a). Embracing the 'becoming' seems appropriate not only for the literacy practices of families with young children but also for museums spaces that look for the transformative. The 'unexpected, disparate and productive connections that create new ways of thinking and living' (Colebrook 2002, cited Mayes 2013, p. 2) are part and parcel of this approach. The second is 'lines of flight', which are helpful to imagine escape routes from rigidity in places, including research methodologies. 'Becoming' and 'lines of flight' align with previous focus concepts of alterity and hinterlands.

My mapping of the MS space has exposed it as an endless network that stretches and contracts; darkens solid in places and is transparently risky in others; and extends in multiple directions, each with potential escape plans and routes in multiple guises. This research has become part of this network, not a network apart.

PART D: SYNTHESIS

This chapter looks to MS in granting a methodological framing to the study. The relevance and portability to the study by the theories of Literacy and MS is established. This combination has previously been underutilised within museums and so the introduction and positioning of both theories as tools is a contribution to the field.

Meaning within a museum contingently arises in the ensemble of ideas and objects, knowledge and infrastructure, and the relations thus made within the diminishing distance between subject and object (Hetherington 1999, 2002). My work of this study is 'to reveal the unbounded and fluid character of the object, dissolved

into a similitude of signification with no attachment to a subject at all' (Law 1999, cited in Hetherington 1999, p. 71). The prospective role of museum objects is a special one for visitors because as MS asserts, 'any time an interaction has temporal and spatial extension, it is because one has shared it with non-humans' (Latour, cited in Brandt & Clinton, p. 353). Museums bring together objects from multiple timescales (heterochronies) and multiple spaces (heterotopies) to promote countless interactions with visitors. In the next chapter I explain the Research Design and show how the research strategy was able to uncover spaces where literacy was generated and deployed as affective encounters and can be activated through identification.

INTERLUDE #1

WHAT AM I?

I am the bedtime story, the marks on paper at school, the footfall of progress, an excuse for poverty and the glow of a smartphone in the faces of commuters on the bus. I am the tools, the materials of the bag that carries me, the 'other' who carries the bag. I am where I am unpacked and admired. I am the group who decides if the tools are useful. Yet I am used by everyone in their day-to-day life, regardless of whether they can signal the correct bus, read Shakespeare, compose a love letter or sing karaoke. One could say I am both pedigree and mongrel yet my reach is beyond any birthright. True, I am in the sinew but also carried in the scent of summer. I am not what I am but what I do. I never act alone. I am we and we are legion.

We are literacy.

4.

RESEARCH DESIGN

This chapter outlines the methods used to interrogate the research questions within the values and methodological opportunities presented by the theory and context. These methods include participant observation; participant interviews; participants' photography and drawings, onsite recorded conversations, writing, and other creative activities (Clark 2001, 2005, 2011; Pahl 2007, 2009; Sterry & Beaumont 2006). The five phases of the fieldwork are outlined. Also covered here are data authenticity, trustworthiness, privacy, integrity and ethical dimensions.

PART A OVERVIEW

4.1 Research ecology

4.1.1 The problem

Despite objects being selected for their capacity to convey certain messages and staff aiming for specific experiential outcomes for visitors when planning and designing exhibitions, objects, like visitors (adult, child, and both in family groupings), can be irreverent *rascals* especially when co-located. When assigning an object, or group of objects, a clear didactic purpose via positioning, lighting, display or label text, the reception may be very different to that intended, even when that purpose is to be achieved through manipulating visitor emotion through exhibition design. Baker (2008) and Witcomb (2003) refer to the planned spaces as the museum of rational or didactic affect whilst noting that the accidental, unruly or delirious visitor response is seldom noted let alone promoted. Such a scenario introduced me to how the changing web of people, objects, ideas, concepts, intentions and the legacy (or otherwise) of everyday literacy practices may be responsible for the alternate spaces within the museum. Literacy practices are rarely included in the exquisite level of detail which

goes into planning an exhibition but understanding these practices may illuminate networks of engagement.

4.1.2 Questions

This thesis addresses three research questions:

1. What can the understanding of literacy in relation to collection objects and families offer to museums and their visitors?
2. Which resources are of use in identifying and mobilising these literacies?
3. How are the concepts of materiality, affect, spatiality and mediation useful in museums?

The first question looks at the literacy transactions between museum objects and families, and it has provoked a host of subsidiary questions: How do families interact with each other in the presence of objects? What are the strengths and potentials of the intergenerational nature of the group? Is there a tempo or rhythm to the visit? Does the age and experiences of each generation afford an exploration of time, technology or culture? Is the literacy practice that family member uses every day (such as texting or use of Facebook) a strong factor in shaping reactions and responses? Are photos taken by family members? Who takes the photos in the family? What of? And why? Are labels read, and by whom? If people use social media are they writing about what they are seeing, what they are doing, or simply where they are? Is the type of object a factor or is it the level of interpretation? Is one form of presentation privileged over another for a certain group? Does an accompanying graphic or physical prop tangibly assist engagement? And when prompted, which modes are the likely choices for family members to register their responses to the museum: object-writing, drawing, photographing, craftwork, or nothing that is on offer?

Answers to these subsidiary questions are provided by the study. Through immersion in material semiotics (MS) and literacy theories I came to understand that to effectively examine the first research question I had to dispense with any dichotomous perspective between subject (family) and object (object) and consider a more delicate view of the interaction. It is here that the second research question prevails. This question about resources builds the theoretical framework set through the literature

review of objects, literacy and MS led by close consideration of the fieldwork. Answering this question not only supplies the methodology but also makes a contribution to the field as others may wish to look closely at literacy within their own museums. To this end the potential dynamism of the interaction is reinforced through the third research question and its close interrogation of the terms materiality, affect, spatiality and mediation, which in themselves become actors. These terms helped me to enter previously uncharted thinking about the relationship between objects, people and the technological stuff that assembles and accretes around (and apart from) us.

4.2 Methodology mapped

This study is praxiographic with the smallest empirical unit being a 'literacy-in-action net' defined within the study and introduced in Chapter 3 (Section 3.5) as 'an observable action or group of actions in which text plays a role and where the text is any entity that is part of an assemblage of entities from which meanings can arise and perspectives change'. Literacy will be caught in these nets as an assemblage of texts. These texts can be human or non-human (such as a museum object). This schema is shown in Figure 3, which is adapted from Bueger (2014, p. 388).

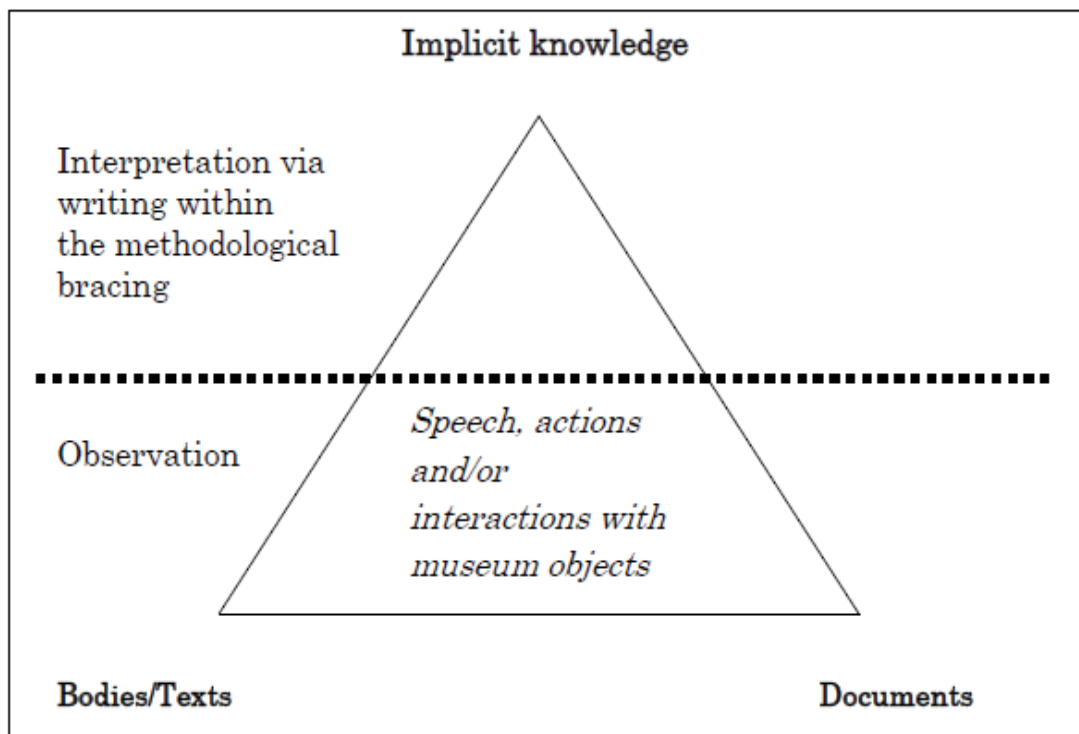


Figure 3 Praxiography, the study of 'praxis' or practices within an area of interest

This study honours the ethnographic perspective (Green & Bloom 1997) rather than the ethnographic tradition with its stricter codes of fieldwork and observational duration. Instead of deepening my understanding of those who came from different social and cultural groups (Irvine, Roberts & Bradbury-Jones 2008), my engagement with the participants was for the purpose of establishing rapport and trust – to better understand literacy as practised at home and ultimately within the museum. The study is within networks, with connections between the home and museum.

Macro no longer describes a wider or a larger site in which the micro would be embedded like some Russian Matryoshka doll, but another equally local, equally micro place, which is connected to many others through some medium transporting specific types of traces ... What is now highlighted much more vividly than before are all the connections, the cables, the means of transportation, the vehicles linking places together. (Latour 2005, p. 176)

Fieldwork is central to the research design (Marcus 2007; Mills & Ratcliffe 2012) and it incorporates participant observation and multimodality. Literacy is identified through time spent in a museum with specifically recruited human participants, as well as things central and incidental to the practices within the museum environment. This study looks down on bodies (Kwa 2002; Law 2010) not to stratify non-mainstream visitors but to better understand 'the local and non-coherent' (Bueger 2014, p. 389) so that the forming, stabilising (or otherwise) of networks can be interpreted to better understand a particular Matter of Concern or object called literacy.

The museum is the primary site in which literacy is followed, but everyday literacy is also followed from and to the home so that plausible connections can be identified. I collected data through participant observation; analysis of documents generated within the study; and expert interviews (the experts in this case being the human participants); and creative writing to bring the voice of the objects into the writing.

PART B FIELDWORK

4.3 Setting

The data was drawn from a fieldwork setting (Holliday, 2007) depicted in Figure 4, (on the next page) which also shows the perimeters of the data.⁴² This setting represents the loci of the fieldwork (including into the family's everyday literacy practices) with porous links beyond where the network is then cut (Strathern 1996, cited in Gad & Bruun Jensen, p. 77). These settings are described in greater detail in Chapter 5.

⁴² MS as ANT sees scale as the actor's own (Latour 2005, p. 185) and would generally cut the potentially global network during the study rather than start with pre-meditated boundaries. This study departs from this approach from the outset in two significant ways: it is an intervention as it invites participants into a new space rather than observing existing actors. Whilst influenced by the participant families the focus is primarily the museum sites including any productive relationships revealed across the data, particularly from the the home.

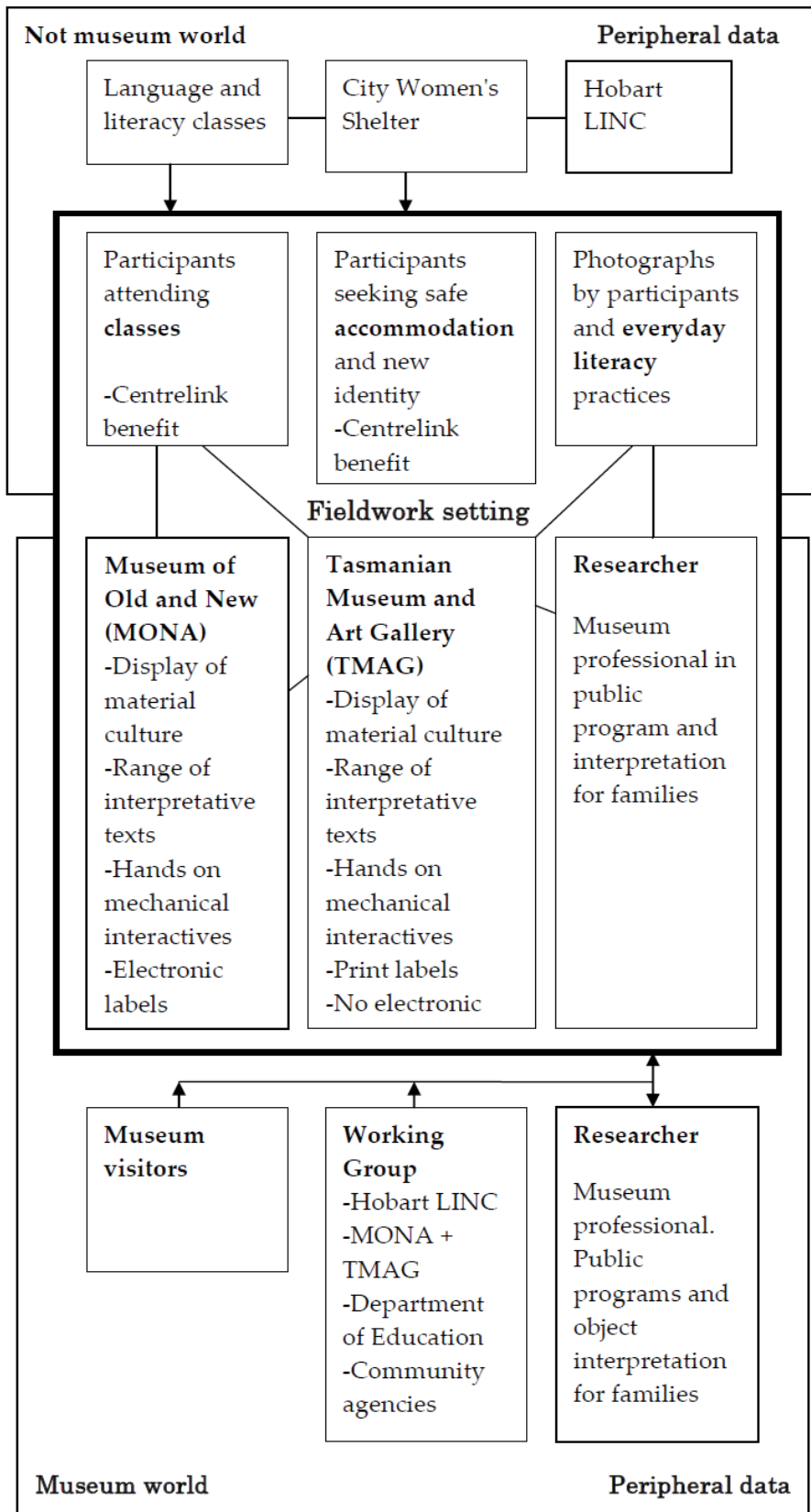


Figure 4: Core and peripheral data settings

4.3.1 Sites

The two Tasmanian sites selected were exhibits within the Museum of Old and New (MONA), which opened in January 2011, and the Tasmanian Museum and Art Gallery (TMAG), which reopened in April 2013. The duopoly of an art gallery and a museum potentially yields greater interest to the industry and benefit to the research, and these sites provide sufficient individuality to warrant the inclusion of both. MONA is in private ownership and TMAG is a publicly funded institution. Each written object label for MONA combines personalised narratives with more conventional information about the works. TMAG exhibits the more conventional written texts expressing the anonymous and authoritative institutional voice. MONA does not promote or cater to the family audience, whilst TMAG declares families as its most important audience. TMAG is more overtly educational and whilst both sites are rich with narratives, TMAG nests each interpretive text within another to build the expression of an institutional theme. There are similarities between the sites: each institution has an international reputation and a collection; the appeal of 'the new' through either recently opening or generating similar interest via a refurbishment and re-opening; hands-on experiences amongst their interpretations or works; and object-rich and hence text-rich displays.

Within each museum I selected a contained area that would facilitate easier management of participant observation. Here I displayed a selection of objects and various interpretations, including props and devices that not only focused attention on an object and/or the idea it embodied, but also held some appeal for the family visitor. Despite my request to stay in particular areas, the participants were invariably drawn to other parts of the museums. Sometimes this was the result of sounds bleeding through galleries or a participant's need to break out of this contained space and move away from the family group to discover something for themselves.

4.3.2 Agencies

The three key agencies⁴³ supporting the research were:

⁴³ Each of the agencies is given a pseudonym to protect participant identity.

1. Library Tasmania: a state-wide access network to library services, literacy support, community learning, online access, archive and heritage services⁴⁴
2. Language and Literacy Classes: a non-denominational Christian community service organisation
3. The City Women's Shelter: providing practical assistance and skills to women and their children who find themselves homeless⁴⁵.

I successfully applied for a small grant from the Tasmanian government to support the research⁴⁶. This grant formalised and enhanced the credibility of the research. Each of the key agencies and institutions sought senior staff approval to be involved in the project; they helped develop the proposal, and participated in a Working Group meeting several times over the course of the research. During the grant's preparation members of this group emphasised the need to remove any barriers to the visit and help make the families feel as comfortable as possible. This was extended to providing support to the families so that they would appear to be and possibly feel like any other family in the museum that day. This support included travel money, refreshments in the museum cafe and a book of their choice from the bookshop. I was able to pay an art educator from TMAG to help develop the literacy activities, source their materials and assist with the practical demands of large groups during the second visit where there was more than one family. Our conversations about the project helped me to reflect on my research aims and her background in art education and access programs complemented my experience in museum programs.

4.3.3 Participants: human

The participant families were recruited from either the Language and Literacy Classes or the City Women's Shelter. These families exhibited a diversity of skills, abilities, ages and cultures. Hobart's small size and interconnectivity of agencies

⁴⁴ I am a Volunteer with Tasmania's Literacy and Numeracy program.

⁴⁵ The study connection was with a program which offered women one-on-one and group opportunities to address literacy, education, employment and training needs and the opportunity to engage with other women with children.

⁴⁶ The 26TEN program grant paid for costs associated with the fieldwork (excluding my time).

proved an asset when recruiting the 10 participant families (later reduced to eight as one family withdrew at the start and another was uncontactable after the second visit).

I investigated the participant families' everyday literacy practices via two methods. The first was an interview led by a Home Literacy Discussion Guide developed in discussion with Working Party members following a Literature Review (see Appendix B with the summary of the responses at Appendix C). The second and more successful method was participants' home photos of artifacts that served as literacy enablers (Pahl 2004; Pahl & Rowsell 2011). The home photographs were initially intended to familiarise the participants with the cameras used during the museum visits. The home setting and everyday literacy practices are described in greater detail in Chapter 5.

4.3.4 Participants: non-human

Objects in a museum which can be *anything* become actors in this study. The MONA and TMAG exhibitions nominated for review were both museum object dense and hence text dense. The families also chose to explore outside the suggested area, thus adding to the text count. Objects included what visitors were wearing; how museum objects were conjoined with interpretative layers; museum signage and staff wearing uniforms, all of which became redolent of cyborgs (Haraway 1994). Such objects can be positioned as protectors, decorators, extenders and even controllers of the bodies and texts. The rooms, the stairs, the cafe, the entry are all potential participants in assemblages but in a sense are not activated until they assemble together in meaningful ways.

We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body ... to destroy that body or be destroyed by it ... to exchange actions and passions with it or to join with it in composing a more powerful body. (Deleuze & Guattari, 1987 quoted in Mulcahy 2016, p. 3)

Whilst the list of elements to follow grew as I became more attuned to the families, I acknowledge that actors may have been missed. Perhaps wraiths and spirits

may have been present in the space or items of significance carried by family members (a secret totem secreted in a jacket) and so on. Table 1 outlines the actors labelled as texts which I follow and analyse.

4.3.5 Texts: all together

"If the world is messy we cannot know it by insisting that it is clear. (Law & Singleton 2005, p. 350)

Whilst accepting the danger of solidifying the actors into regions before they are even charted, putting something in a table is clarifying and tidies things up – thus Table 1. Nevertheless this table demonstrates the complexity already apparent within the bounded research spaces. Potential actors within the study are all called texts, and each is potentially a component of a 'literacy-in-action net'. These texts are described in the fieldwork and analysis as hybrids such as 'text: museum object' or 'text: family'.

Table 1: Actors labelled as texts

Texts/actors	Description	Examples found in the fieldwork
Objects housed by a museum - contains or is encoded information		
Museum Object	Museum <i>objects</i> which can be either or both 2D and 3D artworks. Objects can include audio visuals and immersives.	Various
Immersive	Museum experiences or artworks that surround the visitor.	TMAG Bond Store 3 MONA Mirrored Room Paradise Room Nowhere Less Now
Audio visual	Objects and work which are projected visuals of photos and/or moving images with or without sound	Wall projected Booth
Interpretation	Descriptions created by the museum to enhance their understanding of the museum or gallery.	Print object label Print wall label Wall text Projected text Vote MONA O Label MONA O

Texts/actors	Description	Examples found in the fieldwork
		Other MONA O
Interactive	A device, prop or object intended to be handled by visitors to enhance its meaning or the meaning of adjacent objects or exhibition ideas.	TMAG Weighing scales 'Pack your bags' Diorama Stereoscope Build model house MONA <i>Pulse Room</i> Trampoline <i>Dancer La Musique</i> Table tennis table <i>GNIP GNOP</i>
Literacy works as documents	Texts created from materials provided by the researcher and made available to visitors and participants in order to enhance their understanding of the museum or gallery.	Drawing book Story bowl Interlocking cards Typa-insta Large format paper Letter Other
Technology within a museum : can be seen or accepted as present through what it does and so includes object, objects and/or systems		
Building	Aspects of the museum sites	Space Sound Furniture Cafe Shop
Things	Technology carried by the participants and/or provided by the researcher	Camera Smart phone I pad I pod Clothing Food Toys
Human: living and the material attached such as clothing.		
Individual	Person within research and/or museum	Museum staff Other museum visitors Researcher Research assistant
Family	Member of participant family	Family members Home literacy Formal literacy Discipline
<i>Others</i> occupying spaces of alterity (Law 2002)		

4.4 Data capture

4.4.1 Data recording

The recording and cataloguing of data (Holliday 2007) was a necessary part of the research process, and due to my increasing sociomaterial sensitivities these required greater consideration than relegating this function to purely 'operational' considerations. The electronic equipment, with some successes, also made its shortcomings known throughout the fieldwork, despite having a successful trial when I wore the microphone for a day. Despite another 'good' rehearsal during fieldwork, participant clothing was not always conducive to microphone clips and tight pants censored some audio capture. While I advised family members to turn microphones off if they wanted privacy they were not always successful in turning them back on. Some of the very young children wanted the mikes on and then occasionally and clearly OFF.

I showed the families how to use the camera prior to the visit (and to familiarise themselves with it at home), but some struggled to focus images and were overly troubled or fascinated, or both, by the camera whilst in the museum. I offered children the use of a camera as well as the adults, and despite colour coding these cameras, family members swapped, mislaid, and confused the inventory. In addition to the fieldwork camera some families used their own ipad or smartphone, and regardless of being reminded they did not always send their photographs to me. Retrieving data from the electronic device given to MONA visitors so they can navigate, read about the texts: artworks and even cast a vote on whether they love or hate each work was problematic as the institution changed its system during the research. I downloaded the files into Family folders (now coded in numbers), annotating time and location. Individual files were then transferred into NVivo.

NVivo

NVivo is an analytic software package developed in Australia and produced by QSR International⁴⁷. The initial rationale for the choice of NVivo was not realised as its

⁴⁷ NVivo is software that supports qualitative and mixed methods research. It's designed to help you organize, analyse and find insights in unstructured or qualitative data like: interviews, open-ended survey responses, articles, social media and web

capacity to show relationship mapping resulted in figures depicting a mechanistic network where the nodes appeared as both stabilised and of greater importance than the influence of the actors between the nodes. NVivo could show the network but not the work of the net (Latour 1996b, 1999a, 1999b). It did prove useful, however, for data storage and the literature review.

4.4.2 Rigour

Whilst quantitative research wears a mantle of certainty through its use of data gathered and expressed in numbers and charts (Kvale 2008, p. 22), qualitative research must take greater care customising its research design to demonstrate credibility and validity. Subject to revision and redefinition, rigour, sincerity and coherence are more appropriate in qualitative and/or mixed methods research (Tracy 2010), especially within MS. Consistent with the research design; I will now address the benchmarks of rigour, sincerity and coherence across the study's design.

Holliday (2007) introduces rigour as 'the principled development of a research strategy to suit the scenario being studied as it is revealed' (p. 6). Rigour in this context is promoting 'richness' through showing facets of the same problem (Holliday 2007; Weick 2007; Tracy 2010). In this study rigour is demonstrated through illustrating different pathways to multiple realities through judicious use of:

...description, exposition, analysis, insight, and theory, blending art and science and often transcending these categories. First-person voice is used; scholars seek intimate familiarity with their textual materials; grounded theory and multiple methods may be employed (Denzin 2012, p. 83).

In the same way that I found myself submitting to the fieldwork, the data also captured me. Potentially 'messy' and controversial (Lincoln, Lynham & Guba 2011) the reality of this research was that I submersed myself in it rather than gazed upon it, and in doing so I believe I have been able to more critically engage with its complexities. Integral to the research rigour and integrity is the internal epistemological lucidity across the research design, especially during the writing of the analysis (Holloway &

content.' from <http://www.qsrinternational.com/what-is-nvivo>, accessed 31 March 2016.

Todres 2003). I tell the research story within certain structures that were informed by the people I recruited, my role in the research, and the theories used. The coherence of the research activity is integrated into the research design through my role as researcher, the study's principal theories, and by meeting the needs of the participants.

4.4.3 Ethics and privacy

Consideration and formulation of research Ethics was both a requirement and an asset to the study because they necessitated greater consideration of the research process and its methodology. The University of Technology Sydney Ethics approval⁴⁸ was relatively straightforward: children were under parental supervision at all times, the research was exclusively conducted in either the museum or community centre places and no transport was offered by the researcher to any participant. The supporting documentation to strengthen informed consent was given particular attention, with information sheets prepared in plain English separately for adults and children in addition to generation-specific consent forms. Another issue was not causing harm, including embarrassment, and so the research was undertaken as discreetly as possible within the museum environment. Families were met at the museum entrance and welcomed into the space. Any public observations were recorded into a Smartphone using the utilities function. Tapes, data files, transcripts and completed questionnaires are kept in a locked area. Additionally, computerised data files are password-protected. Privacy of participants is systematically assured including obscuring participant faces in the photographs and deleting reference to country of origin and home language.

4.5 Fieldwork phases

The fieldwork was undertaken between mid-April and November 2013, with data analysis – the fifth and final phase of the research design – commencing during this period. The five fieldwork phases are shown in Figure 5.

⁴⁸ Ethics Approval UTS HREC REF NO. 2013000118 issued 16.4.2013

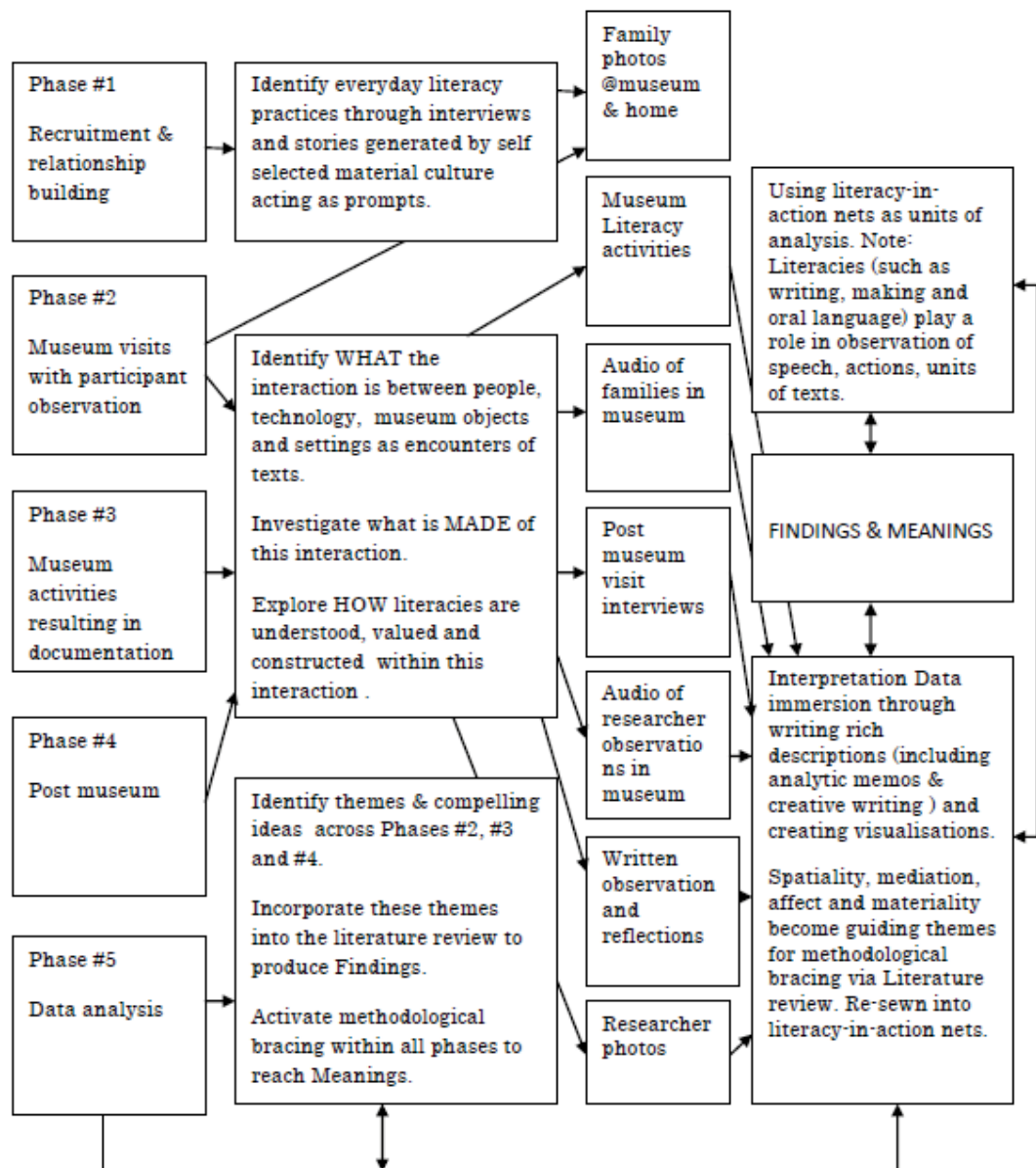


Figure 5 Fieldwork phases

The following sub-sections are set out according to the first four phases of fieldwork. The beginnings and endings of the research design covering conceptual and analytical work blur within the fieldwork methodology (Marcus 2007). The fifth phase of the research is the analysis of findings outlined in the Part C of this chapter.

4.5.1 Recruitment and relationship building (Phase #1)

Phase #1 was preparation for the fieldwork, which included establishing relationships with all stakeholders, namely, community agencies, museum research sites, and the participants, as well as resourcing the research with the required technological equipment and systems. This phase ran from mid-April to July and included one trial visit each by two families to the two different sites. The data from these visits were not treated differently but did serve to better operationalise the remaining visits and refine the research methodologies.

In the same way it is recommended that rapport be established with research participants (Creswell & Miller 2000; Emmel et al. 2007; Guba & Lincoln 1985), I established and/or maintained a level of trust with those who would become gatekeepers and sponsors. Invaluable in this respect was the simple one-page outline of the research and expectations of the research sites that accompanied my initial correspondence (see Appendix D). Coming from the museum profession was invaluable to me in smoothing this process (Walsham 2006, p. 322). Permission for fieldwork access (Holliday 2007) took 3 months (although the study built on many existing relationships⁴⁹) and this may account for the ease in which the fieldwork was accepted by education and visitor services staff at the sites.

Considering that self-selection would yield diversity from a group that generally would fall outside of most known museum demographics, I sought families associated

⁴⁹ Contacts made prior to the doctoral assessment process and the formal ethics process was invaluable to the study. A previous professional connection had been made with the Tasmanian Museum and Art Gallery. For MONA I had attended a seminar organised by the Deakin Arts Participation Incubator (<http://artsparticipationincubator.tumblr.com/>) to establish key contacts. As a Volunteer Literacy Tutor with HobartLINC I met key contacts with the Department of Education to promote my research. It was through this network that I successfully applied for and received a Tasmanian Government 26TEN Grant to support aspects of the fieldwork.

with community agencies that assist marginalised people. Conditions included: family members cohabitated, a family was no more than seven members and included a child between three and 15 years old, with each member willing to speak English during the museum visit as they would be taped.

These families were recruited through an adult attending classes or groups at a community agency that acted as gatekeepers. I spoke to the Language and Literacy classes and at informal meetings at the City Women's Centre to generate interest and start the consent process in the event that any class member was to proceed with the project. I spoke plainly about the values of the project, including the democratisation of collection access, stressing the importance of museums drawing information from all sorts of people to make better exhibitions. Each class responded well to the potential value that its contribution could make (Liamputtong 2008).

As part of the recruitment process I asked the adult family member to allow me to speak with as many family members as possible, including the children, to secure their informed consent prior to commencement. These meetings were held during the school holidays or on the weekend. The initial adult was listed as Adult 1 (A1) in the family cohort. Ten families were recruited and in order of recruitment were coded family 1, family 2 and so on.⁵⁰ The code C1 was attached to the eldest child, C2 to the second eldest C2 and so on. To illustrate the system: 2C1 is the eldest child in family 2. Association between the families was only via the source community agency.

The research drew from participant observation in ethnography (Atkinson & Hammersley 1998) and multi-sited ethnography, echoing MS's influences through pursuit of social connections and networks (Mills & Ratcliffe 2012). Trust appeared as the key to access and insight (Creswell & Miller 2000). According to the teachers one of the adults attending the trial became a quiet ambassador for the project, encouraging students to make contact with me as 'the children loved it' (P. Lucas, personal communication 4 April 2013). Whilst I did not consciously employ a snowball

⁵⁰ Family #7 failed to attend the first museum visit and was removed from the research but not the numbering system. Family #8 did not reappear after the second museum visit, and so did not participate in the post-visit interview.

sampling (Miller & Bell 2002; Noy 2008), the organic social networks present in the Language and Literacy Classes delivered many of the families to my study.

The recruitment pace was deliberately slow in order to go over the Consent forms and research kit as required. Three adults who were all linked by ethnicity but not necessarily language, decided to join after a series of meetings at the community agency where alone or together I repeated information about the project, showed photographs of the museum and where I would be standing to meet them on arrival, and so on. The selection of sites was negotiated between them because going to the same site together for at least one of the visits became prioritised over site preference.

After agreement was reached I gave each family a research bag containing:

- A copy of the signed consent form for the adults (Appendix E)
- Consent forms for the children (two versions for young and very young) (Appendix F)
- Information sheets about the research including key dates (age-appropriate versions) (all forms at Appendix G)
- Location map of the museum
- Photos of the museum entrance.

4.5.2 Museum visits with participant observation (Phase #2)

Research methods cannot be divorced from methodology as the theory's fire guides the deployment and analysis of any method. Observing museum visitors is not new but can sit within different research paradigms for different research purpose and outcomes. Participant observation can be traced as far back into the early twentieth century (Robinson 1928) and has been applied in a number of museum studies such as those undertaken by Beer (1987), Borun, Chambers & Cleghorn (1996), Katriol (1997), Goulding (2000), Ellenbogan (2004), Griffith et al (2005), Macdonald (2002 and 2007), Zancanaro et al (2007), Yasukawa et al (2013), Griswold et al (2013) and most recently by Lehn & Heath (2016) where audio videos recorded visitor activities.

In terms of applying this method the visitors can be monitored as if they are in a laboratory and the observer renders themselves as 'invisible' regardless of how the visitor sees them. As participant observation is time consuming and not easily generalizable (Hooper-Greenhill 2004, Goulding 2000) it is not widely used in visitor

research by museum staff (versus purely academic research), unless it is within a functional and managerial approach described by Hooper-Greenhill as 'counting and tracking' (2004). A recent book intended as a practical guide for museum staff advises on use of observation checklists (Diamond, Horn and Uttal 2016).

Observing visitors also lends itself to interpretive studies where the researcher is not anonymous and follows an ethnographic immersion in the site incorporating the participant observation amidst arrange of qualitative methods (Katriol 1997, Macdonald 2002, Ellenbogen 2004, Yasukawa et al 2013) . These interpretive studies 'approach visiting [museums] as situated, differentiated and a relatively complex process' (Macdonald 2007, pg 152). These studies also tend to place the outcomes within an ethnographic or cultural framing as for example, Katriel's 1997 study of Israel's pioneer museums and their role in fostering identity and self-determination for that cultural community.

The pool of studies using participant observation grows smaller when it is part of a qualitative human centred study and even smaller when a range of non- humans are incorporated into the participants such as in the study of the use of space in an art gallery by Griswold et al (2013). The comment by Heath and Vom Lehn that a restriction on this analysis is the lack of terminology to describe interactions between humans and non-humans versus the vocabulary associated with describing language and gesture (2004, pg 157) strengthens the approach taken in this study. Anecdotally there is a growing interest in material semiotic framing within museums and this pool may be soon to rapidly broaden. My observation of the research participants is ethnomethodological without situating the analysis within any particular culture or sub culture. The first hand encounters within the field with a focus on practice within the museum and home settings are integral to the study methodology.

Preparation

Observing museum visitors can be traced as far back as 1924 (Robinson 1928, p. 7) and has been applied in many museum studies (Beer 1987; Borun, Chambers & Cleghorn 1996; Goulding 2000; Hooper-Greenhill 2006; Yasukawa et al. 2013; Zancanaro et al. 2007). I observed ordinary visitors in each museum for 20 hours on weekdays, weekends and school holidays in order to immerse myself in the research

sites and to ascertain any patterns in the behaviour of regular visitors. I did this not to compare regular visitors with the participant families but to heighten my observations.

Of interest during these visits were:

- The child in a family who noticed me first as part of their constant movement around the exhibition (Hackett 2012), after which I would cease observation and/or introduce myself.
- Mechanical ('hands-on') interactives (such as the weighing scales at TMAG or trampoline artwork at MONA) that generated sustained engagement.
- The object was the most utilised text in the museum environment.

Interviews

There were two interviewing sessions: pre- and post-museum visits. While both sessions were potentially loaded with methodological unease (White & Drew 2011), in practice they amplified the respectful nature of the relationship between the families and myself. Moral and ethical issues permeate this method of data collection (Bourdieu 1996; Brinkmann & Kvale 2005; Temple & Moran 2006), with the literature presenting conflicting opinions between the need to create a warm environment, the dubious practice of faking or commodifying friendships, intimacy and empathy (Duncombe & Jessop 2002), and the perils of interviewer as therapist (Kvale 2006).

I followed the path of responsive interviewing' (Rubin & Rubin 2012) for all families, including those with low to medium levels of English. In this way I was able to include interpersonal qualities of ordinary conversations yet incorporate main questions, probes and follow up questions for precision. Together the interviewee and I shaped the material and worked towards a conversational partnership (White & Drew 2011), allowing for pauses, clarification and humour. Certainly the interviewees gave greatest attention to narratives they saw as significant (Nagar-Ron & Motzafi-Haller 2011). I pursued this approach into the museum and during the activity sessions, hoping to build good relationships whilst confirming and amplifying participant strengths and capacity for creativity (Carter 2005, cited in Greenhill & Dix 2008).

Trial visits

Whilst the relationships with the families were being established over an initial period of one month and continued through the fieldwork, spaces and times were concurrently locked into busy museum schedules, and equipment was sourced and tested. At the same time, I trialled the first family participant visits at TMAG and MONA. The intention of the trial was to step through the logistics of the visit rather than necessarily evaluate the planned activities because I anticipated that different families would take up the activities on offer in different ways. The first two families recruited left the study before the first museum visit placing me on notice that I was requesting families to place trust in someone they did not know, to go to a place they had never been, and to undertake activities that may prove to be challenging. I quickly had to gather two more families and more carefully prepare potential participants (Creswell & Miller 2000), being mindful to monitor ongoing consent by participants. As a result of the trial I amended my research plan in these seven ways:

1. The recruitment and consent process to be given more time than an introductory group meeting to the class or agency and follow up to become a *series of up to three meetings* with adult representatives of the families either alone or with a classmate.
2. A second museum visit to become part of the family's commitment to the research rather than an option. The second visit would then be to a familiar setting and put the families at greater ease.
3. Allow more time and different strategies to ease the families into the activity and to talk about what they were producing in these literacy practices as well as what they were consuming in their museum visit.
4. The act of speaking about their literacy activities work to be deemed as significant as the work itself. Both the 'telling' in relation to the literacies provoked and 'the product' would be stored and treated as data.
5. Stress the value of their participation and opinion in the research.

6. Organise for the families to make the second visit with another family. This shared visit had been requested by most of the families.
7. Amend the list of activities to take in the technologies used by families in their literacy practices.

Museum visits

Each family was requested to make two visits to the same museum (either TMAG or MONA). The first visit was demanding for all participants as it involved both an introduction to the museum environment as well as the reality of the research. The first visit was as a solo family and the second was with one or two other families.

Visit 1 followed this format:

1. Welcome and orientation in the activity space allocated by each museum.
2. Microphones fitted and explained.
3. Conversations recorded in the exhibition space and invitation to family members to take photos of the visit.
4. Morning or afternoon tea offered in museum cafe.
5. Drawing and writing in the activity space.
6. Farewells, money and receipts exchanged and reminders for further meetings issued.

I conceived my role as helping make the families feel comfortable whilst acting as a resource for an experience they directed and produced. I did not intend to be a tour guide or pretend to be invisible (Hammersley and Atkinson 1995). Almost without exception at least one member of each family sought my assistance and/or company, to which I responded warmly. I also did not intend research as a form of walking ethnography (Pink 2008; Pink 2011; Pink et al. 2010), nevertheless sharing conversations in the space became part of the experience producing 'knowledge with others, in movement and through engagement with/in a material, sensory and social environment' (Pink 2011, p. 272).

Visit 2 followed this format:

1. Welcome, introductions (if necessary) between families and orientation undertaken in the museum foyer or activity space

2. Microphones fitted and explained
3. Conversations recorded in the exhibition space and invitation to family members to take photos of the visit
4. Morning or afternoon tea in the activity space
5. Undertaking one or more of the suite of activities on offer
6. Farewells, money and receipts exchanged and reminders.

Literacy activities and occasionally visit orientation were undertaken in either the education rooms or library spaces within each museum.

4.5.3 Museum activities resulting in documentation (Phase #3)

The Mosaic Model

Initially created as a way of listening to children, the Mosaic Model is a methodology combining many research tools and multimodal communications such as observation, interviewing, use of cameras, drawing, tours and role-play (Clark 2001, 2005a, 2005b, 2005c, 2011a; Clark & Friese 2007). This model emphasises the experiences of the participant and their active role in the generation of knowledge rather than an age or stage of development. One of the ingredients of generating self-knowledge is the process of reflection, which proponents of the Reggio Emilia philosophy of early childhood education refer to as 'internal listening' through the gathering of documentation (Rinaldi 2001). This process can draw on different modes of communication to step back from the immediate environment and allow participants to express what they 'hear' in different ways.

The use of multimodal communication to study literacy has been used by others (Dicks et al. 2011; Flewitt 2005, 2011; Pahl 2007b, 2009a, 2009b; Pahl & Rowsell 2012a). This methodology furthered the aims of praxiography and aligned with my interest in the sociomaterial through validation of the modes I used (Clark 2011a, p. 327). My development of the particular methods and choice of materials was guided not only by my experience in developing education programs but also by the research as it unfolded.

Drawing

In previous projects my invitations to draw, with and without captions, had been taken up with enthusiasm by museum visitors (see the Preamble). Using drawings as a research method with children to explore their literacy practices is supported in the literature (Hanke 2000; Hopperstad 2010; Kendrick & McKay 2002, 2009; Leitch 2008; Mavers; Punch; Whitin 2005). Drawings present as a familiar, accessible and adaptable technique that gives the family members greater time and authority to think about their responses to the visit (Punch 2002). Cautionary signals indicate (presciently as it turns out) that children are inexperienced at discussing their drawings and if they are not confident drawers they are susceptible to embarrassment (Richards 2003). Some children may imitate the drawings of others and others do not like to draw at all (Einarsdóttir, Dockett & Perry 2009; Punch 2002). After discussion about what they saw and remembered, family members were invited to draw or write something about their visit. At the same time we downloaded any photographs they had taken and played them on a loop on the laptop. When the opportunity presented I spoke with them about their drawings and/or writing to better understand what and why they had chosen to depict, or simply to see where a conversation might lead (Clark 2001; Leitch 2008; Pink 2011).

Confidence, shyness, copying, enthusiasm were all responses to the drawing activity. The setting can impact on children's drawings, and some of the adults' cautious or uncertain responses to the activity prompted me to encourage them to continue drawing and writing at home if they wished (Einarsdóttir 2009). The drawing books were reissued during Visit 2. I spontaneously invited the participants to send me any reflections about their visit by text message, email, and/or send a letter via a stamped addressed envelope. Four families took up this invitation.

Multimodal activities

The activities post-visit 2 extended the drawing activity by inviting expression of participants' own literacies and interests through providing a greater range of activities. These activities were designed to amplify the potential literacy strengths of the participants consistent their selection within Standpoint Theory (see 2.3) and thus suit the families' levels of understanding, knowledge, interests and particular location

in the social world (Hill et al. 2004), as ascertained through the interviews and the first museum visit. The activities were considered in light of my view of literacy within a New Literacy Studies paradigm. I wanted the activities to be material; 'thing'-like; familiar to the participants and also consistent with public programs undertaken in both museum and art galleries; able to make visible personal or family stories that link to objects (Hackett et al.2008; Pahl & Kelly 2005; Pahl & Rowsell 2010; Rowsell 2011); textual; multimodal; multilayered; sharable; capable of repurposing; both electronic and paper based (Lankshear 2007: Street, Pahl & Rowsell 2009); democratic with all the participants feeling they would be able to do the activity if they chose to (O'Neill 2010; Vestergaard 2012); reflective of the participants own literacy practices; and able to be undertaken in less than one hour with minimal tuition. Within this brief, a series of activities were devised in addition to the drawing books. Sample activities can be viewed at Appendix H.

Writing books

The writing books had cardboard covers and a similar shape to the drawing books, and they were offered with pencils, pens and stamps. Their pages were translucent so that they could be interlaced with the drawings – an option that was not taken up by any participant. However, the stamps of every letter of the alphabet were extremely popular.

Interlocking cards

Families could make a structure from interlocking cards, and they were offered a variety of materials to decorate it, including the photographs they had taken, stamps, pencils, paints and pens.

Ipad

Most families owned a tablet or ipad and were familiar with the technology. A research ipad was offered as a camera. I noticed that 6C1 was captioning her photos with a smartphone Application, and I introduced her idea as an activity in Visit 2. The families could further style their photos and add captions using two simple Applications called PhotoInsta and TypaInsta.

Story bowls

Participants were invited to write a story and use it to line a cardboard bowl.

Cloze exercise

A selection of photographs of objects by families was printed onto A4 sheets of paper. Each photograph had either the start of a sentence to be completed or an invitation to add a drawing to contextualise the object. This is called a Cloze Exercise and I have used it successfully with other visitors at other times. Only one research participant (5A1) took up this option.

Large format art paper

This paper was not high-quality cartridge (as used for the drawing books) as I thought this option (expendable, large) may promote in some families greater expressive freedom and possibly greater familiarity in materials. This option was taken up by 3C2, 1C2, 6C1 and 6C2.

4.5.4 Post-museum interview (Phase #4)

The purpose of this interview was to better understand the participants' responses to the visit (including the photographs taken) and to give them the opportunity to consider their own literacy practices, artifacts and the other practices they used within the museum (Bartlett 2005; Bartlett & Holland 2002). Administered in the same way as the pre-visit Family Literacies interview, its preparation was influenced by the questions used in a study into families visiting the British Museum (McIntyre 2012) and methods used by a museum visitor researcher (Kelly 2007) where she wrote a word in the middle of a page and asked interviewees to say what it meant to them (see Appendix I).

The initial trial interview with family 3 went smoothly until I wrote the words Literacy and Museum on separate pages and asked the adult to write down all the things he thought about when he saw these words. Though based on a Learning Diagram (Kelly 2007), it was an unproductive approach in this situation. I conferred with the LINC Literacy Coordinator and member of the Working Party, who suggested putting a grid of words before each participant (see Appendix J). Adult and (some) child participants confidently selected the words they thought were the best match.

PART C APPROACH TO ANALYSIS

Ideas did not arise exclusively from the data (Charmaz 2000, 2006, cited in Clarke & Friese 2007), although ideas were data led. There was a range of theoretical themes and side roads influencing interaction with the data.⁵¹ The themes of materiality, affect, spatiality, mediation remained and were reinforced through the theory introduced in Chapter 3. These theories provided concepts and relationships that enabled connections between the known and uncovered in the analysis along with ways to approach the data.

Telling endless stories is a difficult trap to avoid in a study where rigour is in part dependent on thick and rich descriptions, and the selected framing theory of MS is a 'toolkit for telling interesting stories' (Law 2009, p. 142). To further guide my reading and writing, I mentally asked questions 'to re-open the analytic moment' (Clarke 2003, p. 228) through systematising what to reflect upon for each item of data but not in order to aggregate the answers. This did not necessarily prevent long extracts from transcribed conversations being used in the study but it assisted me in establishing a writing discipline.

This study adopts the notion of symmetry in treating humans, non-humans, minds, actions, social forms, abstract concepts and processes as equally powerful (or not) within an assemblage. My recruitment of a diversity of families from marginalised groups was to get a richer picture of museum literacy practices and not to link any specific behaviour to specific group qualities. MS acknowledges that any network can be endless. With the benefit of my background knowledge of the families and their literacy practices, I identified these networks and traced them iteratively between the museum and the home commencing (see Chapter 5 to establish a context for the museum stories at Chapters 6 and 7). Describing the families and their museum experiences through disciplined writings was a key step in my generating insights culminating in Chapter 8. In the following chapters I trace certain actors now known as Texts (human and non-human) within the various assemblages being guided by the following series of heuristics:

⁵¹ Interlude #2 outlines theories of influence later discarded after intensive reading within material semiotics.

1. Using literacy-in-action nets, which I define as an observable action or group of actions in which text plays a role. Texts are any entity that is part of an assemblage of entities from which meanings can arise and perspectives change.

Literacy-in-action nets can be manifested through:

- a. Transcribed audio as a conversation or personal utterance
- b. Researcher field notes and research photographs
- c. Participant-generated literacy works known as documents.

The centrality and indeed usefulness of human discourse and movement is utilised within the interpretation via depth studies (Barab, Hay & Yamagata-Lynch 2001). In a bid to break the focus on the 'centred subject who selects/chooses certain practices' (Masny 2012, p. 71), I vary the prime material element.

2. Continually questioning the observable activities within these nets whilst being mindful of spaces falling outside the observable, either in the 'between zones' or residing in 'alterity' (Law & Mol 2001) or indeed never actualised in the 'becoming' (Masny 2013b).

3. Streaming observations through the four compelling research drivers of affect, materiality, spatiality and mediation.

4. Evoking a series of key research actors (see Table 2)

In summary the research design was conceived of in practical terms across five phases, including the analysis. This chapter has foregrounded these phases and the fieldwork whilst nesting them in the theoretical underpinnings sourced from sociomaterial models of literacy and methodology predominantly drawn from MS. These theories will again take greater prominence in the chapters to follow where I write stories (some of them fictional) that interpret my findings within the praxiographic triangle and the symmetry of MS. My stories are especially alive to the possibility of 'encounters' where movement and change constitute the refreshed airs of a museum.

Table 2: Research actors

Terms	Description
Mediator	An actor that transforms, translates, distorts and modifies the meanings they carry whilst creating a new link that did not exist before and modifying the assemblage (Latour 2005, 1993).
Intermediary	Transports meaning without transforming--a clear, singular and predictable actor where inputs predict outputs.
Boundary object	A person, thing or symbol that helps actors to go from one realm into another. It can be abstract and concrete, general and specific, conventional and user-adapted, material and conceptual and makes a partial and temporary bridge between realms. (Trompette and Vinck 2009)
Region	A measurable (Euclidian) stable space
Network	An assemblage formed and stabilised through translation yet poised to change
Fluid	An indeterminate space with no clear boundaries which can blend with another or circumvent an obstacle. A space where change is gradual (Law & Mol 1994; 2001).
Fire	A space where change can be instantaneous. A space of movement which can be dangerous, creative and unknowable. A generative otherness made of alternating presences and absences (Law & Mol 2001; Law 2002).

4.6 Summary and limitations of methodology and methods

This study is a praxiographic study encompassing sociomaterial thinking. It seeks to break the grip of method in order to explore complexity (Law 2004a). Accordingly I emphasise fine-grained accounts of the families and objects and avoid simplification based on assumed behaviours or rushing to sort and thematise data. Praxiography interrogates and blends bodies, artifacts with implicit knowledge '... requiring mixing and blending different strategies into each other or inventing new ones in response to the material studied' (Bueger 2014, p. 385).

The fieldwork has yielded transcribed texts, multimodal texts generated by participants, participant observations, and researcher reflections and writings. It is acknowledged that data was not simply there to be collected but generated through the methods used and relationships formed (White & Drew 2011). I became an active

player in shaping the research and no less so in the analysis of the data. I applied my professional experience of how things work in the museum field and context. I had observed multimodal activities had worked well with a range of ages and abilities within mainstream audiences and believed could be applied to activities for non-mainstream groups.

I reflected on my personal experience of the fieldwork. This resulted in ongoing researcher reflexivity expressed in my memo writing and creative writings. The process of writing was integral to uncovering the four key concepts of materiality, affect, spatiality and mediation which in turn assisted identifying the meanings of significance. Writing was a key method of inquiry (Muecke 2011; Richardson & St Pierre 2005; St Pierre & Jackson 2014).

Possible limitations in the study are looked at in terms of the MS methodology and the extent to which real participation was offered to the families through the methods selected.

Methodology

The main limitations of the MS methodology have been described as:

1. Over attentiveness to strong actors (Fenwick & Edwards 2012; Wajcman 2000)
2. Lack of attentiveness to emotion and affect (Al-Mahmood 2011)
3. Overriding human capability or intentionality (Dolwick, 2009)
4. Guidance deficit on structuring the analysis of the network (Fenwick & Edwards 2012; Walsham 1997)
5. Little support in selecting the actors (Sørensen 2007)
6. Dealing with silent actors (Harman 2009)
7. Accusations of a naturalised ontology (Whittle & Spicer 2008)

I worked with these claims in a number of ways. The criticism of privileging or being biased towards strong actors arose when investigating the applications of new technology and their hero presenters such as Pasteur (Latour 1996b). As an intervention, my study in some ways circumvents this bias. Research participants were invited into the fieldwork and deliberately chosen as non-representative of regular

museum visitors. Nevertheless they cannot be heralded as champions of marginalised groups but rather as effective points of departure to imagine other scenarios or realities (Star 1990). In considering other (non-human and human) actors in the network and how they grant another useful perspective (Quinlan 2012), it is timely to note this provocation written from the New Literary Studies (NLS) perspective.

If the fact of literacy is unavoidable, then I want to propose a research agenda that goes beyond NLS to challenge the hegemony of literacy in any situation, and this means asking how else things could be done. What human, technological, conceptual or material resources can be substituted for the written word, and what would be the effects of enrolling these resources in a particular network? (Clarke 2002, para. 44)

I have taken care not to create heroes from within the draftees, particularly with respect to the child participants, or to essentialise them within a theory that is anti-essentialist (Law & Hassard 1999). It is for this reason, in what I call the Interludes between chapters I write from the perspective of non-human actors. Experimentation in presenting research is within MS (Latour 2005; Dadds, Hart and Crotty 2001, Nicolini 2009). It also helps deal with the issue of silent actors through giving technology a 'voice' within the research network.

Widening the MS net to take in the extensive use of affect (Baker 2010b; Fox 2015; Gherardi, Nicolini & Strati 2007; Mulcahy 2016a; Navaro-Yashin 2009; Shouse 2005; Thrift 2004) addressed the concern of flattening the network so as to turn humans into technologies. Section 3.2.3 looks into human intentionality versus dead inanimate matter (Bennett 2010), acknowledging that wherever the reader positioned themselves on the spectrum of belief concerning the energies of inanimate matter became irrelevant in the face of the dynamics of an assemblage.

Barab, Hay and Yamagata-Lynch's (2001) notion of action-relevant episodes accords with literacy-in-action-nets deployed in Chapters 5 to 7. These episodes take a central object or focus around which the net is co-constructed with resources or tools initially described as helpers, but which in effect are actors. These episodes or encounters can demonstrate the authority that objects and technology hold, including

the other activities that support or are generated around the foci events. For expediency the human participants are central to the discussion around any literacy-in-action net.

The final shortcoming is expressed by Whittle & Spicer (2008), who argue 'ANT is underpinned by ontological realism, epistemological positivism and political conservatism' (p. 612). MS as a critical theory is included in this chapter but nevertheless the danger remains that we cannot see beyond our own realities, despite professing this as a potential affordance of the MS theory. Further, the permission given to actors to 'define the world in their own terms' (Latour 1999, p. 20) must be genuine, rather than purely via the researcher's own filter. Nevertheless, identifying assemblages may be perpetually self-limiting. The use of questions and alternate hypotheses will assist here. I continue to have sympathy with the concern that identifying the range of actors to follow could be seen as taxonomic and therefore false to the spirit of the theory.

Methods

Participatory research methods cannot be assumed to be necessarily progressive or even benign, and my insistence on referring to the family members as participants is possibly an expression of my intent than the reality of their engagement (Holliday 2007, p.150). Some of the older children exercised their power by distorting support in a limited way through switching off their microphones (1C1, 1 C2, and possibly 10C1). Support may also have been distorted in other ways that are beyond my observation or imagination.

Member checking, or showing results to the participants, is a recommended strategy to establish credibility (Creswell, 2003; Guba & Lincoln 2005). Integral to this research methodology was the continual discussion with the participants and requesting their feedback in a non-confrontational way, but I fell short of obtaining feedback on findings. I did not expect family members would want to participate in collaborative writing, regardless of their conventional literacies, yet I did not consider or plan ways they could contribute to or comment upon the research findings. The timescale seemed to be too long and beyond the Ethics Approval, yet in retrospect I could have factored this as a possibility.

Each of the families used social media (Facebook) as well as texting to communicate and this could have been a fruitful avenue. Utilising these literacies in the activities fell outside the Ethics approval. Texting was within the scope of the existing approval and I invited rather than promoted its use, which on reflection should have been facilitated as an option in the same way as the other activities.

I brought families into the research setting at a particular time for a particular purpose. I had intended to act as a resource to their visit and in doing so become a passive observer once the families were on site. The families made intensive use of this resource role, converting it to a far more active one than I envisaged. Their expectations and demands aligned with the role of public programming that at its heart is about promoting a kind of critical literacy that enables visitors to think beyond what is or is not before them and what they can make of it. Nevertheless, balancing my role as a researcher, which gravitates to the neutral values position, with my inclination to be an educator was a tension that I was uncertain could be justified within the research parameters I was constructing but had yet to document.

A second related issue was that of reconciling and integrating theoretical models, particularly around the areas of the socio-cultural versus sociomaterial, where power relations and forces struggle for a presence in research underpinned by a belief in museum equity and access. This struggle was especially poignant when inscribing the bounded research setting and the extent to which participant backgrounds should feature. Due to the unexpected responses by families, I put aside conceived ideas about the nature, extent and complexity of engagement.

The third issue was time. Did I give the participants enough time or was I stretching their goodwill and interest to capacity? Did I factor sufficient time for the trial and its review or was each family so unique that the concept of a trial that extended beyond stepping through logistics inconsistent with the research ontology and epistemology? Working within partner agencies' constraints and timelines largely dictated the answers to these dis-quietening questions. And the participants themselves were enthusiastic and committed through to the last meeting, which I thought was testimony to their experience of the time frame.

Overall the ingredients of 'age, competence, experience, preference and social status of the research subjects ... the cultural environment and the physical setting, as well as the research questions and the competencies of the researcher' (Punch 2002, p. 338) were applied within the research paradigm (Law 2009c). As a practitioner I enjoy the creative, energetic and disruptive nature of family museum visits. As a novice researcher I thought I would be cloaked in a mantle of detachment, yet as the study unfolded in unexpected ways I found myself once again becoming part of the energetic assemblage of families in a museum setting. The cultivating of a methodological approach with internal coherence, validity and applicability provided solace to my concerns regarding limitations in the design.

INTERLUDE #2

I AM THE RESEARCH MACHINE

I am a machine. My component parts can be revised or replaced for different outputs (Fox & Alldred 2015). I see myself as a design- in-progress although the constant tinkering is tiresome. Sometimes my work cannot be undone as I have so many parts to bring together. At other times I am compliant. I pause. I have been surprised by changes and occasionally betrayed. Perhaps I betray some component parts, its part and parcel of my sort of machine. People, ideas, museums, community groups, government departments, technologies, ambitions, stuff and nonsense are working parts. I am a big machine and my edges cannot be seen. I was assembled in Tasmania though my ownership is a little vague. My components are in Sydney and some went abroad when some parts were published. I am now uncertain on how far I travelled and which bits still belong to me.

I am a machine that changes for the better or worse. Sometimes I take control and keep working even when others want to stop and review. There are times when parts of me take control although I can hear a voice saying, 'By themselves, things do not act'. Indeed that there are no things "by themselves." That, instead, there are relations, relations which (sometimes) make things.⁵² I am a *hybrid collectif*, a research hybrid collectif (Callon & Law 1995). I am that collectif, the actor that sows the field and produces the empirical. There is so much of me I sometimes wonder who is in control? At least I am well fed.

I am a machine of expansion. The fieldwork added to my already considerable girth. I consumed pictures, words photographs, voices and sounds until I felt queasy. All these actors wandered about me and I wanted them sorted and quiet. I brought in three more pieces of technology called methodology (Braun & Clark 2006, 2013); coding (Saldaña 2010) and software called NVivo and set them loose on this pile of

⁵² 'Agency and the Hybrid *Collectif*' (Callon & Law 1995) is presented as a conversation between two scholars over the validity of attributing agency to non human actors or actants. This comment is from Callon.

stuff. If truth be known I was a little bit in love with NVivo. It was so neat and could make graphs and models. Very seductive. Take these two samples (Figure 6) designed to show the activities of a mother (4A1) and her daughter (4C1) in the museum. They are caught. The voices have stopped.

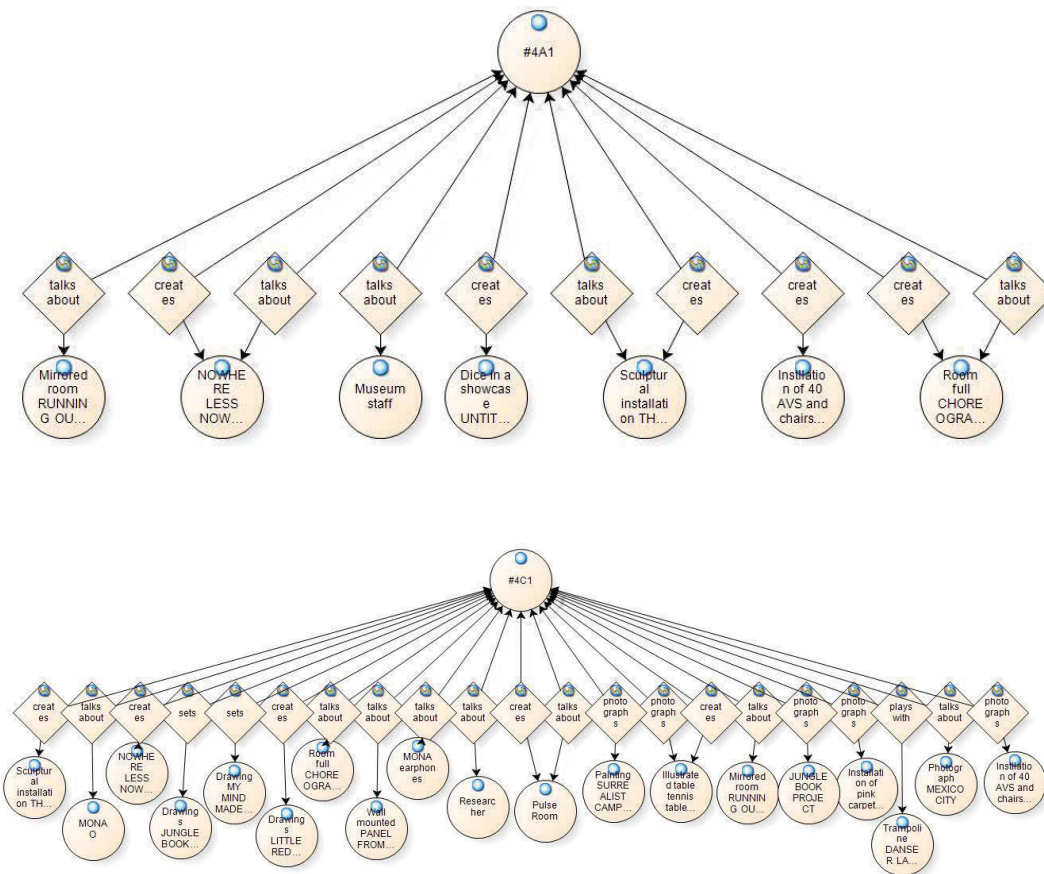


Figure 6: Models of the mother generated by NVivo

These neat figures were emerging from the grit of the fieldwork. I picked up the data and threw bits into the compost bin and selecting juicy pieces of literacy and observed where these grew and what made them flourish. Sometimes I went back into the bin as suddenly some data became the missing connection. I coded and coded, and all that work became like upturned cups forever hiding the magic bean⁵³. I dived deep and sometimes it felt as if I would never surface. I read and wrote, using checklists as lifelines to the surface.

⁵³ See Appendix L for the series of codes initially applied.

I have to admit that humans dominated the research stage (Barab et al. 2001). Action words such as *create, photograph, play with, read, respond to* were rulers. At least my actors were doing some *thing*. Phew! It was exhausting and vaguely troublesome. Was the audio catching those who silently read labels? Was the researcher distracted by the little girl showing off her dress from the family's country of origin or the boy who ran up the stairs and into the past? Some actors said a lot. Some actors could not speak English very well. Some actors could not speak at all. Were they embarrassed to say what they thought? Is the child who asks questions or offers an hypothesis to clarify their understanding of the museum object, text or thing cleverer or more 'on task' than the mother taking care of loose shoelaces or what was going on with the father who lovingly says his son's name in the museum over and over again

I have to say that camera was tricky and did not actually store all the photos being taken. That slinky NVivo was not completely innocent either. I wanted to use its modelling but these capabilities were influencing the data interrogation and so the findings. Take Figure 6. The child is on fire, the mother is restrained. They are separate when every exchange said 'family'. Was this how it was for all the actors? I could not settle on codes that might explain it all or even large chunks of the data within the families and across the two museums.

When your informants mix up organization and hardware and psychology and politics in one sentence, don't break it down first into neat little pots; try to follow the link they make among those elements that would have looked completely incommensurable if you had followed normal academic categories. That's all. ANT can't tell you positively what the link is (Latour 2004, p. 62-63).

My neat pots were these codes. I had codes when I needed linkages or even fabric (Ingold 2008). The data was restless and I felt betrayed by method. The perfect code book was not the perfect cook book. Coding was an avenue to the ingredients. The lines were what I needed, and this is what I found:

1. Family engagement with museum objects is multidimensional and dynamic, continually traversing and transcribing borders within and beyond the museum space.
2. Emotion and physicality contribute to the literacy events provoked by museum objects.
3. Humans and non-humans acted as literacy mediators in the research.
4. The child is a prominent actor in many literacy action nets.

The research machine cranked up a notch and produced significant outputs called materiality, affect, mediation and spatiality. It was from this pattern that any final assault on the mountains of meaning would be made. In the meantime all I can hear is someone yelling 'just describe'.⁵⁴

⁵⁴ The exhortation to follow the actors through description is from the *Prologue in the Form of a Dialog [sic] between a Student and his (somewhat) Socratic Professor*. It can be found at <<http://www.bruno-latour.fr/articles/article/090.html>>. *On the Difficulty of Being an ANT: An Interlude in the Form of a Dialog [sic]*, is in Latour (2005, p.142-156).

5.

STORIES: HOME & MUSEUM

This chapter analyses the home literacies of the participant families and the two museum sites. Understanding home literacy practices (or constituent practices) strengthened identification of literacy practices during the museum visits. Considering the museum as a potential actor in literacy assemblages through an exploration of different spatial forms gives some insight into what each environment may demand of the participants and their literacy repertoire. Chapters 6 and 7 introduce the families and their literacies into each museum.

PART A: FIELDWORK PARTICIPANTS

5.1 'Tricks'

The common thread linking participant families are their association with the Centre for Language and Literacy Class, the City Women's Shelter and/or LINC (Tasmania's state-wide library and information service). These families may stand at the margins but they have revealed in their everyday home literacies a diversity of skills and abilities. Uncertain as to their relevance to many of the literacy models covered in Chapter 3, I decided not to access their literacy scores as measured via external testing applied within formal Domains of learning such as the Australian Core Skills Framework (ACSF) and National Assessment Program.⁵⁵ Instead I believed that understanding the multifaceted everyday literacy practices of the families (Anderson et al. 2010; Bird 2009; Taylor et al. 2008) would better help identify localised practices as opposed to 'a perpetual performances of set practices' (Bhatt 2016, p. 13) within the museum.

⁵⁵ Few relevant instruments exist outside of ACSF or The National Assessment Program – Literacy and Numeracy (NAPLAN), which provide a limited and potentially misguided way to 'measure' or understand family literacy (H. Fielding and E. Levitt, personal communication, March 2013).

Two methods assisted me to develop a trusting and more informed relationship between myself and the participant (Liamputtong 2007, 2008). These methods or 'tricks' revealed assemblages of literacy in the home as they forced new associations to be made (Latour 2005, p. 79). The first method was an interview led by a Home Literacy Discussion Guide developed in discussion with Working Party members from the Library and Literacy Language Classes. The second and more successful method was to send a research camera home with the participants. Photography as research technique is covered by many theorists and researchers (Barker & Smith 2012; Greg & Roz 2007; Jorgenson & Sullivan 2009; Ketelle 2010; Larsen 2008; Moss 2001; Sime 2008). Most refer to the camera's greatest value in eliciting a story from the images selected. One recommendation is to give firm shared boundaries to elude the richest responses whilst gracing the decision of the respondent over what to photograph at the centre of the exercise. Accordingly, the allocated boundaries were inspired by the work of Pahl and Rowsell (2011). Each family was given a list of phrases such as 'reminds me of a good story' and asked to match the words with a domestic artifact and to photograph it. In this case, the stories were linked to artifacts selected by the adult or child or both that matched these words and phrases:

- my family
- a display
- a good story
- my hobby
- value
- beauty
- my hobby
- a family story
- this is clever
- who I am
- makes me happy
- makes me sad.

This served the purposes of familiarising the family members with use of the research camera prior to being expected to use it during the museum visit and

establishing linkages to objects in the home that may or may not translate to objects in the museum. I wanted the participants, as a family, to have a sense of preparedness rather than unease for the museum experience and their roles as study participants. The following sections outline what unfolded as a result of using both methods. The families were arbitrarily divided according to the source agency. Literacy in the home is caught within 'literacy-in-action nets,' the instances of literacies arising from the photographs and the dialogue they promoted and evoked. Revealing literacy in the home was an unintended outcome of the exercise with the research camera.

5.2 Language learning class participants

5.2.1 Family 5

Family 5 is a parent (5A1) and child (5C1, aged four years)⁵⁶ living in a household with their extended family. Having come to Tasmania as a refugee from her country of birth after 18 years in a United Nations camp, 5A1 said 'We are poor people at my home'. This humble statement is indicative of how 5A1 presents and engages with the world. This family chose to photograph *people*, her daughter, the extended family and their home church, rather than the things they own and value. 5A1 presents as contented and connected with her family, which is nested locally within her church community and internationally through social media. Her everyday literacy practices support her church and a deity, described as 'God of words'. 5A1 communicates with this God through Bible readings in homes, attending church, singing hymns and watching YouTube. She uses Skype and Facebook to stay in contact with friends and family in other parts of the world, including North America. The family's literacy network extends internationally, with a potent actor being the Church and its influence upon the family, although 5A1 and certain family members also act as literacy mediators, rather than intermediaries. Whilst this adult believes that her computer skills are limited, she helps her parents and she in turn is helped by her extended family.

⁵⁶ A reminder of the numbering system used: the first adult contacted is labelled 1 as in 5A1 regardless of their gender. The eldest child is 1 as in 5C1, with younger children labelled 2 and then 3 as in a family 10 (10C1, 10C2, 10C3) with more than one child.

5A1 takes a photo of a painting by her brother created from a photograph emailed to the family from America saying 'He is very good artist.' Another photograph showing a plate of croissants is the opportunity to talk about the different food they now eat beyond the dahl and rice of the camp. The pastries are provided by the one employed brother who works at a bakery and shared after their at-home church service.

Her cultural identity is fluid. During the first interview she says, 'we are [from the camp location] and not real [people from her place of birth]', but in the museum she has this exchange with a museum staff member, which highlights a different emphasis on her situation.

Museum staff: Where are you from?

5A1: [place of birth].

Museum staff: You live in Tasmania. Do you like it here?

5A1: We are happy.

The family speak their first language at home and 5A1's English is limited.

We are ... my father and mother don't know English. Difficult to understand 'God of words' so we only go one month two month. In the [camp location] Church the songs are in [language]. Sometimes my daughter speak English with me. 'Mum your English is no good she says' [laughing].

5A1 asks the child what she would like photographed at home. One photo is a display of pretty things.

5C1 [likes] toys. She likes toys. This are her toys. Baby girl toys. She is proud, I think ...'

Another photo shows the child with a pack of coloured pencils.

I took this because she loves pencils. Pencils. Drawing pencils. She chose this. I want these things to be in picture, she says.

There are multiple sources of pride and/or possibly aspirations being expressed by the photographs. The home literacy practices of the family appear to forge a place in a new world within an extended network facilitated by family relationships; the computer and the printed bible (see Figure 7).



Figure 7: Photograph by 5A1 of a home bible reading.
The photograph shows an unnamed family member reading the bible at a community home church. An easel with drawings can be seen. It is not allocated a label phrase such as 'my family'.

5.2.2 Family 3

The adults in this family (3A1 and 3A2) came to Tasmania via a refugee camp where they lived for 20 years. They now live in Hobart with their three pre-school children (3C1 aged five years, 3C2 aged three years and a new baby). Their home pictures were dominated by the children and very large floor mats (see Figure 8) sent from the adults' country of birth, which speaks to the life of family 3 and their local and global connections: 'Most of the [cultural and language group] people they use this one [the mat] ... we transfer money and they post it ... a lot of children they eat and they play on the floor.'

The family make intensive use of the internet at the library, watching news of their birth country, downloading music and movies (in two Asian languages other than their birth language), which the mother watches. The father favours YouTube of

soccer games (supporting the United Kingdom's Manchester United) and downloading Asian language cover band renditions of The Eagles. Family 3 are active in their language and Church communities. 3A1 reports that 'Sometimes, [I teach my] children how to sing songs in English. Just children's songs, easy song and we download and we teach. Very quick the children learn very quick. It's good'. Despite the children's ability to speak English, family conversation detected is mostly in the birth language of the adults which is the family language.



Figure 8 : Photograph by 3A1 of his child at their home.
The child (3C2) stands with an educational toy and on a style of mat often used by the cultural group wherever they live. Part of the home literacy series, it does not have a phrase label.

5.2.3 Family 10

Both adults in family 10 came to Tasmania as refugees. A family of five, the children are eight, six and three years old. Like family 3 they are regular Library users and use social media to keep local and international connections (see Figure 9). The children study their home language at a weekend Community School run by a volunteer. 10A1 (the father) is very proud of his English: '... before, nothing'. He also later writes after a museum visit that 'in the future I want to improve more my English

because my English is not good enough'. I had mistakenly assumed until our last interview that 10A2 (the mother) did not understand English as well as 10A1 as she would speak to him in their home language after each question. 10A1 later explains that she is translating my questions for him.

10A1 has a greater range of information technology skills than other participant adults. He is a regular Facebook user, reports online to Centrelink and makes intensive and creative use of his smartphone. He uses the phone to help translate words and concepts by speaking into it, obtaining the correct spelling and putting that into a Google image search. The mosaic of images helps to quickly convey the word's rich potential.



Figure 9: Photograph by 10A1 of his child at their home.
The child (aged eight years) is sitting on a bike whilst holding an ipad.
Part of the home literacy series, it does not have a label.

5.2.4 Family 2

Family 2 is a single-parent family of four children, three of whom live with the mother, 2A1. Her partner (2A2) is a part-time taxi driver and the only employed person amongst the participants in this study. 2A1 commenting on the eldest boy's choice not to accompany the family on the first museum visit says 'But he [2C2] wasn't

really interested. Oh that's stupid, that's Tasmanian stuff. We come from Sydney. He doesn't really worry about it. He needs to get back into reality, not just into the games.'

The initial interview itemises technologies used and suggests a consequent siloing between the adult and children around their literacy practices. The mother says of the eldest child, 2C1 (aged 14 years):

She likes drawing so she probably goes on there and looks at pictures and stuff', and in reference to the family watching movies she comments, 'Umm, we are not really interested. We don't do movie nights. One will watch it and comment on it and say we all should watch it.

The home photos, selected as a family, are described with humour and warmth, revealing a home environment alive with written script. Chain store decorative items and personal clothing are embellished with words and sayings, as are the youngest child's T-shirt from his old mainland school (labelled as a family story); magazines and bicycle (hobby) and a Bob the builder book (hobby). Making things is a bonding experience for the youngest child and new partner. An incidental photo shows a desk, notebook and bills with sticky notes – a system used by the extended family when they visit (See Figure 10). Family 2 presents as an organised household supplied with literacy means, endorsing independent use of these technologies alone, in groups and as a family.



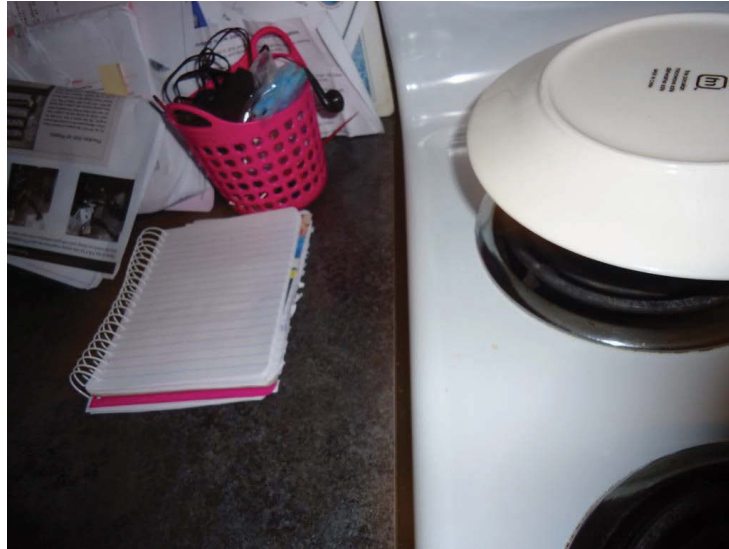


Figure 10: Photographs (including previous page) by 2A1 taken at home
Each subject in the home literacy series is with guidance from 2C1 (aged 14 years) and 2C3 (aged eight years). The table decoration (previous page) is labelled is 'a display', while this photo is unlabelled and shows the home 'office' where the family keep notes and bills together in a system used by the extended family.

5.2.5 Family 6

The mother of family 6 (6A1) is my most enthusiastic recruitment, saying she is interested in things that are different. She is keen to introduce her girls (aged 14 and 10 years) to varied learning opportunities and puts research participation in this category. The interview looking into home literacy practices indicates a dedicated mother intent on providing as many resources as she can within a limited budget. The alignment between school and literacy is strong but so too are 'outings'. The interview demonstrates the strong affective connection between identity, parenting, learning and literacy.

You know what? Sitting here makes me realise ... [long pause]. Sometimes I think I'm on my own. I'm a bit tired, depressed and that, you know. Talking like this has made me realise, I do a lot with them. My friends say to me, "You've got them at the beach, at the pool, always on the go with them, always taking them somewhere." Just having this conversation has reminded me. I know there is more I could be doing. But if the kids aren't going to do it. I get upset; it ends in a screaming match. I get all worked up.

If you don't do your homework you are going to suffer [pause]. I tell them my story, about how I had to be pulled out [of school]. Eight kids in the family. Mum made me go to work. Yeh, I do tell them stories, actually [6A1 starts crying].

The photograph (Figure 11) was described in different ways by the child and the mother ('clever' and 'happy') revealing a number of literacy practices. The entire family take the home photos and discuss them whilst offering different labels for the same scene and/or artifact.



Figure 11: A photograph by 6A1 of her child and family friend. 6C2 sorts picture cards with a friend whilst they watch the television set. 'This is clever as it tells you about different animals and creatures' (6C2)

'This makes me happy as I'm always on to the kids about learning. There is a collection run by Purity. There were two good sides. She was sorting out the ones she had and the ones she didn't want to give to other children so they could finish their set off.' (6A1)

5.3 City Women's Shelter

5.3.1 Family 8

Family 8 is a single-parent family of three daughters (ages 13, four and two years). All the family take the photos (not the two-year-old), with 8A1 describing hers as reflecting 'new life, blossoms, beautiful. I collect jewellery and I like shells'. The four-year-old took many of the photographs, with her eldest sister and mother being both proud and intrigued by the child's originality (see Figure 12).

8A1: She's four. She's excellent with a camera. 8C2 took that one of 8C3 and her view out the [car] window. These are all 8C2's pictures.

8C1: Some of them are mine I think.

8A1: That's a picture in a book that she liked.

8C1: The *PlaySchool* Book.

Researcher: Did she say why she liked those pages?

8A1: [both laugh] 8C2's mostly random. She's one of a kind.

8A1 comments that her scarce resources had to be directed into something worthwhile for the family's future: 'No I can't afford that yet and I'm still learning that's the whole idea. I'm getting back into ... [sighs] I need to learn about computers and everything. That was put on hold recently. I'm desperate to learn.' This emotional intensity is echoed in a conversation after the museum visit. I make a hard copy of one of the family photographs after giving it to 8A1 she holds the photograph to her chest and says 'this is the cherry on the top'.



Figure 12: Photograph by 8C2 taken in the family car.
8C2 (aged four years) chooses to take photos in different settings, including from her car seat. In this photo she asks her mother to hold up her recent painting.

5.3.2 Family 4

Family 4 is a single-parent household. The mother, 4A1, and child, 4C1 (aged five years), do not seem to have the support of either a local family or an extensive friendship group. 4A1 is warm, approachable and interested in the world, but recently communication technologies have failed her. She had Facebook but forgot her password and has not renewed it; she once got help with her computer but the relationship with her helper faded; she did have music in the car but the antenna broke; she cooks but not for pleasure; she would like to sew as a hobby but that will be in the future. Literacy activities with her daughter are those that have not faded. The little family sings, dances, plays games and reads books together.

The photos of things from home yield strong connections with emotional and material networks (see Figure 13). 4A1's mother, who is visiting from interstate, contributes to the discussion. Pragmatic and on task, 4A1 has taken the cards and methodically worked through them encouraging 4C1 to do the same, seemingly with

little coaching or intervention. The images show an organised house with 'treasures' to be admired in a display case.

In her photographs 4C1 chooses an angry mother to express what makes her sad. Her mother obliges in the picture by making an angry face. The favourite toy makes 4C1 happy. There is a sense that 4C1 looks around her house to find what she needs and if nothing is apparent she creates it from available resources. She displays figurines in interesting places and perspectives. It has a sense of spontaneity and even gaiety. She is enjoying the camera and takes multiple shots of the same thing. 4A1 likes things and has been an EBay shopper. She likes looking at things, although not too far afield.

4A1: I don't get into town hardly at all.

4A1's mother: It's the parking. We thought we'd get the bus but it takes too long to get back before 4C1 gets back from school.

The journey from Hobart to the suburb adjacent to the family's home takes 20 minutes by bus, which makes 4A1's visit to an unknown gallery location admirable. She comments favourably on the process of taking photos at home saying, 'I think I did them all except, "This reminds me of a family story" – I couldn't think. It was good once you got into it.'



Figure 13: Photograph by 4A1 saying 'this is me'.
The photograph is of a bag purchased on Ebay. Online shopping is an interest for the mother and she labels it 'This is me'.

5.3.3 Family 9

Family 9 is a single-parent family with one child. 9A1 is on a disability pension and her eight-year-old daughter is her Registered Carer. 9A1 asserts that 9C1 identifies as Aboriginal and they maintain contact with the Indigenous community via a language and cultural centre. They are both interested in other languages, including Japanese and French. 9A1 is very clear that 9C1 is at the forefront of her life:

She is my motivation. A lot of people say that about their children but I just feel this overwhelming sense to really work hard to instil those things that I was saying early because she has a long journey ahead of her, a really important one I feel. I'm sure a lot of parents feel that but she is already doing that already. Yep a long journey. You just can't fob her off.

Family 9 gathers print fiction and non-fiction books, watches television shows ranging from cosmology to children's programs. The mother likes cooking and gardening and refers to books when discussing her hobbies as well as phone images of her cooking (see Figure 14). They love music, the child makes up her own song lyrics and they sing together. The child is a willing public speaker about her role as her mother's carer. Family 9 wants to help in the community and be connected to it⁵⁷.

⁵⁷ 9A1 cooks for a couple that operate a 'soup kitchen' and Family 9 actively supports the Bush Fire Relief through organising the printing and sale of car stickers to promote the charity.



Figure 14: Photograph taken in the home literacy series by 9A1
The image shows the 'before' and 'after' of her beetroot dip through using the research camera to photograph the dip and her iPhone image of the dip when first made because, as explained by 9A1, 'it looks nicer' She labels the photo 'This is my hobby.'

The mother and child both participate in gathering images for home literacy practices and 'tag team' in recounting and co-constructing the narratives provoked by the images. This is a tight-knit family unit, conscious of their stories within larger narrative spheres complete with setting, complication and resolution.

9A1: Do you want to tell the story?

9C1: Well, when we lived in Launceston we used to get food boxes from HillaryBarn

9A1: HillBarn.

9C1: Hillbarn. Hillary and Barney. In one of the boxes was a two-year-old Basil.

9A1: Two years old?

9C1: Two month old basil. His roots were like that big and the pot was like that big.

9A1: Tiny little basil.

9C1: ... and he was very cute.

9A1: He's had a very interesting life. To fill out that story. That would be 2010.

9C1: He's three.

9A1: He's three. Good girl, she's onto it. He looked healthier at one stage and Hilary put it on her blog because his name was Basil.

9C1: Basil after the TV show. Basil!!!!

9A1: He's had a tough life actually. Because he's moved from Launceston to Hobart, then he ...

9C1: He's moved a lot of times.

As with other families associated with the Women's Shelter, family 9 has moved a lot, often by necessity. This story associated with a pot plant is one of displacement and continuity but it also reflects various literacy activities through references to time periods, hobbies, a blog and favourite television show.

5.4 Library

5.4.1 Family 1

This family has two parents and three male children aged 11, eight and three years. The home photographs yield a rich emotional vein with the theme of 'making' evident in the home photographs, to which each member contributed at least one image. The father's photos show tools, workbenches and the hearth fire. One photo is a workshop which shows marbles, gemstone and 'a mess of tools'. The father as my initial recruitment is 1A1. He comments 'I make something every day. This is my passion.' The mother photographs her passport saying it reminds her of a good story through her travels. The eldest child (1C3) photographs a detail of his guitar ('valuable', 'who I am', 'happy') and a sword he made. The middle child (1C2) takes unlabelled pictures of himself and little brother (1C3) and puts every label next to his rock collection, the one he brings to the museum to show me on the first visit (see Figure 15). This is a family where literacy extends from the home hearth to the legal system, from the hand to online experiences, from solo pursuits to family activities.



Figure 15: Photograph by 1C2 of rock collection.

1C2 (aged 8 years) photographs his rock collection and brings it to the museum on the first visit. He asserts that each rock has an associated story.

5.5 Summary

The families about to cross into museum territory were diverse, their members distinct, with all the adults and children exhibiting a range of literacy levels and practices. The discussion guide elicited that all families shared music in their lives (listened to, played or made) and accessed the internet from a mobile device or a

computer at the home, school or library. Most families used the library (but not necessarily to borrow or read print material), took photos (using a smartphone, ipad and, for family 6, a camera), used social media (commonly Facebook) and shared some form of literacy practice. The families with an adult parent of refugee status used YouTube to maintain contact with their country of origin and Facebook for their family and friends from the camps. These results can be read like a shopping list of technologies associated with literacy, rather than the purpose, value or meaning of literacy in family lives. Technologies such as a computer speak of connections from home into their world, but their skills are underplayed. The adult seemed to consider and answer each question in light of literacy expectations formed at school. The initial interview with 1A1 (the father) reads as though it comes from the literacy-rich home of a conventional middle-class family. It was when 1A1 said 'I make something every day. This is my passion,' that I was alerted to the otherwise elusive factors of emotion as content, in this and subsequent transcripts. This may have been a product of the discussion format, as I had made it open. Whilst the father itemised the technologies used to generate literacies in the home, other aspects and interests were later reinforced and revealed by family members when talking about their photographs. It was as though the interview gave me the actors whilst the later photo elicitation graced the assemblages.

This richness of data was an unintended consequence of my request that the participants photograph human and non-human things of meaning to them. I could have asked for literacies of value, but I believe this would have generated a graphic, itemised shopping list of technologies associated with literacy. Objects had meaning for the families, and literacy as a 'matter of concern' revealed its place within the family space. The families disrupted the dominant discourse around literacy and its association with school rather than home. Family members were not only passive users of technology, they adapted literacies to their own purposes and situations, such as families 3 and 10 using the library as a communication hub to watch English soccer; listening to cultural language groups cover bands play 1980s Rock songs; and using both the translate function then the image function on a smartphone to understand unfamiliar English words and expressions.

As the selected literacy-in action nets reveal, despite the participants being resource poor, literacy had a valued place in their homes and lives, thereby unsettling a prominent imaginary of adults with low literacy levels reproducing homes of low literacy. Many of the family photographs directly and indirectly included tools for creating literacy (for example, pencils, ipad, computer, along with printed texts) as decorative items as well as gifts. The families often worked together on the projects of assembling their stories, and in the case of families 1, 4, and 6 the young children both adapted and disturbed the family narratives.

The single child in families 4, 5, 6 and 9 appears to be at the forefront of the adult's discussion about literacy. Families 1, 6, 8 and 9 identify one child as unusual or gifted and in need of additional stimulation. Though the children were either silent or vocal actors in the decision to participate in the research, the adults' decisions to participate grew out of concern for the broader educational needs of the children in the family. For the families where the adults had previously been refugees, improving the adults' English language skills was as pronounced as cultural maintenance through weekend classes for the children. Figured worlds (Bartlett & Holland 2002) is in evidence here, with the child becoming emblematic of the family's struggle, such as 'the journey' for 9A1 and 9C1; 'We are poor people' (5A1); and 'My English is poor' (10A1), which may or may not be taken at face value. Literacies are 'invoked, animated, contested and enacted through artifacts, activities and identities in practice' (Street 2003, p. 6) in observable ways such as the stories families choose to tell about themselves (for example, the swap cards for family 6); the artifacts that provoke these stories (the basil plant for family 9) and the incidental artifacts, such as the mat from their country of birth for family 3, which nevertheless demonstrate Pahl and Rowsell's (2007, 2012a) commentary on sedimented and persistent themes.

The revelation of home literacy practices through things they valued has exposed the thick and affective materiality of these practices. Looking into the home using the research camera was a useful way to make silent actors such as literacy 'talk' and become actors in the home literacy assemblage. Strange and innovative connections irrupted, not through the more formal discussion guide I administered but through the placing of multi-modal tools in the hands of the participants.

A final literacy-in-action net for family 2 demonstrates the merit of photographs versus discussion guide. The mother, 2A1, did not mention cooking in the initial discussion, although she said her partner and the youngest liked doing things together and this is what she chose to photograph because she values this relationship. The adults and child are happily working together reading, estimating, measuring and manipulating shapes involving biscuit packets, biscuits, cooking equipment within a new family routine (see Figure 16). Or another way to see this interaction is the translation of both literacy and numeracy skills, which would be difficult to illicit from an interview.

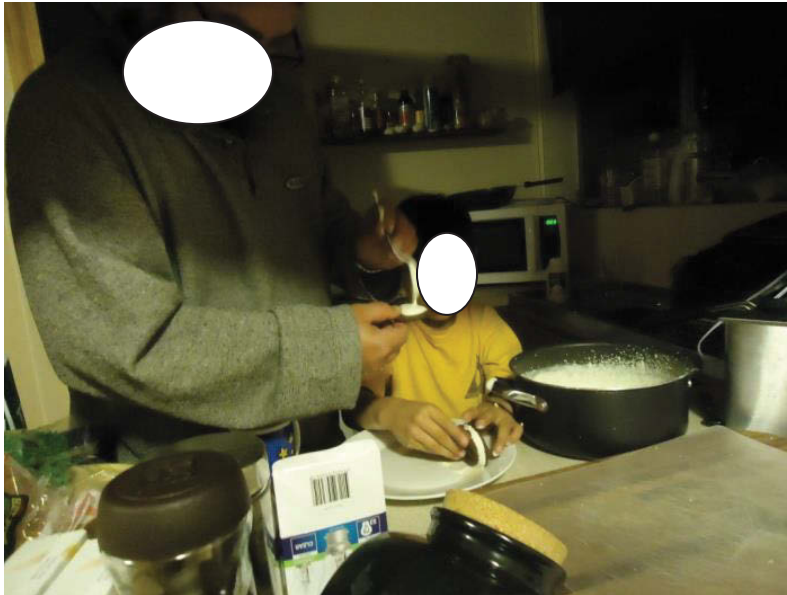


Figure 16: Photograph taken by 2A of 2A2 and 2C3

2A1: This was the night we went to MONA, I think, and we were staying at 2A2's house and 2C3 and 2A1 love cooking together and they were making a biscuit cream, I don't know what you call it. Like a layered biscuit and you put it in the freezer and it's like an ice-cream biscuit cake. [R: yummy?]

2A1: I don't know, I don't eat dessert, I'm not a sweet eater!

[R: disbelief/laughter]

2A1: But they enjoy it. They love it.

2A1: That's them doing it, like laying it out.

[R: Would 2C3 read a cook book or would they just know how to do it?]

2A1: Sometimes they ask me, like how much do you reckon we might need? I say well measure! How many biscuits you've got and cream and see if you have enough together. It's on the biscuit packet.

PART B: SETTINGS

5.6 Background

Part B looks at MONA and TMAG in detail as a kind of base line prior to the research intervention and the introduction of the families and their existing literacy repertoires. Both museums selected for the research are sites of significance within Tasmania. Each is a place where attachments are formed, relationships created and practices maintained within and beyond its site. They have the 'distinct materiality' (Leitner, Sheppard & Sziarto 2008, p. 161) that has the potential to normalise museums as centres of authority and power. The literacies they endorse can establish socio-spatial and material boundaries sanctioning the language and other identity markers as a museum Discourse. The activities of the participants could act to temporarily re-signify both the place and these literacies.

5.7 Museum of Old and New Art (MONA)

MONA is an unexpected star on Tasmania's cultural horizon. It is a privately owned contemporary art gallery based on David Walsh's very broad and eclectic collection purchased from the profits of a business based on his gambling winnings. This institution continues to trade on its unconventional presence in Tasmania and within the panoply of cultural institutions both locally and internationally.^{58 59} This suggests MONA as an embodiment of 'otherness, strangeness and alienation' (Masny & Cole 2009, p. 5). Whether disruptiveness overrules spontaneity remains to be seen in practice. The museum is deliberately playful and irreverent, with works (ranging from

⁵⁸ 'It's becoming difficult to remember what Hobart was like before David Walsh started his Museum of Old and New Art (MONA). Within two-and-a-half years this Gothic fortress of sex and death has eaten up the city more effectively than any movie monster ever ate Detroit. Every day a steady procession of tourists from all over the world make their way to the museum via the MONA ferry or the MONA bus. Well-heeled guests stay on-site in the luxury chalets, and dine in the restaurant or café'. (McDonald 2013, Para. 1)

⁵⁹ 'The main aim of Wlash (sic) behind setting up the museum is to shock, inform, challenge, offend and entertain visitors, and appears to be right on target' (Belle 2011, Abstract).

the sophisticated to the cunningly banal) appealing to a range of senses, including smell.

This institution has the intention to be disruptive, yet somehow it has reconciled its contradictions into a coherent brand. It aims to shock and offend, yet visitors find this appealing. It is not positioned as family friendly yet families attend⁶⁰. Children were not considered as an audience in the museum's development other than a pre-opening concern that some of the works were likely to be viewed as unsuitable for this audience (E. Pearce, MONA curator, personal communications via email 27 February 2014). Nevertheless families were amongst the visitors that flocked to the institution and continue to visit⁶¹ yet MONA's reach is much further than its visitation. MONA is the local hero bolstered by its free admission on proof of Tasmanian residency and for those less than 18 years old. It levies an Adult or Concession charge for off-island visitors. MONA has a very recognisable and grown-up brand with an effective almost manicured management of its identity transforming it into a type of 'black box'⁶³ in the Tasmanian cultural landscape.

The research focus was *The Red Queen*, a temporary exhibition located during the fieldwork period on the lowest level of the museum. It housed 33 works of different materials, artforms, times and ways to interact, in addition to viewing. The texts were two dimensional (such as drawings and paintings) and three dimensional (audio visuals; immersive experiences; mechanically interactive and historic artifacts). To reach this gallery the visitor enters through the main foyer, which repeats a common

⁶⁰ Six of the nine participant families were aware of MONA. Four were eager to visit and the remaining five equivocal.

⁶¹ The question of how many families cannot be definitively answered as there is no Family ticket for off islanders and no easy way to track visitor demographics. Families are identifiable and MONA's front of house staff estimate that 12-15% of adult visitors are accompanied by a child during 2013 (J. Johnstone, MONA Venue Manager, personal communication via text 28 February 2014)

⁶² During 2013 it is estimated that 28 % of visitors (280,700) went to MONA making it the state's second most popular attraction (after Salamanca Markets). Approximately 70-75% of these tourists are not from Tasmania. This would suggest MONA has attracted about one million visitors from opening in 2011 until 2013 (Tourism Tasmania 2014).

⁶³ As a Tasmanian resident, my observation is that anything MONA does in Tasmania is seen in an unquestioned favourable light.

museum language of housing the reception, cloakroom, shop, cafe, sitting room and entry into the main museum, and then through a hole in the floor. The visitor can choose to take the stairs or the circular glass lift, each wrap around each other double helix-like piercing through what was the ground floor into the earth. At each of the two levels below there is only one choice to take onto that floor. In the case of *The Red Queen* it is the bottom floor and is approached through a bar with smartly dressed waiters, 'groovy' chairs and a right-hand turn along a dramatic rectangular walkway called The Void where one side is three stories high of sandstone and the other is punctuated with entries and Texts, including the ashes of David Walsh's father in a draped crypt. The electronic guide called the MONA O enrolls visitors into the space. Through its changing font colour to red on screen, the O announces you have crossed into The Red Queen. There is no line, signage, lighting or soundscape to announce the new territory. Already it can be understood that the visitor is entering a series of conjoined Euclidian shapes but not one that makes for navigation as an intuitive process.

MONA eschews traditional print signage on walls or showcases such as introductory text, theme panels and printed labels. Instead the gallery utilises a hand-held electronic device (reminiscent of a smartphone), called The O as its main form of interpretation aside from the physical display of the texts (object, artworks, art or works). Visitors are adorned with the MONA O from a cart that blocks traffic flow and acts as an obligatory point of passage, 'an organising principle through which everything else in the collection comes to make narrative sense' (Hetherington 1997, p. 211). Visitors can choose to take the technology but it is an offer made by the staff member as integral to the experience. The O's location sensor identifies a list of nearby texts each time the pink circular 'O' button is activated thereby elevating position in space as a defining element. It offers a selection of information about each work, including writings which would be included in traditional print wall descriptors such as the name of the work, when it was made, the name of the artist and where he or she made the work. Other copy includes The Gonzo⁶⁴, music selected or composed for the

⁶⁴ 'Gonzo journalism themed content. The icon for this button features the famous six-fingered 'gonzo fist' holding the peyote seed that was originally used in Hunter S.

work, and interviews with the artist. Occasionally there may be a quote from a novel or a poem. The visitor can choose Love or Hate to vote on the work, with a Follow noting the number of other visitors who agreed with their choice. The O not only identifies existing networks around the text but generates others. Upon arrival at *The Red Queen* the visitor has already been introduced to the (deliberately unconventional) MONA discourse and enrolled in its usage.

We are, therefore, not only entering a series of Euclidian spaces, rectangles, cylinders, cubes and so on, we are also entering into the space of a code, a signifying and classifying code that represents the spaces through which we move and allows us to read what the museum understands its exhibition to mean. Museums have always been classifying machines. (Hetherington 1997, p. 202)

The Red Queen is contrived to answer the question of why we make art, although according to the exhibition publicity, 'The answer, we hope and aim, will remain elusive; there will be no lessons learnt or taught, only contagious inquiry into the messy machinery of human nature'⁶⁵. This would seem to make the question a priority. Nevertheless, I considered each work as a solo text, read using a range of literacies and understood via literate identities. I was uncertain whether this fire and fluidity would be a liberating provocation or add to a sense of participant confusion. It does emphasise the notion of an expanding assemblage where interpretation is secondary to affect.

The range of MONA O copy available to the reader for the object *Neige et Renard / Snow and Fox* is at Appendix M. The copy is urbane, sometimes esoteric, generally representing high levels of conventional literacy accompanied by a selection of ways to engage with a work. The copy is suggestive, fluid and not written with accessibility or

Thompson's 1970 campaign for sheriff of Aspen, Colorado. Much of this content is written by Mona's creator, David Walsh. It often includes David's personal, and always frank, response to the work. How he came across it, why he bought it, why he likes or hates it. How it relates to his philosophies etc. Not always truthful, politically correct or even relevant.' (ArtProcessors Pty Ltd, 2012)

⁶⁵ <http://www.mona.net.au/past-exhibitions>, accessed 16 September 2014.

audience segmentation in mind. The spaces are multiple and so too is the discourse. Visitors move forward into this rhizomatic world but not necessarily with certainty. This space is heterogeneous and as a classifying machine would seem to be assigning as much certainty as the Mad Hatters Tea Party. The familiar table and chairs exist but the connections are strange. They must be made anew. The museum space is being continually folded, encouraging 'new, yet unfixed and more partial perspectives to come into view' (Hetherington 1997, p. 214). Ironically, fortuitously or perhaps deliberately, it is the wildly creative, material and Euclidian objects as texts that provide the spatial mooring points.

Gallery Officers are prospective candidates for literacy mediators or intermediaries in the Latourian sense. They are young (hence 'on brand'), friendly, clearly knowledgeable and they watch for opportunities to offer their assistance. This assistance is to convey information about the gallery, and in my experience they neither distort the content nor promote different ways of seeing it, putting it instead into a background frame as Intermediaries. The MONA O is a more active player in this space through offering personal, authored and occasionally fictionalised accounts of the Texts. For the families, 'within a collectively produced event' (Yasukawa et al. 2013, p. 85), an adult or child may be acting as mediator or intermediary. Certainly family groups gather about their O's.

5.8 The Tasmanian Museum and Art Gallery

The Tasmanian Museum and Art Gallery (TMAG) is a creature of the state rather than a private obsession. Like other Australian state museums it weaves the weight of its own history into a network of authority between its various stakeholders and communities. Its diverse collection extends the networks even further through its assemblages of buildings, spaces, artworks, objects, things and animals. The museum was established in 1848, by the Royal Society of Tasmania (the oldest Royal Society outside England), which still meets on site. TMAG is an assemblage of significant Colonial buildings that includes Tasmania's oldest public building, the Commissariat Store. TMAG is a museum of natural history, an art gallery and herbarium, with a collection it describes as treasures 'spanning art, history and science, and ranging from

Colonial Huon pine furniture and ancient Chinese artifacts to Tasmanian Aboriginal culture' Tasmanian Museum and Art Gallery Foundation, 2016). TMAG is free of charge to all visitors. Whilst MONA is private, TMAG is a public museum.

Almost concurrently with MONA's opening, TMAG commenced a major redevelopment with the majority of construction work taking place whilst the museum remained open. A new logo was launched at this time. This brand relies on the written word to carry its key narrative representing the institution as a 'Museum within a Museum', asserting TMAG is 'Uniquely Tasmanian [and] embraces Cultural Diversity and tells Distinctive Stories' (Tasmanian Museum and Art Gallery n.d). Throughout its signage is the mantra of 'stories that move you'. Like other major galleries. TMAG links its online and offline experiences through '100 things that shaped Tasmania' on display and on the internet. TMAG nails itself to the mast of interpretation and content in quite a different way from MONA. It positions itself as the storyteller wanting to share its collection of stories with the visitor. You may be encouraged to respond to these narratives with your own stories; it's just that there is no place to enfold multiple stories into the institutional fabric. It is hard wired into a regional and stable network.

TMAG's known visitation numbers and demographics appear to be comparable to those of MONA⁶⁶, especially with respect to answering children's questions and the extent of family visitations. Like MONA the number of adult visitors accompanied by a child is not recorded. Regardless of visitation (and unlike MONA), TMAG's website asserts that family learning is central to the museum and its exhibitions are developed as intergenerational. TMAG presents public programs regularly to schools, families and 'under 5s'. It segments its audience and so constructs it in a way which is not apparent in MONA.

TMAG is ordered and full of right angles from its hand hewn sandstone and original timbers. Attempts to soften these shapes have been made by a semi-circular boardwalk on one side of the entry courtyard. Whilst we waited to begin, the children 10C2 and 10C3 zoomed up and around this structure as if it were the sides of a race

⁶⁶ TMAG attracted approximately 281,000 visits (including students and offsite) during the year 2012–2013 (Tasmanian Museum and Art Gallery 2013, p. 18). TMAG was closed between 12 November 2012 and 14 March 2013 due to building works.

track, a 'line of flight' (or naughtiness) that was immediately stopped by the Gallery staff as it was potentially dangerous. The levels of the Bond Store Commissariat can be accessed by a circular staircase or the lift, with Level 2 housing the exhibition selected for this research called *Our changing land: Creating Tasmania*, which covered the state's Colonial history from the early 1800s to 1901. Access to this level necessitates walking through a roomful of taxidermied animals (Bond Store 1) via a line of sight between openings in the gallery. Following this path establishes the strangeness of the world you are entering – its nature is extraordinary even when one of the specimen's amongst native animals is a cat with green eyes. It is the air of mystery that is initially the strongest and therefore the affect is amplified. This is the obligatory point of passage both practically and figuratively. You are an explorer, yet unlike in MONA you enter this space with a compass intact, not because of the strong storyline guides, but because the ways in and out are obvious. The floorboards echo and the metal staircase clutters.

Our changing land is an exhibition that intends to integrate or make hybrids of texts and props to tell the museum story. A 'text: museum object' once displayed becomes a site of enrolment and mobilisation of actors. From my experience, there is very little internal staff dissent once an object is displayed, with all staff 'falling into line' over its meaning. The mission becomes how to present this package to the visitor. A museum convention to achieve this is via a communication hierarchy with the printed word of the curator and their choice of ideas and themes supported by (in this case) over 210 individual objects and object labels, five mechanical play interactives, and two audiovisual projections. The mantle of interpretative copy is thrown across the space with its levels of directional and content signage constructed within a museum vernacular to yield a selection of ways for visitors to engage with key messages of the exhibition. There are theme panels for each section, large and small format object labels and labels for children (written in rhyme verse form). The museum objects range from tiny (a nit comb) to large (a Brougham Coach), with examples shown at Appendix N. There are showcases displaying one to many texts, including four showcases set at floor level. Texts, especially the furniture, are on open display. The walls have original writings from the late 1800s. *The Welcome Arch* prop is big enough to walk beneath. The

space is full of texts and time-space connections. All print texts, even those intended for children, require high levels of conventional literacy as well as understanding the museum vernacular. Yet in this case it would seem that a *region* would need to be crossed and that region is pre-existing knowledge of Tasmania's colonial past. This exhibition conveys a particular story of Tasmania's history.

The Bond Store levels each have a low ceiling and an echoing wooden floor with unnatural and dim lighting. Sound is the unplanned and disruptive organiser, as is the darkness. Level 2 does not have its own soundscape but the keening of the Indigenous women as their people are decimated floats down from above. It is ghostly. At a visceral and affective level it is ghastly. It is the sound of consequence of the exhibition's particular story that folds and distorts the space as it cuts through the mannerly European narrative. It is the unintentional topological effect that weakens the Colonial story visitors are being asked to accept. The massacre was always coming. It is upstairs but also present. The sound has agency.

The Gallery exhibit above (in Bond Store 3) is entitled *Our Land: Parrawa Parrawa! Go Away!* This is the story of war between Indigenous Tasmanians and colonists⁶⁷. It is an immersive experience with audio-visual projections covering entire walls and an all-encompassing powerful soundscape of actors reading from 19th-century newspaper articles or a reconstructed Indigenous language. *Our Land: Parrawa Parrawa! Go Away!* is far less object dense than the floors below, with the 'voices' carrying the exhibition narrative across a range of print, graphic and audio-visual texts.

As with MONA, TMAG Gallery Officers are prospective candidates for being called literacy mediators and/or mediators/intermediaries. They are of many ages and backgrounds, reserved rather than overly friendly, responsive rather than proactively helpful. There are individual exceptions of course in their level of customer service. Essentially they see their role is to carry the museum message, to peel back a little the cover on the 'black box' but not to open it completely. Within the families an adult or child may be acting as a mediator. The non-participant families I observed as background to this study showed that the child is more likely to be a mediator through

⁶⁷ It is the research participants that revealed that the levels are represented as opposite sides of the same historical coin. This is taken up in Chapter 7.

distorting the museum message whilst the adult is intent on carrying that message via adopting a teacher/guiding role. TMAG's regular programs, such as family backpacks of activities, may offer the opportunity for mediators to make their presence felt.

5.9 Commentary

The intention of my research design was to explore two sites, with an art gallery (MONA) and museum (TMAG) selected accordingly. I chose this combination to yield greater interest to the industry and benefit to the research. Each has a collection and therefore can be generically termed a museum, although within the sector each operates in separate yet intersecting fields. The sites were similar in key ways, such as their significant resourcing, yet the collections and display are distinct, particularly when looked at in terms of literacy.

MONA and TMAG may initially seem different but close inspection reveals their similarities. Like other museums of international standing they have a calculated imprint, and so despite their differences in style they occupy similar fixed regional topological spaces. How would each institution position its literacy environment? Each would embrace the Ideological Model in situating literacy within a range of social and cultural practices that can apply to different textual forms (and thus the multi-modal museum environment). MONA would be reluctant to see itself as part of a formal system of education whilst TMAG may be conflicted yet ultimately see its responsibility to serve the state. Each in their own way is striving towards transformative experiences. Both are recruiters to their own network and region.

There are however differences in their approach. New Literacy Studies in its valuing the local, historical and political resonates with TMAG. The museum story is at the heart of the TMAG brand so it prioritises reading and writing in its approach to literacy seemingly very intent on conveying its story rather than sharing the stories of others as in the participatory flavour of New Literacies. In the spirit of Artifactual Critical Literacies, objects seem to be selected on the basis of teachable moments to convey meaning through a narrower range than the sensuousness of craft. Nevertheless, each Text's function, materials, aesthetics and cultural significance supports the main message of the display. Its willingness to craft those teachable

moments is evidenced in its efforts to create family-friendly experiences. The transformation is intended to be situated cognitively, in the head. It wants you to know more.

MONA on the other hand positions its transformation in the body. It wants you to feel more. And ideally this visceral offer transports you to being part of the cheeky and irreverent terrain of Tasmania's own success story. There is a sense that the curators and MONA O may be revealing aspects of the work of interest to themselves as they select and write. And they may not necessarily care what the take-home message is for the visitor, whilst caring deeply that the passion for the artworks and site is shared.

Both sites deploy the armoury of New Literacies, with texts acting like hyperlinks into other texts of interest. Although each would position itself strongly around visitor choice of engagement, both are light on the collaborative and participatory promise. Both are candidates for Multiple Literacies Theory (MLT) in their 'visual, oral, written, tactile, olfactory and ... multimodal digital' (Masny & Waterhouse 2011, p. 291) offerings, although the theory is more than the choice of modal channels. MLT actualises around the individual and their capacities and potentials within text assemblages that include the body. This aspect of literacy practices as affective encounters by the participant families within the museum spaces is one of the key findings of this research.

Both sites express the diversity and significance of materiality, the complexity of their spatiality and the use, whether bidden or unplanned, of affect within these topologically knotty spaces. Mediators are thin on the ground but later manifest within literacy-in-action nets as enacted by the participant families.

5.10 Summary

This chapter has looked at how literacy is imagined and embedded within everyday practices, how it is implicated in 'the disorderly flow of social life' (Hamilton 2012, p. 53) and how it might be currently understood within the museum space. It is through a close inspection of the domain of museum and home that literacy or literacies can be brought into closer focus as multiple imaginings. Otherwise, each of the

literacy-in-action nets to be described in Chapters 6 and 7 is as disembodied as a grade in an externally administered test.

Leakages across the regions of museum and home as boundary objects would be expected but their nature and carriage would be unknown until the visits to the museum. Boundary objects can be any object, noting that they are powerful actors and 'the general principle that objects are active life presences' (Turkle 2007, p. 9). As 'active life presences', these objects signal dimensions of participant histories that might otherwise be hidden or at least veiled in observations and interview dialogues (Rowse 2011, p. 4). The review of home literacies has granted insights into what these boundary objects would be and how they would operate.

Whether literacy is a boundary object or 'more than one or less than many' objects (Mol 2002, p. 4) inhabiting multiple spaces is reviewed in Chapter 8 according to usefulness and applicability. Consideration of whether literacy is the boundary object, one of many boundary objects, or one of many literacies contributes to the investigation of practices choreographed within the key domain via this initial bracketing of museum and home. This exploration of the museum and home literacies via their topologies results in three understandings: boundaries are permeable; spaces are diverse; and at times are both sites present as surprisingly complex technological assemblages. A final imagining is of museums and homes as intersections rather than parking lots with literacy being modes of carriage between them.

This chapter has investigated the visible and invisible work that may assemble around the families and the museum texts at the time of their visits. MS acknowledges that any network can extend from microscopic to endless as 'scale is the actor's own achievement' (Latour 2005, p. 185). Many of these assemblages are identified in Chapters 6 and 7, first travelling to MONA and then to TMAG with the participant families.

INTERLUDE #3

MUSEUM LABELS

The Museum of Old and New Art (MONA) electronic device

I am the MONA O. Call me O. I spend a lot of my day hanging out on a rack near the Information Desk in a museum, the Museum of Old and New Art. There are quite an army of us ready and waiting to serve. When we were first recruited we were so hip and cool, just like those wanker phones everyone wanted. Everyone has a phone now, but they are willing to put them aside for me, heh, heh. I have a host of on-board weaponry ready to fire, all electronic of course. I am up to the minute. The weapons can be word texts; long, wordy and full of 'artspeak and artybollocks' (Jones 2015, title) whilst others are short and to the point – bam, bam, bam! To be truthful I do not really care for the texts. It's all circuitry to me. Some selections are audios of the artist speaking or musicians playing. This is a bit of a pain as people have to wear a headphone as well. There is so much fiddling, especially for a child. What do I care whether they can manage a camera, headphones, me and their favourite Hello Kitty necklace? Just get on with it, as once out of the rack I am on high alert. You see I am more than a guide and a set of labels to each visitor. I know where we are and what's around us.

I am so helpful to everyone. In exchange I get to know what visitors are feeling – what they love, what they hate and what they want to remember after they go home. People hold me near their hearts, at chest height. I'm like a Geiger counter or a mine sweeper, except I do not beep. I'm silent and all seeing. I am an intelligence operative. I can tell the Boss where people go, where they stand and for how long. I like to think of myself as covert, rather than overt, ops.

Try me, I'm free.

The Tasmanian Museum and Art Gallery (TMAG) label graphic⁶⁸



MATHINNA

I am from Trowenna,
a long time ago,
Stolen from my people
and forced out on show,
A mere curiosity,
a toy passed around,
Nowhere to belong
– drowned my sorrows
and drowned.

Figure 17: TMAG label graphic of Mathinna.

I am a hybrid of writing and image, poetry and portraiture. When the educator aroused me I was on her computer and so fixed in *regional* space as *immutably mobile*. Ultimately this is where I will stabilise as a fixture in the exhibition sitting opposite the model of Government House. Unless the visitors are knowers they do not really understand the choice of this location or why others might say I am 'ironic' or I might say I'm just unsettled. I travelled through many lands within the network as an immutable mobile before my spot on the wall. There may have been discussion and even debate over my inclusion. I was momentarily alight during this period. I was in, then out, in, edited and massaged by the graphic designer to be consistent with other copy intended for children and likely to be read by adults. And so I became *fluid*. Finally due to the exhibition assemblage I become a mutable mobile, now a hybrid forever linked to a copy of the portrait painted of Mathinna in 1842 by Thomas Bock. This artist was a contemporary of the child and his original Text is also in TMAG. The original of this small Bock painting is in another gallery far from Bond Store 2. Tucked

⁶⁸ Based on Law and Mol (2001, pp. 12-13) writing about the spaces their paper occupies to illustrate different topologies.

into a drawer to protect it from light, the fragility of the portrait's materials is given similar due as the fragility of the subject. Attached to Mathinna, melancholy now permeates me and crosses local space and time. I feel sorry for her. Mathinna is here and yet she is not. I know answers to the questions about me such as 'Have you thought about what you read since the visit?' and I overhear the father say something sad:

... Yeh, one Aboriginal lady girl, I forgot her name. One time one person the governor in Tasmania stole or take her away... Mathinia [sic] took her away. I don't know, took her away and then when the Tasmanian governor moved to another place, then she dies with alcohol ... alcohol. (3A1)

I, the graphic label, am many things, located in four spaces: region, network, fluid and fire.

6.

STORIES: FROM MONA

This chapter is an account of the stories of the set of families that chose to visit the Museum of Old and New Art (MONA). It is based in a selection from literacy instances called literacy-in-action-nets identified from the fieldwork. Chapter 7 follows with stories from the different set of families that visited the Tasmanian Museum and Art Gallery (TMAG). The synthesis of the visits across both sites is at the conclusion of Chapter 7.

6.1 Approach revisited

I would define a good account as one that traces a network ... a narrative or a description or a proposition where all the actors do something and don't just sit there. Instead of simply transporting effects without transforming them, each of the points in the text may become a bifurcation, an event, or the origin of a new translation. (Latour 2005, p. 128)

By its nature the data was messy and following Latour's advice I sorted through it via how and what *happened* rather than what it *meant*. The data interpreted in this chapter is transcribed from audio tapes of two visits each by the families to MONA to capture discourse; multimodal texts generated by each member of the families as documents; eight in-depth interviews with adults (and some children) as expert opinion; hundreds of photographs taken by participants; and tens of photographs and written reflections by the researcher to capture bodily movement and my own thinking in the spirit of a Latour (2005) notebook.

Chapters 6 and 7 wear 'thick' descriptions as a mantle (Denzin 1998), with any narratives becoming the basis for research-focussed commentary in Chapter 8, which expands upon the persuasive concepts running through the data. These concepts or meanings illustrate that through identifying literacy as an actor within assemblages of

families and objects, museums can be spaces where personal change happens through something that promotes a difference in thinking. These encounters can be assisted by people or technology being adopted as mediators (Baynham 1993) in contexts where literacy practices are either being adjusted between home and museum domains or are working together as different and multiple sorts of literacies.

Materiality that arises in assemblages with other material elements is integral to the understanding of literacy in this research. I follow certain actors now known as texts (human and non-human) within the various assemblages and discursively describe their pathways using a series of heuristics outlined in Chapters 3 and 4. Useful questions for the analysis are: How certain actors, such as family member or a child with a camera, come together to create instances of literacy? What happens once these assemblages, instances, or literacy-in-actions nets are created? Are these literacy assemblages stable or continually being remade? Do different actors take on different roles over the course of the visit? Which texts (human or non-human) are agents of change? The questions were a useful guide but being attuned to what is surprising and unexpected is an equally important element of this enquiry.

The specific heuristics are:

- The use of literacy-in-action nets defined as an observable action or group of actions in which text plays a role
- Valuing the usefulness of human discourse and movement within the interpretation through selective use of depth studies with a central actor/object/focus around which the net is assembled so as to include related actors as resources and tools (Barab, Hay & Yamagata-Lynch 2001)
- The using of emotion as marker (Anderson & Wylie 2009)
- The use of key MS terms, including mediator, intermediary, immutable mobile, mutable mobile, boundary object, region, network, fluid and fire.

6.2 MONA observations

6.2.1 Family 2

Family 2 is a single-parent family of four children, three of whom live with their mother. They present as an organised household supplied with literacy means,

prioritising independent use of technologies, although the children assist other family members to use electronic equipment.

Visit 1

During Visit 1, the family spent about 50 minutes in the gallery punctuating their viewing, with another 30 minutes in the cafe and a further 30 minutes for the activity. The family⁶⁹ present as pleasantly 'smiley' and interested in doing something together. The following comments made at the outset are typical and suggest low intensity affect through either hiding their nervousness or simply an expression of excitement.

2A2: So different.

2C3: Awesome.

2C1: It's really cool.

2C3 (aged 8 years), the youngest child tells me with enthusiasm, 'I want to do everything', which suggests an expectation that this experience will be out of the ordinary, a space of de-territorialisation (Masny 2013a). His teenage sister, 2C1 (aged 14 years) is more reserved yet equally intent on validating her interest in the space. The family, whether tense or excited, respond as if they are in a foreign land with different rules, norms, and even possibly reality, throughout both visits but especially the first. 2C3 fills this space with questions which he is also able to translate into his terms. In response to my explanation over how the museum was built and that they had to excavate into the hill to protect an old building on the surface 2C3 replies 'like if you have a precious bike you keep it'.

The mother (2A1) appears calm but on the audio speaks apprehensively, with her unease peaking around two issues. The first is about the whereabouts of the youngest child (2C3) who is intent on exploring the space which promotes this literacy-in-action net.

2A1: Oh God. Where's 2C3 [the youngest child]. 2C3 where's 2C3 [urgent].

Where is he? Can you see 2C3 [nervous laugh]. Where is he? He's not sitting down. Sit down [to 2C1]. Oh shivers. [2C3 re-joins the family] 2C3, 2C3, you

⁶⁹ The older brother (2C2 aged 11 years) does not accompany the family on Visit 1.

should get one of us sitting down watching. Where's the camera? Take a photo of someone watching the TVs. Get 2C3. Sit down 2C3. Sit down so we can take a photo. OK go over there. Let's go here. C'mon. You can't go in there as you have to take your shoes off. I wish I knew that you had to wear sox. Take a photo. You go in there and take a photo. You go in there.

2A1 channels her emotion through attempting to unite her family in a common task, which is photographing each museum object. The second source of anxiety is the prospect of having to write about the visit saying, 'I'm just going to hate it when we have to go back to the room and do that thing.'

2A2 (adult male friend), as an intermediary, speaks calmly and empathetically to the mother, 2A1, trying to bring the territory back to the familiar. Standing outside *Paradise* which the mother adamantly refuses to enter, the adults have the following exchange.

2A1: No!! Later. Where else do we go? Is that real or not?

2A2: It's a shag pile carpet and TVs.

And later over lunch in the cafe the mother and partner introduce familiar actors to explain the experience:

2A1: That's why when we were in the Paradise Room I asked whether the girl was real. She was like the model in there or something, laying down.

2A2: She was just having a siesta or a snooze.

Artworks seem to arise as landmarks in this strange place, which is both a bounded region and a fire space of both danger and excitement. For the adults and youngest child, artworks are found and captured as photographs, enabling them to move on. Navigation is the sustained form of engagement.

The children are the influential actors. Where their intention to explore the space aligns with their mother's direction the children are happy to oblige her. It is 2C3's infatuation with the camera that finally enables commentary on artworks. An immersive artwork where visitors walk into a mirrored room called the Japanese Tea

Room prompts 2C3, the youngest child, to talk about his experience. The camera supports orientation within the space and as 2C3 speaks as if he is the camera; engagement blossoms. The commentary by 2C3 is laden with affective contagion marked by physicality and a growing confidence he imparts to the adults.

2C3: Watch out. I'm going far down. I took a picture of that. Mum, I took a picture of that, that, that and that. Zoom in, Zoom out. I took a picture of some cool stuff. That was fun!

[Researcher points out the Japanese Tea Room].

Hold my camera.

[You must wear socks in this room and 2C3 quickly takes his off. The Gallery staff greets the family in Japanese to which they respond in kind.]

2A1: Konichiwa.

2C3: Konichiwa. I learnt it at school. Cool [sound of camera]. Zoom, in Zoom out, Zoom out.

2A1: Bonsai.

2C3: Bonsai. I can't take a picture of that. 2A1 come over here. Wow, that's a wall. Where are we now? Let's walk this way. Let's walk out.

2C1: 2C3 can I have the camera? [He doesn't respond] 2C3 take a picture of that! 2C1: Put your shoes on 2C3.

2A1: Was it fun in there?

2C1: Good. I walked into a wall. Go and have a look at that.

2A1: What is it? Are you sure it is? [an artwork]

2C1: Yes it is. Look at it.

2C1 (aged 14 years) together with the MONA O extends the family assemblage through identifying works and deploying the voting function as to whether she 'loves' or 'hates' them. As the use of the camera becomes an actor so too does emergent mastery of the O to stabilise practice and network continuity. The children's experimentation with this technology continues to encourage and validate adult usage.

Visit 2

The family spend about 40 minutes during Visit 2 in the same areas of the museum and about 70 minutes working on their activities⁷⁰. 2A1 tells me that 2C1 and 2C3 have been home ambassadors for the visit, encouraging 2C2 (aged 11 years) to attend Visit 2. The family prefer to revisit their favourite artworks and so stabilise their network of engagement and territory. 2C3 encourages his older brother 2C2 to have the same disruptive experience as he had in the mirrored Japanese Tea Room artwork.

2C3: I still remember the glass one. I'm pretty sure it's in here. You have to take your shoes off.

Researcher: That's downstairs.

2C3: It's downstairs. Can we go down to the glass one? 2C2 do you want to go to the glass thing? You might even walk into glass. You have to try and find your way.

2C2: You walk into glass?!

Acting as a mediator, I model to 2C3 how to question gallery staff. Later he questions a staff member and conveys his new understanding of the Weather Powered Drawing Machine to his brother.

2C3: Huh. You see that thing that swings there. That makes it draw. Those are the pens it chucks out. Does it chuck the pens out?

2C1: What did you ask him?

2C3: I said did that thing draw things and he says it draws an inch by day.

The grouping by family actors subtly change and so do assemblages as the adults enjoy more time together and the children together or individually. The adults' assemblage stabilises into a pattern due to the MONA O. They look for works, find, love them or not, and this judging aspect of the O peppers any discussion. 2A1 does not ask on the whereabouts of 2C3 as she enjoys sharing the capacity of the MONA O to vote, prefacing a question to the children as 'What did you hate?' to which 2C2,

⁷⁰ It was intended that Family 6 and Family 2 undertake Visit 2 together but family commitments don't align so each family have a solo second visit.

replies 'I like it' and 2C1 says 'I love it.' Whilst 2A2 (adult partner) participates in voting on works, he is heard to comment less on the works, possibly because 2A1 (the mother) tends to close discussion rather than 2C3 who was full of questions. 2A1 like 2C3 uses the information from the previous visit as a form of capital with exchange value within the family. Aside from the voting function of the MONA O the sound of a gunshot and helicopter become actors.

2A1: You guys look over there. Look 2C2 watch it.

2C2: I'm watching it.

2A1: Are you scared? It's going to go up. I told you [sound of heliicopter]. So you loved it then? Did you love it. I put on here that you did.

2C2 changes over the course of the visit from demonstrably disconnected to intrigued to the point of absorption. At the visit outset, I try to engage him through selecting and showing him an artwork where words are exposed through turning your head quickly. He shrugs his shoulders with disinterest. At the visit's conclusion he bounds down to the corridor, flicking his head to reveal the words then turning to tell other visitors how it works. 2C2 stands in the place of 2C3 as the enthusiasm and affect leader in Visit 2⁷¹.

The research camera and ipad dominate the children's interaction with artworks. 2C3 takes many of the photos with the research camera, capturing individual artworks, some details and different perspectives. 2C21 initiates taking pictures of the family with the artworks. Her language about the artworks echoes the language of an art class from the formal education sector but it tends to restrict her discussion rather than opening up new thinking (see Figure 18). 2C1 photographs the family, later captioning the images electronically in the Activity session. 2C1 works diligently on a series of captioned photos that sit nicely with the 3-D work where she writes 'Amazing Art work and a Day with Family'. She pastes the family images on one side and artworks on the other, (see Figure 19).

⁷¹ 2C3 has a cold during Visit 2 and after a short burst of interest increasingly asks to go upstairs so he can work on the activities. A request his mother dismisses until 2A2 intervenes.

The artworks dominate the photo-capture and increasingly the photographs become substitute texts for the 'text: museum object' in arousing greater talk. Aside from 2C3, who photographs the fireplace adjacent to the cafe and draws it, no family member chooses to take contextual shots, building details or the grand spaces. The children use the MONA O to better understand each artwork. 2C2 is observed spending time in front of each work reading the O but generally the family do not verbalise or express this reading beyond the title of each work and how people voted. The protocol is established to try and accurately caption works through the capability of the MONA O (see Figure 21).



Figure 18: Photograph of 2C1 by 2C3

'Wait do it with the artwork behind me. I want to have a look at the Red Riding Hood. It's very detailed. That's beautiful' (2C1)⁷².

⁷² *Little Red Riding Hood*⁷² series of drawings By Alex Rabus (1999)

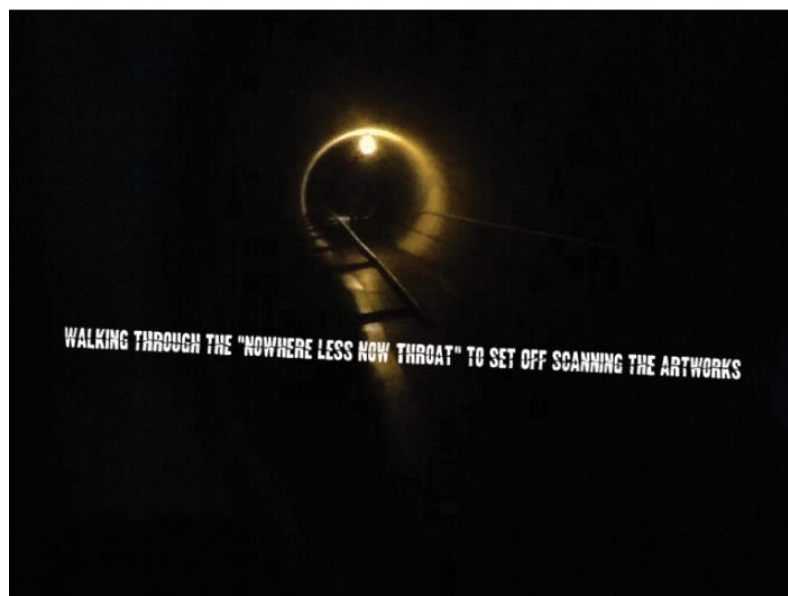


Figure 19: Literacy works by 2C1.

One side of the work says ART and the other says FAMILY.

A series of captioned photographs by 2C1 suggest that the *entire* experience was important to her as they are images of refreshments, the family with artworks and the artworks. One photograph says "walking through the 'Nowhere less now throat'" to set off scanning the artworks.

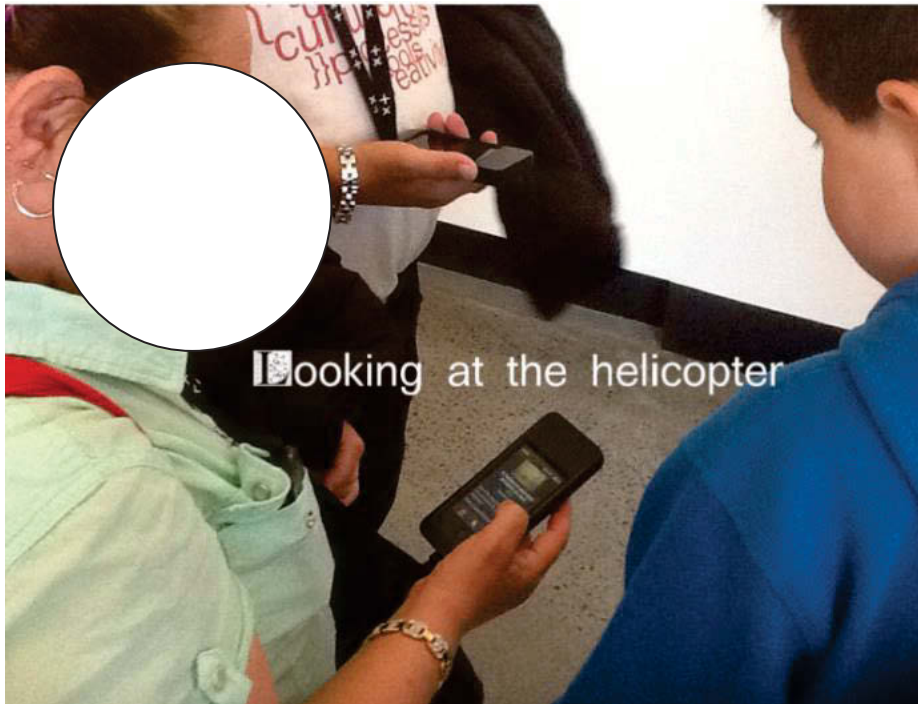


Figure 20: Photograph by 2C1.

The family have watched the audio visual artwork and then gather to vote on their MONA O. The photograph is captioned by 2C1 as 'looking at the helicopter'.





Figure 21: Photographs and literacy works by 2C3

These were of the same artifact taken, or made, over both visits. Researcher: Why do you like this one? 2C3: 'It was like a rock I'd never seen because it has this on it', 2C3 records his interest in the Scarab and looks up its correct title on the O, referring to it as 'cool' and 'a rock shoe' in his Literacy work during Visit 2.

Depth Study: 'Text: museum object'

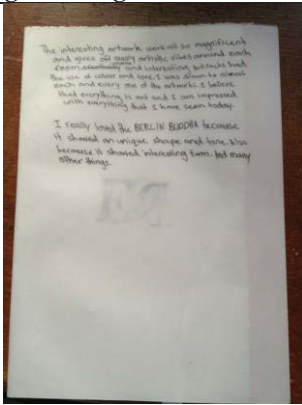
The Depth Studies look at the treatment of one element or text to demonstrate in table form the relationships involved in making meaning from it and the range of other texts as actors or helpers supporting the engagement. The element at hand, known as the central actor, is an artwork called the *Berlin Buddha*. This 'text: museum object' possesses the qualities of resonance, wonder and praesentia discussed in Chapter 2. The object draws reverential attention from the family and promotes use of a range of other texts and people, as shown in Table 3 The initial respondent is 2C1, who draws the 'text: object' making, it a literacy-in-action net. There are a range of nets related to artwork and the youngest child in the family is the most emboldened in his curiosity. 2C1 is consistently a quiet actor in her interrogation of the object and at the centre of related nets, involving other family members and entities⁷³.

Table 3: Depth study of the Berlin Buddha.

Central actor	Literacy -in-action net
	
<p>⁷⁴ Photo by researcher of the Berlin Buddha'</p>	<p>Literacy work by 2C2</p> <p>Helpers/actors:</p> <ul style="list-style-type: none"> - Label MONA O (Used to correctly caption the drawing) - Vote MONA O (2C1 votes LOVE) - Family members (2C3 asks questions)

⁷³ There are two instances in this literacy-in-action net where the researcher and 2A1 disrupts the viewing but are still listed as a helper. The first was the research camera becoming a priority over an explanation of the work and the second is the mother's mission to get through the task which she seems to consider is photographing the objects and moving through the spaces quickly.

⁷⁴ By Zhang Huan (2007).

	about the artwork on behalf of 2C1) - Drawing book
Related literacy-in-action nets	Helpers/actors
Visit 1	
<p>2A2: This is interesting 2C3: Done R: Whose camera is that? 2C3: We share the iPod and we play it together. What's that? R: It's made of dust. 2C3: How did they make it just by dust? Researcher: They filled that shape with dust to make that. They make it everytime the work travels 2C3: Are they going to make more? 2C1: [listening to this exchange] R: I don't know. Does anyone want to take a picture ... How about we give it to 2C1? 2C3: That's how you turn it off and on. See [takes photo]</p> <p>2A2: It's pretty interesting. That's interesting darlin. 2A1: Yeh. Lets go. Who wants to carry the camera? [2C3 wants it back] [2C1 keeps the camera]. Is it recording? 2A2: Now it is 2A1: Did you take a photo? 2C1: I'm not going to take a photo. That is really interesting ... 2A1: alright let's go.</p>	<p>iPod used as camera</p> <p>Family member: 2C3</p> <p>Researcher: intermediary (disruptive)</p> <p>Family member: 2C3</p> <p>Family member: 2A2</p> <p>Family member: 2A1</p> <p>Audio recorder (disruptive)</p>
 <p><i>Literacy work by 2C2.</i></p>	<p>Drawing book Label MONA O Formal literacy (the expressions used in the writings suggest school based genre)</p>

<p>(Transcription of writing by 2C2). 'The interesting artwork were all so magnificent and gives off really artistic vibes around each room. Creativity Creative and interesting artifacts had the use of colour and tone. I was drawn to almost each and every one of the artworks. I believe that everything is art and I am impressed with everything that I have seen today.</p> <p>I really loved the BERLIN BUDDHA because it showed a unique shape and tone. Also because it showed interesting form. And many other things.'</p>	
<p>Visit 2</p>	
<p>2C3: I think she [2C1] wants to go to the sand man, [family goes up stairs towards the Berlin Buddha].</p> <p>2C2: Whoa what is this? It's scary, so high. What's this?</p> <p>2C3: What happened to the head?</p> <p>Researcher: [suggests asking the staff and accompanied by 2C3 puts this question. The reply is that staff filled the mould with incense ash that travels with the work but they packed it so tight they didn't have enough for the head]</p> <p>2C3: [tells 2C1 and 2C2 who gather around him to hear what the staff member said]</p> <p>They didn't have enough dust for the head.</p>	<p>Building space</p> <p>Researcher as mediator</p> <p>Museum staff</p> <p>Family member: 2C3</p>

The *Berlin Buddha* holds a network of interest between Visit 1 and Visit 2 as carried by the children. The youngest child is persistent in efforts to understand it whilst the eldest child (2C1) is so motivated to see the artwork again she takes off solo to find it. The creation of the literacy work was accompanied by family photographs taken on both their own camera and the research camera. 2C3 presents as a mediator engaging in mode, code and register switching (Baynham 1987) to convey information between himself and family members. Table 3 demonstrates the complex network of texts acting together to give the work meaning. These texts include literacies from school and technologies normally used to support everyday literacy practices.

Summary

The family changes between Visits 1 and 2 as they reconnect with the familiar and lose their fear or anticipation of the unknown. The family look to me less for orientation and reassurance than they did in Visit 1, and now rather for advice on what they want to achieve. The activities on offer after both visits are greeted with

enthusiasm and focus, particularly after Visit 2 when a variety of materials are on offer. The mother in family 2 remains dismissive of her literacy work although in the post interview reflects favourably on the activities.

There is demarcation between adults and children reflecting the family's home literacies. The adults 2A1 and 2A2 act as Intermediaries throughout the visits, crossing regions from home to museum. For example, 2A1 makes a scrapbook of the visit, providing the materials and framings for literacy undertakings. 2A2 (the male partner) is often a silent actor, although speaking and acting to support 2A1 (the mother) and 2C3 (the youngest child). 2A2 is relentlessly positive and calm. 2C1 enlists other actors in her activity through example rather than active recruitment.

The role of mediation is noticeable in this family as it is played by family members, the researcher and the technology that is carried around the museum. 'Texts: museum objects' as powerful actors and landmarks that influence museum pathways are apparent. The camera and MONA O assert their agency and commence to dominate and usurp other actors. The children, particularly 2C3, are open to encounters whilst the adults focus on stabilising their visit assemblages into recognisable and comfortable patterns.

6.2.2 Family 4

Family 4 is a single-parent household. Visit 1 occupies them in the gallery for an hour and in the literacy activity for another 45 minutes. Parent and child accidentally share the activity session with family 9, which has taken so long they are still in the Library when family 4 arrives. This blending of families, interests and disruptions is significant in the literacy assemblages.

Visit 1

The child, 4C1 (aged 5 years), after walking through the museum, suddenly flickers into fire becoming full of interruptions, demands, inquiry and excitement. She actively interrogates any experience, assessing it against her expectations and knowledge. On arrival I show her *The Pulse Room*, an artwork which registers pulse and translates it into a blinking light bulb that appears to move along a line of bulbs as each visitor steps up. She then quietly walks through an exhibition featuring 40

televisions. It is in the sound tunnel installation she exclaims with tangible affect: 'I can't see where I'm going, Aaah. Aaah. How about a dinosaur? Excuse me, I want to see dinosaur bones. What's that? Excuse me. Excuse me. What's that? It looks like a monster to me.' The child then reflects on her experience of *The Pulse Room*:

4C1: Did it look like my heart?

4A1 (the mother): No, it was just a beat.

4C1: I didn't hear it. I just saw it. My heart beat going up. I can't feel my heartbeart.

This exchange is representative of the child's inquisitiveness in comparison to the mother's measured comments that tend to describe but not interrogate. The mother cannot easily settle on the right words to describe the museum initially saying, 'This is pretty magical' and later, 'This is bizarre isn't it?' and 'This is nice isn't it, 4C1?' constantly addressing the child. The child meanwhile has become an active MONA O user, which changes from a status item to something both useable and convertible to social capital. 4C1 proclaims she can vote, obtain information, find out where she is and also what she may have missed out on with the MONA O declaring, 'That's what you'll see. We haven't seen that. We've seen that.' She tries to engage her mother in its use but 4A1 prefers to use ask me or a Gallery Officer for orientation. Whilst sitting in an immersive audio visual artwork the child becomes Fluid speaking thoughtfully as she adjusts her initial ideas and makes connections through both cognitive and affective responses.

4C1: What are they talking about now? What's that red bit?

4A1: Sssshhh.

4C1: They are talking about eyes?

4A1: Ssshhh yes.

4C1: Oh. What's that great bit? They have different coloured eyes. We don't.

Why do some people have different coloured eyes?

4C1: What's that? What's that?

4A1: Just an image.

4C1: What's an image? What's an image?

4A1: I'll explain later.

4C1: Did you see a little kid that had a purple eye. I think it was purple.

4A1: [no reponse]

4C1: Oh. Did you see those puppies?

4A1: Yes.

4C1: What's that? [now stage whispering]

4A1: Pardon. I didn't see it darls. Do you want to keep watching?

4C1: Yes. Are they talking about sad things?

4A1: I don't think so.

[pause in conversation]

4A1: There you go darls. What did you think of that?

4C1: I couldn't understand it really.

4A1: [laughs] Either could I really.

4C1: Where is there more art? I want to see the rest ...

Visit 2

The Visit 2 by family 4 is taken as planned with family 9. It is a convivial and relaxed family outing between mothers and daughters. At the outset, the mother of family 9 tried to steer her child (aged 10 years) to a more exclusive visit within a contained literacy network. 4C1 (aged 5 years) is increasingly keen to find and be with the other child, 9C1, who she sees as an actor leading to maximised enjoyment. The MONA O takes on another role through assisting to re-establish relationships between actors.

4A1: You love that one do you? [reading] ... '10% of our beautiful visitors loved this artwork too' [pause as she looks at other adjacent works]. Oh look at that number wow [to 4C1].

4C1: Look at how much ... 9C1, 9C1. What! I'm looking at that one too! But look how many.

9A1: That's a big number isn't it?

9C1: Look at this.

4C1: Look wow. I had more.

4A1: That's a lot isn't it? 9C1 has a lot. That's millions.

4C1: I saw millions [giggling]. I saw millions [sing song] millions, millions I saw millions.

The network stabilises as the children talk and the mothers chat. Each family member carries some continuity from the previous visit and confidently speaks about their experiences. The mother's photograph their children with the table tennis artwork is a favourite. During this process the activity enables a renewed look at the surface of the table covered in drawings, which each mother photographs. The mothers start to socialise through finding linkages between the museum and home. There are connections between the two visits for this family. For example, *The Pulse Room* mobilises both mother and daughter to photograph each other using it. Similarly *The Depraved Pursuit of a Possum* is a landmark actor.

4C1 refuses to be patronised or left out, demanding equal access to the technology and to any understandings or information being shared within her hearing. 4A1 and 4C1 spend time together, for example, looking at *The Red Riding Hood* series. The child maintains her network of curiosity across the visits. 4C1 draws *Red Riding Hood* after Visit 1, despite no conversation being recorded about it. In this case her mother was unresponsive to her queries. 4C1 requests my help when other sources of information have failed.

4C1: Does the girl get eaten in the story?

[R: Yes but she's ok].

4C1: There is only the head on the wolf's back.

[R: The girl was riding the wolf].

4C1: But why is there only one head on the wolf's body?

[R: That's a good question].

This family takes photographs but not to the same extent as other families until the children are consistently together and mobilise through mimicry of each other. Few photos are recognisable and/or stay on the camera.



Figure 22: Photograph of 9C1 and 4C1.
The children together take photos of many of the same artworks.

9C1 is helpful and instructive to 4C1 during the visit. It is also possible that 4C1 allows the unusually perceptive 9C1 to not always be 'on track' and on task. The audio visual component of *The Jungle Book*⁷⁵ story attracts multiple still photographs. As the visit proceeds the lure of the activity session and afternoon tea become powerful actors diverting their attention.

Visit 2 Activity session is another 55 minutes of talking, eating, making and encouragement (between all parties). The girls sit together and the mothers sit together. 4C1 occasionally wants her mother's approval, 'please check on us' but also seeks the approval from 9C1. The children help each other and chat about how and what they are doing. They talk about techniques, materials and technology intermingled with content recollections. Together the girls recall artworks as embodied experiences: 'The Pulse Room' via the sound of their heartbeats saying aloud (boom, boom) to represent the flickering the light bulbs which the 'Text: museum object' silently emits; the Japanese Tea Room was much admired despite it requiring them to take their shoes off and wear socks; the sound and feel of the trampoline ('yeh with bells'). 4C1's drawing of the *The Pulse Room* features the machine that drives it, not her

⁷⁵ *The Jungle Book Project* by Pierre Bismuth (2001)

using it. None of the drawings or little of the discussion reflect other human actors including their mothers, 9C1, the researcher, museum staff or other visitors.

4C1 realises that images on any available camera can be a useful reference for the activity. The child takes the exercise seriously 'I have to think what to draw; I can't remember half of it' as she looks through all available images on any camera. Later 4C1 chooses to make a title page for her drawing book (Figure 23).

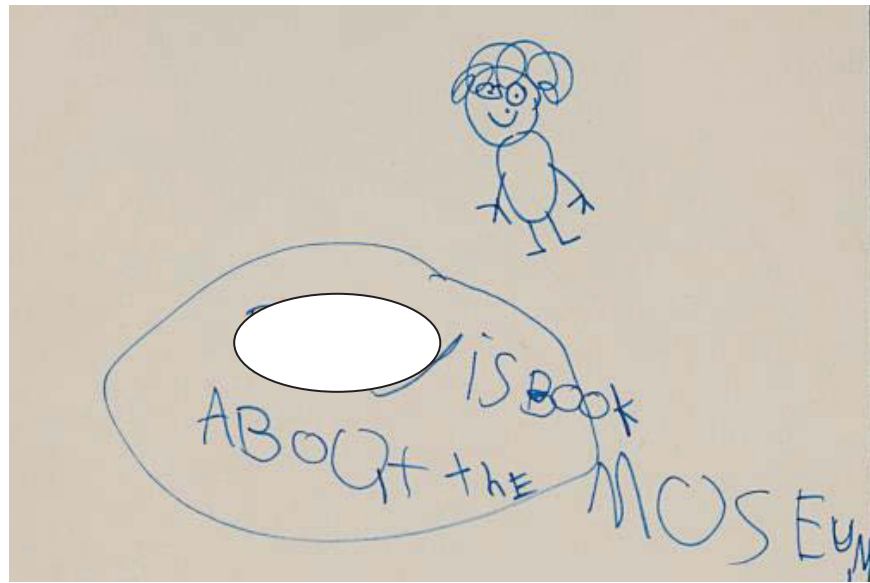


Figure 23: Literacy work by 4C1

4C1: Mummy, how do I spell 'museum book'.

4A1: One of the things that goes up the top.

4C1: 4C1's book about museums, the museum. [4A1 spells it out. 4C1 checks constantly].

4A1: Is that a u? that looks like an o?

4C1: M-u- s- e- u- m

The child titles her drawing as '4C1's Book About The Museum'. 4A1 (the mother) continues to write recounts in her drawing book. She comments that she enjoyed re-reading her previous work. 4A1 dates the entry '13/10' in her book and writes, 'Today I noticed some things I hadn't noticed before.' 4A1 does not name any of the artworks, refer to their maker or artist or to the impact of the work. Instead she offers a restrained recount with some reference to the process, 'a stuffed possum', a 'dice encased in some sort of resin', 'a room full of TVs'. The adult makes no reference to what the museum would term content, which in the case of the immersive

installation of television screens shows 40 Turkish individuals telling their story of life in their community. She further writes 'in the centre was a set of cups and a teapot'.

'The film⁷⁶ was rather strange.'


4A1 tells 9A1 that the visit was great for her and 4C1, appreciating its function as one of de-territorialisation. She says that the experience was something new to them, taking them away from their normal activities. 4C1 continually follows 'lines of flight' in both visits, which the mother confides, equally frightens and puts her in awe. 4A1 says she often does not know how to answer the child's questions.

Depth study: Literacy Work

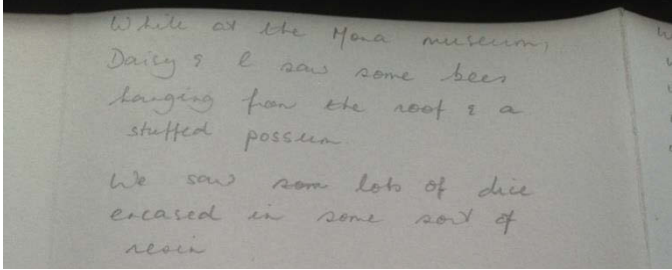
The element at hand shown in Table 4 is a drawing as literacy-in-action net by 4C1 reflecting on *The Depraved Pursuit of a Possum* by Tessa Farmer (2013). Both (4A1) adult and (4C1) child choose to reflect on this Text. The child exits into de-territorialisation through interrogating the artwork whilst standing before it. Later she chooses to describe it rather than re-interpret it in her drawing.

⁷⁶ *Nowhere Less Now* is about one women's pursuit of others with one blue eye and one brown.

Table 4: Depth study of The Depraved Pursuit of a Possum⁷⁷

Central actor-a literacy work	Literacy -in-action net
	<p>Helpers: 9C1 who shares her drawing</p> <p>4A1 who is continually called upon to check and admire work</p> <p>Research camera used to check possum anatomy</p> <p>Literacy work: Drawing book and textas</p>
<p>The possum is shown with its entourage of flies and spiders. Initially 4C1 was drawing the outline of insects when 9C1 showed her how she simply did dots to represent them-a method 4C1 quickly adopted. 4C1 keen to get the possum correct asked whether it has 'pointy ears' and decided to check 'the thingumabobby' (the camera). She flicks through the photographs and announces that possums have round ears.</p>	
Related literacy-in-action nets	Helpers/actors
<p>Visit 1</p>	
<p>4C1: Mummy. I don't want that possum to be stuffed. 4A1: Well it is 4C1. Should we take a photo of the bees? I might. 4C1: Mummy I'm going to take a photo of the possum. Mummy, Mum. Is that real? (pointing) Mum, mum. 4A1: yes 4C1. 4C1: Is that a beetle? (pointing) 4A1: Yes. 4C1: I want to touch it. I want to feel it. 4A1: You are not allowed to. That's the thing about artwork, other people have made it and they don't want other people's fingers on it. Shall we take a picture of ... 4C1: I am. I'll show you mine. 4A1: Hang on. What do you press? [sounds frustrated]. 4C1: That one. 4A1: Turn that off. Press that button there [checking].</p>	<p>Helpers : Text: museum object)</p> <p>Research camera</p>

⁷⁷ *The Depraved Pursuit of a Possum* by Tessa Farmer (2013)

<p>OK good. That's a good photo. 4C1: I don't want it to be dead' 4A1: Wow look at that. Look at the butterflies. Stand behind the white line. Can I get a photo of that? mmmmmm no' 4C1: I don]t want it to be dead. 4A1: But it is dead 4C1 [Mother sounds frustrated]. [4C1 asks me whether the possum is dead and to reads from the O. I show her the O and read aloud 'Possum freeze dried'] 4A1: Freeze dried. 4C1: Did someone kill it? 4A1: It might have died and they found it by the side of the road under a tree or something. 4C1: You wouldn't touch a dead possum. Yuck [I resume reading aloud 'I'm too involved in the story', 4C1 interrupts] 4C1: What does that mean?</p>	<p>Museum staff ask 4C1 to stand behind the line</p> <p>Researcher who answers question</p> <p>MONA O labels text read aloud</p> <p>MONA label</p>
<p>Numerous photographs of the taxidermied possum.</p>	<p>Camera</p>
 <p>Literacy work by 4A1</p>	<p>Literacy work: drawing book</p> <p>Family 4A1: formal literacy (the expressions used in the writings suggest school texts)</p>
<p>'While at the MONA museum [4C1] & I saw some bees hanging from the roof & a stuffed possum. We saw lots of dice.' Transcription from 4A1 writing book</p>	

Summary

This family emphasises spatiality and affect. 4A1 is mostly the fire child, full of curiosity and eagerness to make new connections from insights that tumble out verbally and at times pre-cognitively. The mother responds most enthusiastically to the MONA furniture and any links are as an intermediary to the familiar. 4C1 does not rally from artwork to artwork but is drawn by selected artworks and actors that can help her better understand them. The mother is anxious to stabilise this enthusiasm into something quiet and acceptable, with the result that any intervention closes down

engagement with artworks. 4A1 manifests her discomfort about behaviour and protocols differently from the mother in family 2 but nevertheless they both telegraph anxiety. 4A1 and 4C1 have different emotional and cognitive responses to the museum and occasionally they struggle to accommodate each other. Their enjoyment of the activity session and eagerness to utilise its opportunities is of interest. This eagerness is apparent in all families, especially after Visit 2. It is clear from Table 4 that many texts have assembled to create the literacy work, with questions and assumptions taking the conversation into profound topics such as the ethics of art making.

6.2.3 Family 6

The mother of family 6 is keen to introduce her girls (aged 14 and 10 years) to varied learning opportunities. The girls are each in their own way full of enthusiasm for MONA with their mother's wish to keep them on track and 'on task' not always aligning.

Visit 1

The younger child, 6C2 (aged 10 years), is deeply engaged with many of the works and talks them over with her mother who accompanies her at all times. 6A1 grapples with the MONA O technology and seeks assistance from her children. This results in the child simultaneously dealing with her mother's wishes, looking at the artwork before them and locating those she wants to see on the MONA O. 6A1 is frustrated as she can't keep up with her children, their timings no longer align.

6C2: Mum this is a frog. I wonder where it is? [Finding a work on the screen nearby she would like to see] Hey Mum!

[pause in conversation] .

6A1: What's this one? [Looking at the MONA O]

6C2: They are coins mummy [child clearly wanting to find the frogs rather than participate in a teachable moment with her mother].

6A1: Have a look.

6C2: They are 3-D [looking at the actual work].

6A1: Are they important people?

6C2: Have a look [frustration]. Oh here, look ancient coins. This one is the spear tip [child points out series of works she is referring to on her MONA O] .

6A1: You are going too fast darling.

6C2: Look at yours, you have yours.

The elder child (6C1) chooses not to stay with her mother and sister, and the audio reveals her simultaneous affective shock and delight about spaces as well as texts. She shares these feelings with a friend who has accompanied them on this visit.

6C1: Look at the ants. Are they real? They are ... they are real. Dude do you know how disgusting that is. Does that mean the spider is real? They are not real.

Friend: Yeh they are.

6C1: They are plastic. God dude, that's disturbing. Come here.

6C1: That is awesome. That's amazing. The roof. I wonder what is underneath this. It's really scary because you don't know whether its going to break.

[long pause in conversation]

6C1: Look at the dog. That thing with the bugs, that's just not normal. ... Let's go find mum now.

[long pause in conversation]

6C1: God. Come here, just come here. There's this like Pink Room. I'm not going in there!

[long pause in conversation]

6C1: Look at the big Buddha. A few steps to go. God (raptuously) ... you have to. You know Johnny Rafel *I'm Top of the World* [sings aloud] 'Cause I'm on top of the world.' You look at this if it collapsed. My phone [takes photo]. Imagine falling from here onto that trampoline ... Scary, but awesome.

The camera captures the artworks, with 6C2 enthusiastically 'bagging' every artwork in *The Red Queen* (except for one). The mother and 6C2 take many photographs of themselves but a few of 6C1, which seems unusual as she is a teen model and frequently photographed. Nothing on the audio suggests she is taking 'selfies' of her and friend in Visit 1 and none are in evidence. I suggest a family photograph which 6A1, 6C1 and 6C2 enthusiastically stage manage.

The activity session seems challenging to 6A1, who continually worries that 6C1 is not on task. Yet 6C1 appears to respond to the activity in a thoughtful way and the fast food she draws is explained as a suitable match to the 'text: museum object' she viewed and photographed.

'It's fascinating. Its your imagination putting itself onto something. Putting your thoughts down.'

[long pause in conversation]

When it comes to drawing things you don't get off the internet, its pretty hard [sound of her flicking through the camera images]. I'm going to draw that. French fries as there's a photo of a guy holding food with both hands'.

After 6C1 completes this task she goes back into the museum alone and playfully captions photos she has taken on her smart phone (Figure 24). She is not concerned whether the caption is accurate. I adapt this use of captioning digital photos on an ipad for all participants in Visit 2.



Figure 24: Digital photo and captions by 6C1.

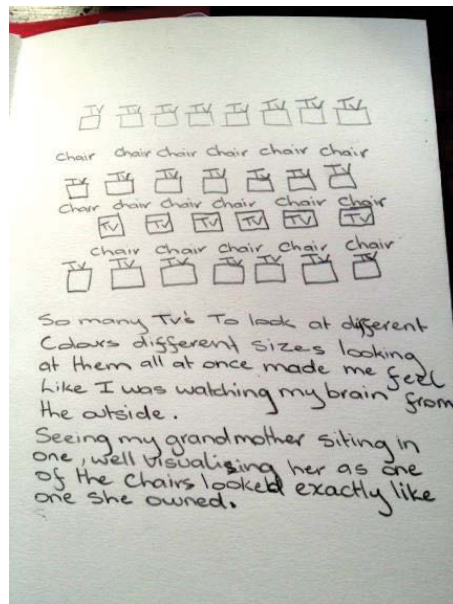
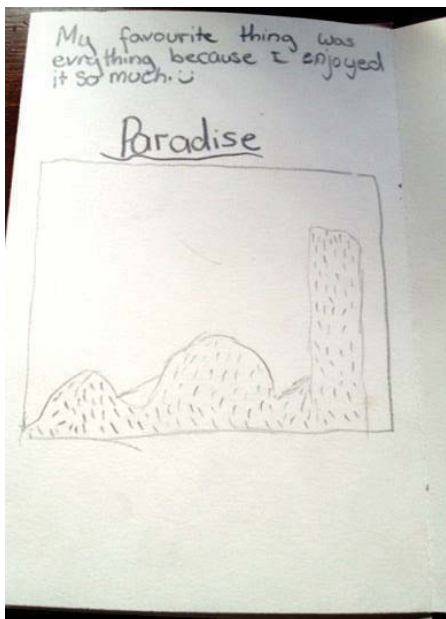


Figure 25: Literacy work by 6C2
 'My favourite thing was everything because I enjoyed it so much' a depiction of *Paradise*⁷⁸.
 Transcript of literacy work by 6C2

Figure 26: Literacy work by 6A1
 'So many TV⁷⁹s to look at different colours different sizes looking at them all at once made me feel like I was watching my brain from the outside. Seeing my grandmother siting in one, well visualising her as one of the chairs looked exactly like the one she owned.'
 Transcript of literacy work by 6A1

Visit 2

The family arrive early for the second visit and upon their navigating MONA alone to find me I am touched by their genuine eagerness, warmth and a thankyou gift. The assemblages change in this visit with the children spending more time together and at times drawing their mother into their network. The pink *Paradise* and other 'texts: museum objects' promote continuity between the visits, with 6C1 intent at the outset on having her photo taken posing in this exhibit. She is dissatisfied with the photos her mother takes and enlists the more sympathetic 6C1. 6C1 captions one image acceptable to 6C2 in the post-visit activity (see Figure 27 with an electronic caption 'A bit of heaven').

⁷⁸ By Kutlung Ataman (2007-13)

⁷⁹ *Kuba* by Kutlung Ataman (2004-12)

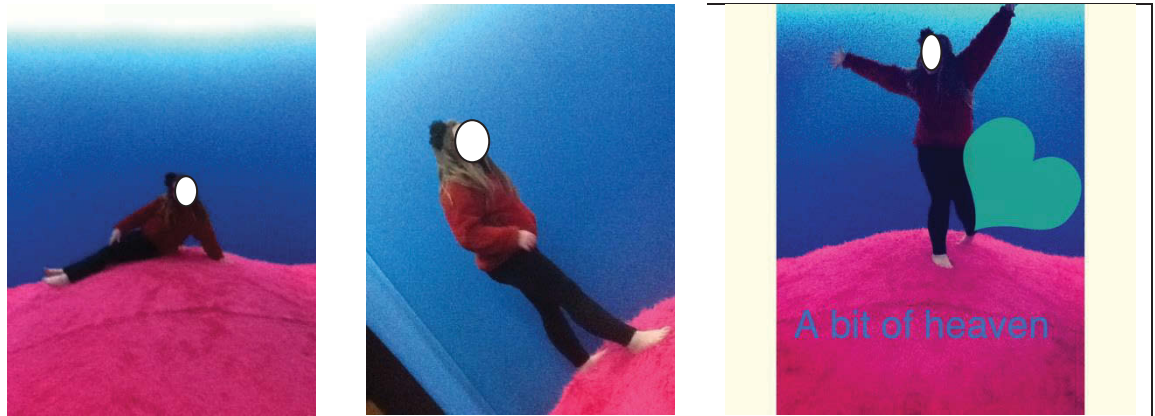


Figure 27: Photograph taken of 6C2 by 6A1 or 6C1

Paradise is a favourite text: artwork for this family. It houses a bank of ipads with interviews uploaded onto them with people living in a USA community near the Mexican border. In reply to whether 6C1 looked at the ipads she says, 'No, I was too busy playing.'

The family members are proficient in finding their works of interest and occasionally voting, although they continually disrupt the save function which they are not concerned with. The family interrogates MONA between the practical and imaginative; the real world and spaces of alterity; the meanings ascribed to works by the institution and how they find them. This exchange is a rapid-fire sampling of these many realms prompted by 6C2's wish to share with the family her shocked (affective) response to certain texts.

6A1: It must cost a fortune to employ all these people. Look at all this. We are the Tasmanian Museum. That's who 'we' are [meaning MONA of Tasmania].

6C1: Do you guys want to go upstairs 6C2? There's some really good stuff up there ... There is one upstairs that has the graveyard and the things ... [MONA hums in the background. The mother and I follow the girls].

6C2: Oh cool.

6C1: Over here Mum. There is something I would love to show you guys. The graveyard the guy is breathing in it. Where's Mum? [sound of spooky breathy voice in the background].

6C2: Is that a real person?

6C1: Listen to him. Can you hear him? [Sound of taking photo] Listen to him.

6C2: What's he doing?

6C1: He's breathing.

6C2: He's real.

6C1: It's real. I think it's a man's head. Has been there so long he's turned into a caterpillar himself. That unreal isn't it. Where are we? [looking at MONA O].

6A1: What's he saying? Whose idea is that? What is he saying? He's breathing.

6C1: Oh really!

6A1: That's unreal isn't it?

6C1: 6C2 it's following you [laughing].

6C1: Move! What's that! Move.

6A1: [said to me as the girls have gone on] This would have cost a fortune. Do they borrow them? How do I do it again? [MONA O] Got nearby. Did the update ... Is that it? There it is there. Biggest worm in the world ... calling someone a worm ... [tutting and reading aloud] 'Installation of granite headstones', audio. I LOVE it. Upstairs there is a picture of a girl's 'fa fa'. The girls walked right past there. Does this change all the time? How do they get them up here. I felt them and I tell ya ... Unbelievable. It's unbelievable.

6C2: [inside Madonna karaoke artwork] I don't get this [the girls comment together on how people nearby are dressed such as a man wearing high heels].

6C1: Neither do I. Hang on; let's go find Mum before she gets lost. [Opens door and says] Come and have a look at the car, Mum. Come and have a look. It's a Porsche. [6A1 remembers that 6C2 had taken and captioned an image of it on the previous visit].

[pause in conversation]

6C1: Come in here [sound of door re-opening] Move [people laughing].

6A1: [6A1 has entered and energetically sings the final phrases with 6C2, 'I believe in the power, I believe you can rescue me, I believe you can rescue me etc.'].
6A1: It puts schizophrenia into perspective [looking at the MONA O].
What's this about? Is it about how people sing, how they do their hair. [6A1 and I together read aloud the Gonzo entry in the MONA O by David Walsh and 6A1 laughs aloud].

Visit 2 Activities (Figure 28 and 29) are notable in that all the family is more relaxed and focussed.

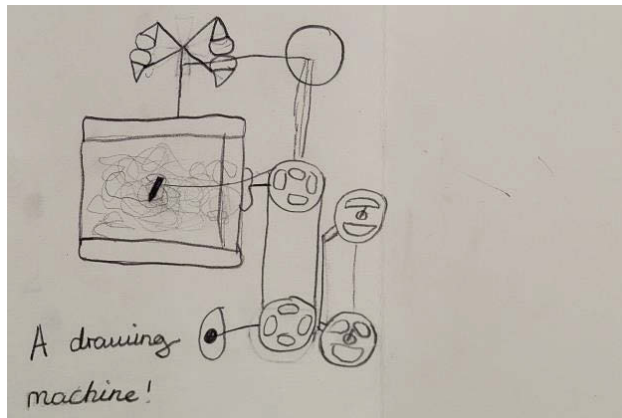


Figure 28: Literacy work by 6C2
The drawing machine by 6C1 is a closely observed sketch of the mechanism in an artwork (by Cameron Robbins) operating inside and outside the building.

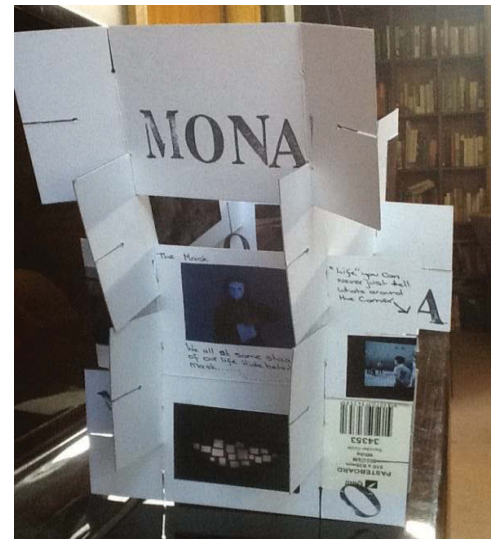




Figure 29: Literacy work by 6A1
The 3-D model by 6A1 is the most complex of these types of works with visual puns and comments on every face.

Despite her mother's concern that 6C1 struggles at school to stay on task, the child produces a series of 15 captioned images. 6C2 draws, paints and makes. 6A1, who had laboured during the first session to settle into an activity, spends considerable focussed time on her 3-D sculpture. She says it expresses that MONA is about 'all different angles and possibilities'.

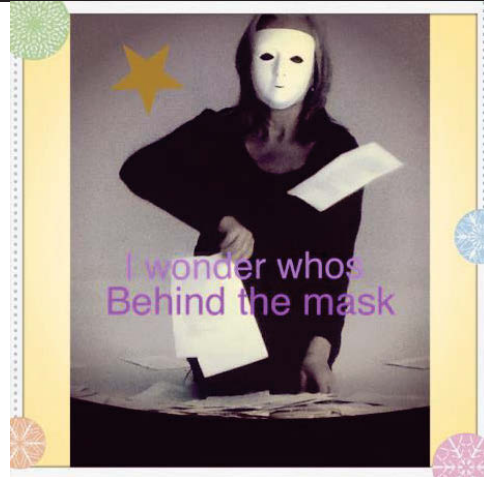
Depth study: camera

The element at hand at Table 5 is the research camera. In this example the camera was placed at the peephole in the red box called *Moirra* by Brigita Ozolins (2013). In Visit 1 it is photographed from the outside, and by Visit 2 it is interrogated more closely due to the use of the camera. The mother is initially concerned about photographing inside the red box via its 'peep hole' but later helps her daughter use the camera. Table 5 shows the role of the camera as an actor in the literacy-in-action net. Related literacy events build on the use of the camera as literacy works. The photographs take on exchange value over and above that of the original 'text: museum object' and are re-purposed in a number of ways.

Table 5: Depth study the research camera

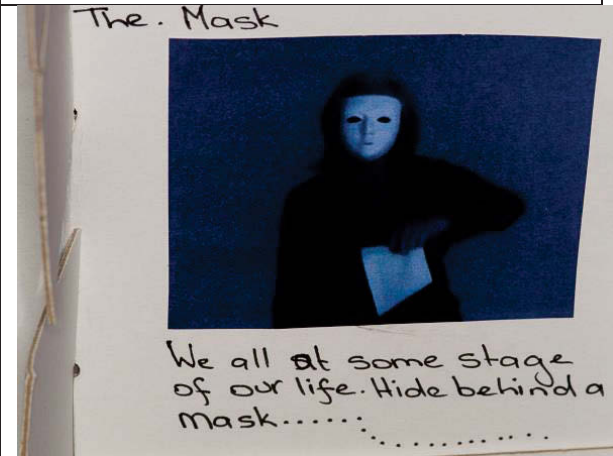
Central actor-camera	Literacy in-action net
	<p>6C2: How do I video with this? 6A1: What are you doing? You can't do that. 6C2: Pieces of paper, it's a girl. Helen guess what I did? I took a picture through there (shows me and I admire). 6A1: She was on her knees. There was all this writing. [The mother then instructs the child over how to take a better photo] "Centre it. Always a little room so you can enlarge it. Good girl. OK." 6C1: Come and have a look at this. if you put the camera up near the box you can see it . 6A1: Yeh I know we did. 6C1: Put it inside the box. 6A1: Oh we did. That camera ... I can't find that one we were just looking at [flicking through images]. Here we go. There's the red box. I refreshed it. Helpers: Family members who collaborates and/or challenges each other.</p>
Related in-action net Visit 2	Related in-action net Visit 1
 <p data-bbox="167 1901 646 1964">6C1 composed a literacy work using electronic image and the software</p>	

called TypaInsta to caption her image of a work⁸⁰.



The work is an ornate box with a peephole. Instead the box is an audio visual of a woman in a mask flicking papers away from her. 6C1 photographed a series of stills and captioned one as 'I wonder whos Behind the mask'

An unplanned work using electronic image and software available on 6C1's smartphone during visit 1. This inspires the series of captioned photos in Visit 2. She captioned one as 'Moira' 'Whats in the beautiful box'?



6A1 used one of the images on her 3D model (see Figure 29) entitling it 'The Mask' with a handwritten caption 'we all at some stage of our life. Hide behind a mask....'

The creation of this literacy work was accompanied and supported by family photographs taken as stills of the video playing inside the box.

⁸⁰ *Moira* by Brigita Ozolins (2013)

Summary

Family 6 appears to be simultaneously disarmed and engaged by their interactions with museum artworks. Like families 2 and 4, the words 'real' and 'unreal' echo about them as terms of authenticity but also surprise as the experience takes them to encounters with new territories and thinking.

6.2. 4 Family 9

Family 9 is a single-parent family with one child aged 8 years. 9A1 is on a disability pension and her daughter is her Registered Carer. During each museum visit the family stabilises immediately into a pattern of viewing. They look at the works, experience them, talk to each other, read their MONA O, take photographs and methodically work through the spaces. There are two disruptive actors in this assemblage during Visit 1, the child and the camera. The MONA O immediately offers all its functionality as label, audio, navigator, and voting box. The mother encourages use of this device but is nervous about 9C1's possible (over) use of the camera, which has a powerful effect upon the child

The audio transcription reveals a series of intense literacy-in-action nets. The child readily incorporates the camera into her interaction with any artworks and frequently makes puns around the visual works. She giggled as she photographs an artwork entitled 'Dice ... dice with ice' (9C1).⁸¹ The work is a series of dice encased in resin.

I invite all participants to send me anything they want to say after the visit and give them stamped envelopes. This is an extract from a transcription of a letter I receive from family 9:

9C1 stated that she liked the Little Red Riding Hood artwork. Here's her story ... a three headed beast. Containing a wise woman, + an unwise-ish woman and an UGLY wolfe. The beast is a flower stomper-on-er-rah. The Beast is also a people-eater. (From 9C1 in the hand of 9A1 [with smiley face])

⁸¹ The work is *Ulexite, Untitled* by Hubert Duprat (2011)

Another extract from the letter commenting on a photograph of 9C1 posing on *Danser La Musique*⁸² (the trampoline) says:

. I was feeling happy and Excited. I was also feeling emotional, like things on the inside that i can't describe. I felt like I was performing with a crowd. (family 9)

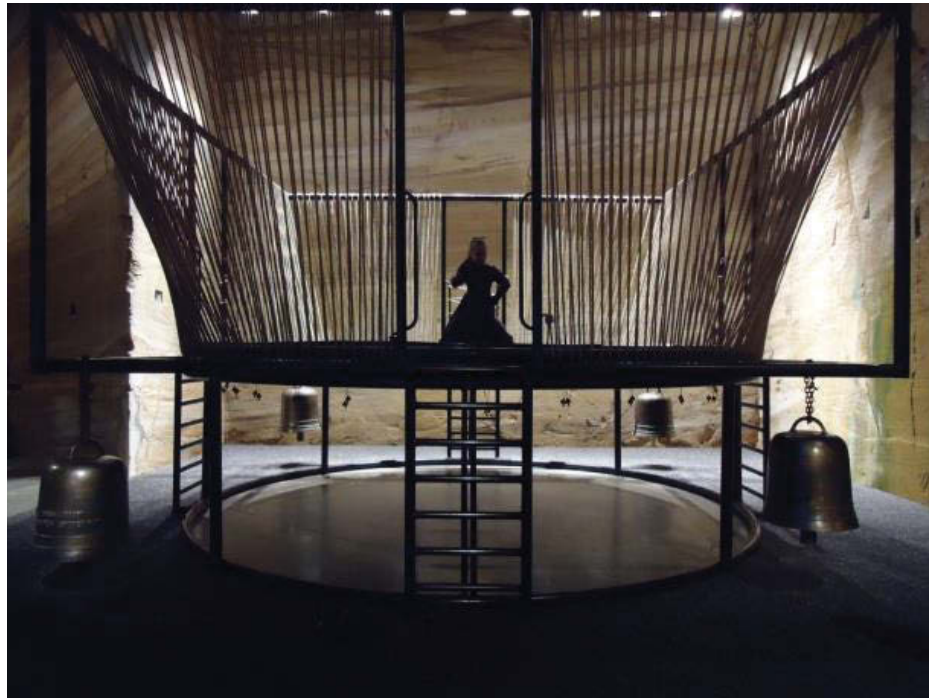


Figure 30: Photograph by 9A1 of 9C1.

During the visit the child stays on her trajectory of interests despite her mother's comments. 9C1 seemingly absorbs and transmits data via affective contagion. In the following literacy-in-action net the child apparently incidentally notes that the characters in the *Jungle Book* audio visual artwork are all speaking in different languages whilst observing that the accompanying pencil drawings of the characters are labelled in the language they speak:

9C1: [Humming] I thought it was the *Jungle Book*.

9A1: Do you want to leave? There is still fun stuff here for us to do.

9C1: No it's English.

9A1: Amazing, load and loads of drawings.

9C1: Cah ... maybe [referring to the AV and not responding to her mother].

⁸² By Chen Zhen (2000-2009)

9A1: Like the flick books.

9C1: Maybe it's not Cah ... no its Italian (giggling) [Silence as she watches].

Uh oh, (giggling) what the ...

9A1: What language is that?

9C1: Spanish.

9A1: Does it sound Spanish?

9C1: He said gracias ... no ... he said de nada.

9A1: What does that mean?

9C1: You're welcome. It says what they are up on the pictures. He's going to push it over. That's what I feel like. He looks funny, [the child has turned her attention to the character of the bear Balloo floating down stream on screen]. That would be nice.

9A1: Let's go 9C1 [No movement from the child].

9C1: Look she's just sitting there. I thought that was actually real but it's just on a piece of paper [referring to the drawings].

9A1: Pretty tricky, from far away.

9C1: Let's go to the void now, [as they walk away 9C1 adds] ... he just said Ca Va.

Despite the depth at which they dive into the offer, these family members do not verbalise any enquiry into the larger themes or comment on the spaces, sound, lighting, furniture or even other visitors aside from the food, coffee and musicians enjoyed during their afternoon tea. 9C1 is the only participant to 'map' the space in a drawing showing the bar (where the family had afternoon tea after both visits), the lift, the toilet (also an artwork), The Pulse Room and Gift Shop (which is on another level).

Visit 2

Visit 2 is more social, yet 9A1 seems nervous that family 4 will disrupt their assemblage. This is a danger 9C1 is unaware of or concerned about as she acquiesces to the demands of the younger child. Eventually the families become integrated. This audio extract shows the interplay between materiality, available skills from different domains and technology in creating literacy.

9C1: I've done things like this at school so I know how to do it already.

4C1: I haven't. You can show me.

9C1: Mostly we use clay.

9C1: Where are the scissors?

4C1: How about you bring the scissors over here?

9C1: Fold it and it rips straightly [to 4C1]

9C1: It's funny, I'm going to leave some there ...

9C1: I could stick some on the ocean part ...

4C1: I'm looking the camera for more ideas.

9C1: That's a good idea.

4C1: 9C1 I don't know how to flick through.

[The children look at their cameras ... swapping them].

Summary

It is difficult not to be distracted in this series by the exceptional 9C1, who seems to transmit ideas on a range of cognitive and affective channels throughout the visit. It's as if she easily occupies the rational and delirious museum (Baker 2008) simultaneously. The mother (like other parents) attempts to keep her on track but forever seems to be following the child as she pops in and out of affective realms in response to the artworks. I do not act as a mediator for their visit as the family only extends their self-contained orb to permit family 4. I am an intermediary following the families and providing refreshments and equipment.

6.3 Commentary

6.3.1 Families as experts

Each family participates in a post-museum interview and provides insight into the deployment of responses to any texts, including museum objects. 9A1 comments that she could not understand the overall theme of *The Red Queen*:

I look to see everything and step back and have a think about it. That's MONA – there is things put here and there for overall for each individual theme I've been able to find the theme. But for the *Red Queen* I can see there

is a theme but it was still a little ... disjointed perhaps a little bit more than the last exhibition was put together.

9C1 interrupts up to say 'Theatre of the world ... talking house', which is an insightful summary of the last exhibition's title and theme, which was a spatial representation of chronology using the metaphor of a memory room or theatre full of objects.

Others families consider the museum experience in terms of the written text and the strategies they used to understand the text:

2A1: I looked at some things but I didn't know the words so I just looked at the picture. The words were too difficult.

R: Too long?

2A1: Yeh, if it just had short words ... it carried on a bit.

2A1: I showed 2A2 the ... [the MONA O?] yeh he would like, I showed him where it was [on the MONA O] and he would read it out. He would help me as well.

Family 6 used different texts to help them make meaning such as the 'iphone things' (6C2):

6A1: I just looked at the pictures (6C1); I did a bit of both ... it was just a visual thing. Some things you looked at [on the MONA O] and things I didn't notice that when I looked at the picture.

The mother 6A1 was not altogether uncritical of the reading level required:

I think that the O, it went on a little bit ... for people a different age group there should have been a bit more explanatory. The words were quite big for little 10-year-olds, to read, to comprehend ... and here [pointing to herself]. Laymen's terms would have been a bit easier.

Her youngest child seemed to sidestep this as a limitation, confirming the appeal of spaces of alterity or simply 'the other':

I just like to imagine some things. You know the one that had the snow ... the first one we saw near the ping pong tables. I just imagined it with a cat because it looked like a cat or a fox.

Sharing or extending the network was in evidence with a camera an actor. Family 2 made a photo album of their visit. 10A1 and 5A1 send images to friends via social media. Family 9 considered the camera:

9A1: Yes. It was fun. Um, [pause] it helped bring it together when you sent the pack [of images]. It helped with sharing with my family. I could show my brother and nephew and nieces. It was great for 9C1. It brought it back to the home for us. And I am going to frame one of the pictures and put it on the wall.

9A1: Thinking photos now 9C1. Did you enjoy taking pictures?

9C1: Everywhere I turned I used to go ... this is the camera [pretending to take photos in every direction].

Family 9 commented on the literacy activities, expressly saying that the activities generally seen as for children opened new avenues for expression as an adult:

9A1: I love the craft bit. That craft session that we did, the buffet. I loved it especially because I'm always focused on things for 9C1. I liked it because I got to be involved and do my own piece as an adult. At home or at the shops I'm buying an activity for 9C1 and I enjoy helping her but I got to do something for me as an adult. I want to thank you for that. It's OK for me to do things like that as well, as an adult.

The mother in family 2 had expressed anxiety over the literacy works during Visit 1 and a grudging acceptance by Visit 2. 2A1 says the activities are best suited to children, whilst confirming the family enjoyment of the experience:

[We] could put an activity room for children so they could do something in there. [Like we did?] Yeh, it was pretty interesting to do that. They could do that for all visitors as well.

6.3.2 Summary

Like the families orientating themselves to the space, I required mooring points to consider the data and continually reference: materiality, spatiality, affect and mediation. The 'text: museum objects' are powerful actors in stimulating dialogue and works in the literacy activities. Some museum objects were numinous in their attractiveness, luring the families into engagement across both space and time, as evidenced by being remembered between visits. Texts as the camera and MONA O at times insinuated themselves into the network, arresting authority from the objects themselves and drafting families into literacy-in-action nets. Meanings were not always as intended by the museum via the MONA O labels, and for many family members this was of little consequence as the intensity of their engagement resulted in changed thinking and, in many cases, their identities and roles within the family visit assemblage. Strange actors intervened at times, such as shoes and the requirement to remove them to enter two immersive art works, creating different engagement patterns and dialogue. These strangers served as a reminder that there is probably a legion of actors at play within any visit.

Children became tour leaders and occasional change agents as they departed from regional space into fire and fluid spaces depending on the strength of existing family relationships and patterns. Spaces were predominantly 'thin' (Sheehy 2004) with few overt and didactic lessons, which may account for the strength of departures into spaces of alterity for the families. These departures were often of concern for the adults in the families, and they predominantly tried to stabilise the networks forming around them whilst becoming increasingly influenced by them. There were concurrent time zones or tempos operating, occasionally creating frictions and also sites of interest.

My role as an intermediary and mediator arose strongly in all families' visits. It was difficult to differentiate between roles, but I found the most powerful was mediator as boundary object, bridging between expectations and patterns of home and museum. Literacy as a boundary object between home and museum was apparent within the family relationships, but a multiplicity of literacies could also be observed across the literacy-in-action nets, depending on the assumed realities and assumptions.

The study now turns from families visiting MONA to families visiting the TMAG. Tracing the production and consumption of texts as evidence of literacy, (Clarke 2002 and 2008; Baynham, 2000; Pahl 2007; Lancaster 2003) and using literacy-in-action nets as units of analysis continues to be a feature of Chapter 7, which also synthesises the stories across both Chapters 6 and 7 in readiness for the meanings in the final chapter.

INTERLUDE #4

I am pink camera

I am a camera and so see things from the outside in. It was the child that first told me about my colour. I was swinging along in her hand with pink shoes going in and out of sight, wondering when I'd get to see some art when I heard her mother say:

Mother: Ooh look at that nice red couch. Isn't that lovely? [laughing]

Child: Look at that.

I saw the couch as I captured it and it certainly was red.

Mother: Oh wow

Looking at me as I was showing off an image of the red couch.

C'mon let's look at some art.

So the couch wasn't art eh?

Child: Aren't you going to take any photos?

This person was invited to take photos by the researcher and she is ready to go!

Mother: I might take a photo of that couch actually,

Child: Yes.

This smaller person is very encouraging.

Mother: Even though it's probably not part of the art.

I'm feeling useful making a copy of the things you like.

Child: Who knows?

Exactly!

You need to turn it off. When I turn it off mine goes beep,.

She notices that little thing I do.

Mine is pink. Do you want to swap? What's your favourite colour? You've got a lot of black. Is black your favourite colour?

Mother: Green. I think we are going the wrong way.

So pink was my colour. I felt quite pleased. I was starting to like this person with the matching pink shoes and a similar 'open to the world' attitude to mine. I was worried that she would use the MONA O. Everyone I can see out of the corner of my lens is looking at theirs. Are they

taking photos too? I can't really tell. I then hear a stranger say 'do you know how to make it work?' Is that what is meant by artwork? He was talking about the Pulse Room.

Mother: My daughter does, ba boom, ba boom, ba boom ... See what my daughter is doing. It takes a while.

This adult is laughing.

There it goes.

Child: I can feel it. Have a feel ... I love my pink camera

Mother: It's not ours to keep dahls. I don't think there is anything there.

Child: I know

Sadly I thought. I love the little girl. She touches, she talks, she feels. She keeps my strap around her wrist, the MONA O around her neck and follows a train of thought that doesn't always stay on course. She is quite the creator.

Mother: I think we'll go round this way. Do we? Are you going to take a photo? This one up the top. That's it.

Child: Mummy you have a camera

Mother: Yes, I know. When I see something that really interests me. C'mon dahls come on. Oooh look at these. C'mon dahl.

Child: You have to do that.

I'm clicking away like mad. I think she should wait for me to catch up. I can't focus as quickly as she can and sometimes I can't be bothered and the photos are just clouds of movement. The child doesn't seem to mind.

Child: I want to touch it. I want to feel it.

Touch me, touch me instead!

Mother: You are not allowed to. That's the thing about artwork, other people have made it and they don't want other people's fingers on it. Shall we take a picture of ...

Child: I am. I'll show you mine.

Mother: Hang on. What do you press?

Child: That one.

Mother: Turn that off. Press that button there. OK good. That's a good photo.

Child: I don't want it to be dead

Mother: Wow look at that. Look at the butterflies. Stand behind the white line. Can I get a photo of that? Mmmmmm no.

Sorry to disappoint just when you have started to use me in your viewing, but that butterfly fairy is a long way away.

Child: I don't want it to be dead.

Yes, but I can help it live. Helen will send you a copy of whatever artwork I steal for you]

I had quite a few relationships in the research. I crossed boundaries coming and going to her home and made it possible for her to find, arrange and use me to make images of toys to show Helen. Eventually I was given to the little girl. She was very pleased. I tried to photograph the things she wanted me too. My photos remind her of where she had been or could have been. Whether the possum had pointy or curved ears and how she wished it wasn't dead. She would sometimes say she had a photo when she didn't. I was valuable to her that way. I could be used to trade possibilities in her conversations about objects. As I feared she went over to the MONA O during both visits but eventually she came back to me. I helped her shape ideas with her family and friends whilst the MONA O connected her to the ideas of people she hadn't met. Even when she forgot how I worked, she wasn't afraid to ask. I am the pink camera. I was part of a research assemblage that occupies a fluid space. That's me on the right.



Figure 31: The pink camera

7.

STORIES: FROM TMAG

This chapter commences with accounts of the set of families that chose to visit the Tasmanian Museum and Art Gallery (TMAG) rather than the Museum of Old and New (MONA). As in the previous chapter covering participant families and their visits to MONA, these accounts are instances of literacy caught within literacy-in-action-nets as identified from the audio transcripts of family conversations; family photographs and other creative activities during museum visits. Traces of the home literacies from Chapter 5 are incorporated into the analysis, with each account choreographed so that the actors' voices can be heard. This chapter concludes with a distillation of all participant family observations across both sites.

7.1 Observations

7.1.1 Family 1

Family 1 is two parents and their three male children aged 11, 8 and 3 years. This is a family where literacy extends from the home hearth to the political system, from the hands-on to online experiences, from solo pursuits to family activities.

Visit 1

The Bond Store 1 engages the family for 35 minutes and drawing activities occupy them for a further 35 minutes, after which they go to the cafe and another part of the museum. The audios from Visit 1 indicate shifting *positionality* from tension between family members to intrigue, surprise and occasionally delight over the spaces and texts. For this family, disruption plays a primary role in their network involving texts and people.

The middle child, 1C2 converts the Euclidian into a Fire space, talking to himself on different floors, apparently unconsciously.

1C2 : ... aaaahhh Whoa what the heck? Whoa Mum look!

1A2: Do you know what this is?

1C2: It's obviously something. I'm bored. Pooh pooh. Let's go somewhere.

Weeeee, oooh, they look ... veeery veeery stupid. Why do they put this one there? Oh yeh. Oh boy. Welcome to Tasmania. huh huh yeh yeh ... [playing and tapping on the audio recorder as if it's a beatbox] W [tap] E[tap].L. spelling out the words on the overhead sign like a rap song].C.O .M.E. T.O. T.A.S.M.A.N.I.A. What's this?

1C2 (aged 8 years) frequently departs from the real into the virtual and (im)material. Perhaps he does not want his interest to be uncovered by the family; from the audio transcript it is apparent he is simultaneously mobilised by museum objects whilst pronouncing how bored he is. Perhaps his reaction is pure affect. The eldest 1C1 (aged 11 years) is notable through his frequent absences, flickering between the family and elsewhere. Early on he suppresses the voice of the microphone by switching it off. This action means as an actor he can only be accessed via the audio of other actors. The mother, 1A2, mediates between all actors, attending to her own interests in the texts whilst responding to the practical demands (such as toileting) from the children. The father, 1A1, moves methodically through the research space, at times actively looking after the youngest child, 1C3, and responding to the others. He adopts the role of intermediary by amplifying and reading aloud from the labels, yet he too ventures into the 'delirious' space of thinking and verbalising the unthinkable. He only occasionally (reluctantly, deliberately or distractedly) follows the interests and leads of the children:

1C1: Death mask [reading label]

1A1: What do you reckon? Is that for whaling? That must be for cutting up whales. Cat-of-nine tails. They probably would whip you with for not working fast enough. Dig faster boy you will never go to school, it's your life, dig coal ... meat clever, I thought it might have been a whale butchering tool [o not following the child's interest].

1C1: Death mask – it's 19 [matching the object to its label].

1A1: That's a pretty big door bolt [again, not engaging in the child's network of interest].

1C1: Death mask. Death mask number 19.

1A1: Death mask number 19. Robert Knopwood [sighs]. That's a piece of ...

1C1: 19th century ... [reading from the label].

1A1: [interrupting the reading] Do you think they buried his face in plaster?

1C1: No what they would do is ...

1A1: ... or did they take his face after his death?

1C1: No they would kill him, I think ... [re-reading the label aloud].

1A1: It says Lord Burrow [talking over C1].

1C1: What they would do ...

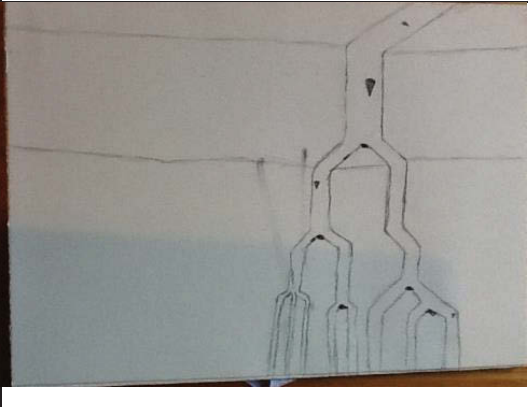
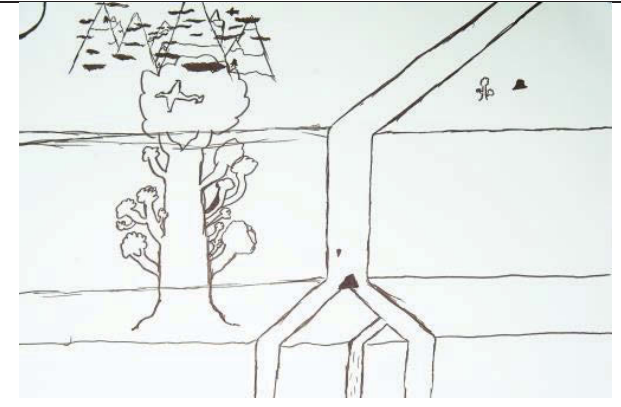
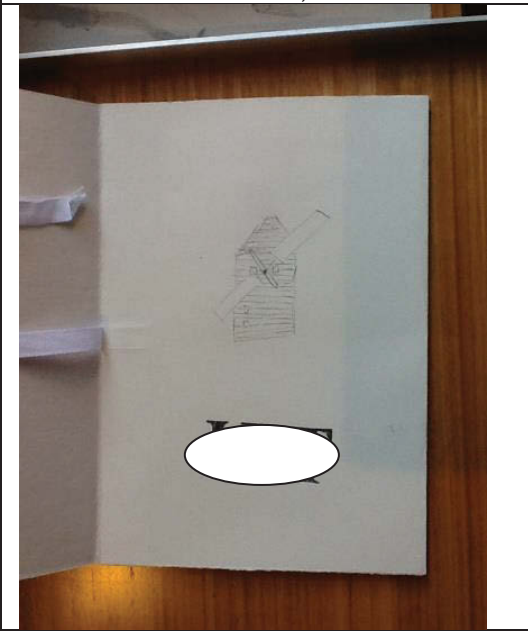

1A1: Fireman's Helmut. Look at that ...


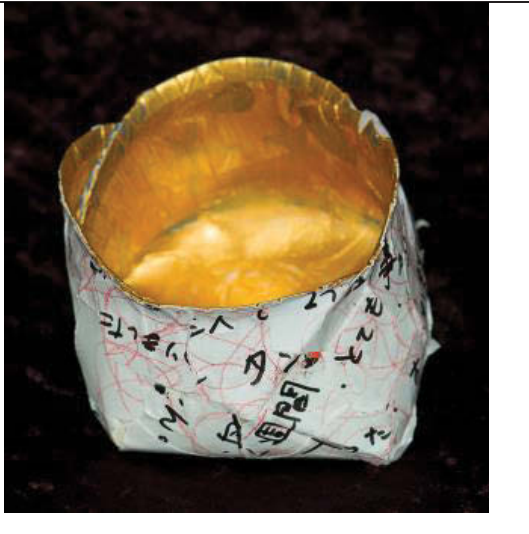
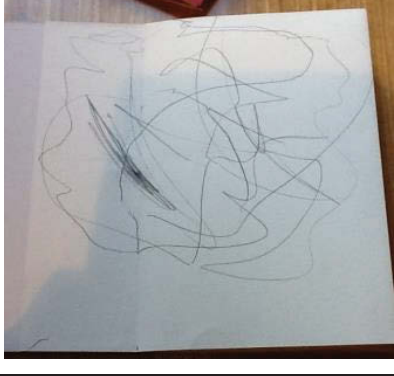

Together or in smaller, changing groups, Family 1 look into every showcase and activate an extended literacy-in-action net during interaction with the 'Pack your bags' trunkful of painted blocks representing objects from 2012 and the 1830s. The aim is to choose items of value as painted onto the blocks. In this case 1A2 acts as motivator, peacekeeper, and disciplinarian, continually reading the text as an event that involves relationships between her children, family life and the ethics of value. The mechanical interactive was the subject of related literacy-in-action-nets expressed in family literacy works. 1A1 extends the theme of the interactive, incorporating other texts.

Visit 2

During Visit 2 (with family 8), family 1 spends about 40 minutes in museum exhibitions attending to Bond Stores 2 and 3 and about 50 minutes working on their activities. Visit 2 is characterised by less talking, more adult laughter and less crying by 1C3. The original graffiti in Bond Store 2 engages 1A1. 1C2 and 1A2 put on earphones, watching and listening to the audio visuals in Bond Store 3. At one stage both families sit and watch the wall projection, reminiscent of sitting around a campfire and a meeting place. During the Literacy Activity period, 1C3 works on his own painting for 20 minutes, quietly next to his mother. Meaning in these works is not analysed, although in this case Table 6 suggests the differences and continuities between the visits. The literacy works in Visit 2 appear as more powerful actors in the visit drawing concentration from the family members and available materials.

Table 6: Comparison of literacy works by family 1

Visit 1	Visit 2
	
<p><i>Literacy work by 1C2</i> 1C2 describes this drawing as a waterfall but will not comment further. At the start of the visit as we are entering the museum 1C2 says to himself 'This is a waterfall' and hums. 1C2 is described by his father as an artist that he would send to art school if he could afford to (SMS text to researcher after visit 1)</p>	<p><i>Literacy works by 1C2</i> 1C2 requests the large format paper on which to draw. He has the previous drawing open next to him as he works on this version. Commenting on this drawing 1A1 says: 'He's been doing that a lot lately. It's been a new thing. It's been incorporated into his landscapes and all sorts of stuff ... A little bit. He'll say that's where everything been channelled and where everything is going to. It could be lots of things maybe. Roads or circuits or anything' (1A1)</p>
	
<p><i>Literacy works by 1C3</i> 1 C3 (eventually and reluctantly) draws a windmill model on display and stamps his name on the cover.</p>	<p><i>Literacy work by 1C3</i> 1C3 makes drawings in his book that fill the page with colour and later makes a large model out of interlocking cards. He is quiet and focussed.</p>

	
<p><i>Literacy work by 1A2</i> 1C3 draws these chairs from memory in a drawing that captures the conversation they incite, a net that includes the label. '1A1: I really like that chair. 1C3: Let's go.' R: They are described [in the label] as strictly functional ... beautiful. 1C3: I think they are beautiful, yes.</p>	<p><i>Literacy work by 1A2</i> 1A2: 'I am writing an embarrassing story that I don't want to tell people. Very embarrassing. [laughin]'. This lovely bowl with its painted gold interior and 'secret story' applied to the exterior excites admiration from the group and 8A1 emulates it.</p>
	
<p><i>Literacy works by 1C3</i> 1C3 drew on his father's book refusing to draw on his own book</p> <p>This is in sharp comparison to his deliberation over and identification with his literacy work in the second visit.</p>	<p><i>Literacy works by 1C3</i> '1A2: 1C3: Do you want to write a story 1C3?' [then speaks to him in her first language]. Mother and child sat together during this Activity. The child very clear over how it should be arranged as a triptych with only red paint. He does not complain during this period as was evident throughout Visit 1.</p> <p>1C3 wants to add red to his mother's bowl and she asserts her personal work and refuses, 1A1: 'No, no, no, not there mummy made it'</p>

<p><i>Literacy works by 1A1</i> 1A1 labels furniture, money and tableware owned by the wealthy as 'rations'.</p>	<p><i>Literacy works by 1A1</i> 1A1 wants to extend the museum visit by securing copies of historic images,' ... I wanted to find out if you could get a copy of the photo that's in one of these things. Up here there's a new thingo that's got photos. I'm wondering if they sell postcards of these photos downstairs' (1A1).</p>

Visit 2 is marked by affect through physicality, along with a more relaxed group. 1C2 stands on showcase plinths and grips the perspex to get a better look at objects. 1C2 and 2C3 dance in the projected words floating around the Printing Press. All the children play with the blocks and 1C3 is especially delighted by running to find objects that match the painting on the block. Together the adults manipulate available props and equipment. When 1C2 disappears under a security rope barrier upstairs into the darkness between levels 2 and 3 his father pinpoints the child's lack of regard for convention and need to physically experience a space:

1A1: You Mister. Going where you are not supposed to go. Kids just want to crawl and look at everything.

1C1 veers from being disruptive within networks to showing an independent interest in texts. Dealing with his 'cheekiness' promotes greater engagement and decisiveness in the interactions of 1A2 with texts.

1C2 commands the research camera, although 1A2 takes some photographs in the second visit. 1C2 is quite deliberate with his photos and arranges the props for the photograph of the Shopkeeper's Weights. No family member takes a family portrait, so

the series shows no mementos of a family day out. The few photographs of individual children are of them *doing* something and captured when they are not looking. The family uses photos as inspiration for artworks.

I had contemplated this family as an assemblage that refused to stabilise; however, some process of sedimentation occurred during the visit as each family member reconciled their own interests with that of the family. This change is pronounced at the conclusion of Visit 2⁸³. The following literacy-in-action net shows mother and children contributing a family 'language' and knowledge rather than competing with each other.

1C2: They stuff them and put them in the museum.

Research assistant: We put them in a freezer first to stop the bugs coming in.

1A2: Look at this 1C2, shining one.

1C2: Mum look [inaudible description].

1A2: What kind of snake is that? Copper?

1C2: Mmmm. Look at that snake.

1A2: Tiger snake, it says Tiger snake [reading label].

1C2: Mum, look here, it's ... [inaudible reading label].

1C3: Mum sea horse.

1C2: Look at that one!

1A2: They are nice.

1C2: I like that one.

1C3: Mum, spider. Ooh more spiders ...

1A2: [stopping him from speaking as he wants to be picked up] Finish drinking and I'll show you (speaks to him in her first language)

1C2: What does [word] mean?

1A2: [appears to explain and sings to him in her first language]

1C3: That's a boy and a girl spider.

⁸³ Later my Research Journal note about this visit, 'not too deep and deadly' takes me by surprise as it reveals disquiet over the first visit that I had been unaware of – an example of pre-cognitive affect.

1A2: (seems to say spider in his mother's first language)

1C3: Oooh spider oh? (repeats what his mother says in her language). Look at those butterflies I love them. We've got those, from the beach ...

(continues in the mother's birth language).

Summary

Until the conclusion of Visit 2, where a showcase of familiar specimens provokes a literacy-in-action net, the hands-on mechanical interactives such as the 'Pack your bags' coloured blocks interactive and 'The Shopkeepers Weights' appear as powerful and memorable actors for the family members. The children return independently to these texts a number of times. Similarly, the moveable diorama made of a montage of historic images and contemporary props, where one can physically move the images and the stereoscope of old photos, prompts literacy-in-action nets through talk. In smaller groups or individually they look at and talk about museum objects. These nets demonstrate the complex nature of the interaction as the family talk at, over, and to, each other whilst responding to the meanings revealed to them by the all the texts, including museum objects and technologies. Between the first and second visits they transitioned from co-existing in the spaces to inhabiting them and engaging in a more confident way, as in the identified literacy-in-action nets. Individuals responded to the objects in personal ways. The literacy-in-action nets and materialised literacy nets via the activities suggest crossovers between home literacies, exhibition visits and the shifting sands of family identity. Each family member takes the opportunity in the literacy activities to say something about themselves, making the theme of 'becoming' through encounters speak strongly through this family.

The mother and older children each send me a thankyou letter after the museum visits, with 1C3 covering the back of his mother's with drawings. 1C1 writes that he remembers the boat (which in the museum was photographed by 1C2 and drawn by 1A1). 1C2 drew all over his brief letter, which commences with 'thankssss for ever'. 'It made me think of what is important,' wrote 1A2 in her letter, along with 'Well done Thank you for the opportunity for us 😊 .'

7.1.2 Family 5

Family 5 is a mother and child (aged 4 years) living in a household with their extended family. 5A1 came to Tasmania as a refugee from an Asian country. Her everyday literacy practices are very invested in her belief in a 'God of words' and church community.

Visit 1

During the first visit the family were in Bond Store 1 for about 45 minutes, stopping briefly at Bond Store 2 and then in the drawing activity for another 45 minutes. 5A1's brother and his new wife arrive at the end of this period and the family spend another 20 minutes in Bond Store 2. Any museum is unfamiliar territory for this family, yet despite the darkened space of Bond Store 2 being full of culturally strange objects and wailing sounds wafting down from above, 5A1 is relentlessly cheerful and encouraging. This could be due to her fast hold on me as her trusted link cum mediator and/or possibly as a way to nurse the child through her initial uncertainty as her intermediary. The visit evolves into an intense speaking and listening session directed by the family with the researcher cast as a mediator. 5A1 echoes what I say to her whilst building knowledge of the museum system as an active player in this experience. At 5A1's request, I actively engage 5C1 with the objects and she starts to look with interest in showcases. 5C1 transfers her role as subject to directing photos of museum objects, pointing and exerting her agency through engaging her mother to photograph selected objects. The photographs of objects are framed nicely, they fit in the picture and are more than idle 'point and shoot'.

5A1: What is called?

Researcher: This is an owl.

A1: What is this?

R: This is a Grey Goose.

A1: Grey Goose.

R: You look at the number here [point to the number for the Goose].

A1: Number 9 [indicating the label for another animal and also that she understands this code already].

R: Masked owl.

A1: Masked, um um.

R: This one is number 5.

A1: Number 5, this is a duck [R: yes its a ...].

5C1: This one! I like the big one [she likes the big one] [photo].

5A1: OK ... Which one? 5C1! This big plate? [What's in the middle of the big plate?]

5C1: Kangaroo and emu.

5A1: Aaahh (laughs approvingly).

5C1: Oooh, this one [these are made by convicts but owned by wealthy people]. Candle [yes] .The girl [pointing to a bowl] [photo taken].

5A1: [photo] Which one 5C1? [photo taken].

5C1: I like the flower.

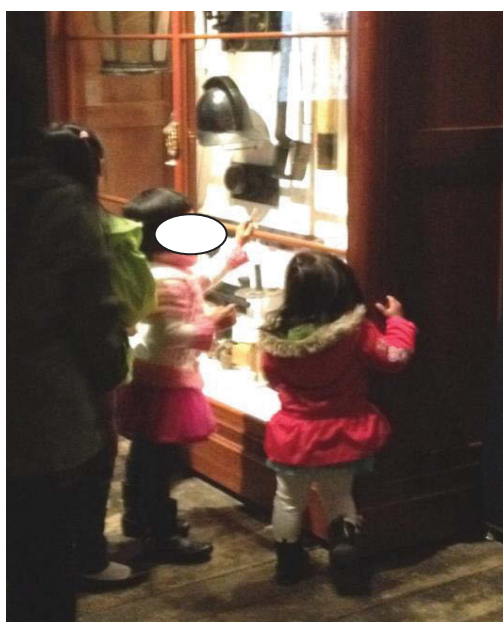
5A1: mmmm [photo taken].

I assumed that the content of the 'text: interactive' called 'Pack your bags: you are leaving home forever' would resonate with the adults who had been refugees. These families disrupted this expectation and took the net into an unexpected direction or space of de-territorialisation. Family 5's engagement with 'Pack your bags' blocks is through the adult saying the name of the illustrated object in both her birth language and English and querying the unknown (an 18th century dress). It is the sound of wailing from above that mobilises the strongest affective response from these families.

The brother and his new wife who join the visit are lost en route, and without the benefit of a shared language to give explicit instructions I am assisted by technology sending him a screen grab of a map via smart phone. 5C1, the often silent actor, is frequently photographed and carried for the remainder of the visit by her aunt. We return to Bond Store 2 and the brother asks, 'What is that sound?' and 5A1 replying in her language assembles the group to move upstairs to Bond store 3 where she again prompts literacy-in-action nets through modelling asking questions and repeating the answers – a process readily adopted by her brother.

Visit 2

Visit 2 is taken with the two other families (families 3 and 10), whose adults had also been refugees. The adults are friends from the Language and Literacy classes and from the outset they wanted to visit the same museum at the same time. We visit all three levels of the Bond Store for more than 35 minutes, with the shortest stop being on the ground level. The six children arrive excited, smiling; they greet me enthusiastically, stand to be photographed, tumble into the museum, keen to do anything, and immediately engage with the 'texts: museum objects' on level 1. On level 1 the children run to the building blocks as if they are friends about to share a favourite game. The older children assist the smaller children, including 5C1, pointing within showcases, lifting them off exhibition hardware, tidying up and holding hands. The adults use their own portable devices such as an ipad and their phones. Visit 2 manifests as a joyous child-led excursion within an extended assemblage, although as quiet actors the adults reinforce and at times initiate talk and action. The children look into showcases whilst touching and stroking the glass, (see Figure 32).



*Figure 32: Children from families 5 and 10
The children look into the convict
showcase whilst holding onto the glass.*

The adult women struggle to speak in English yet walk and talk together while taking photographs of the children on their own devices. They establish links initially through sharing the names and ages of their children.

10A2: Are you A44 or A45? [This number is a refugee status]

5A1: A44.

10A2: Same.


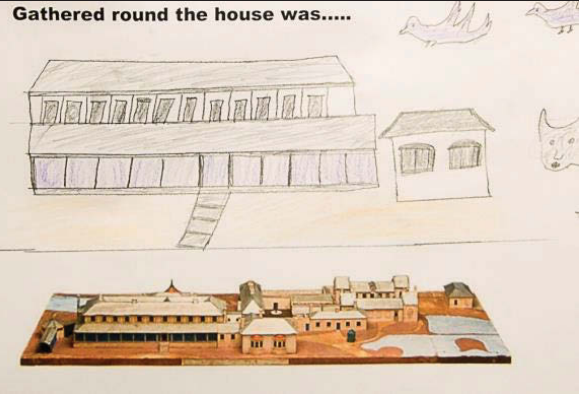


5A1: Life is good [taking a picture].

10A2: We are the same (laughing).

After 10 minutes in Bond Store the older children go upstairs and finally all the participants go to Bond Store 3. All adults, including 5A1, take photos and videos with their own phones/ipad. 5A1 reads and photographs wall labels on Bond Store 3 alone and with 10A2. All adults and older children listen to the individual audio-visu-als and all family members sit and watch the audio-visual projected onto the walls. 5A1 is especially interested in this text: interpretation. All the participants dip in and out of experiences, which are often, but not always, child led.

Families 3, 5 and 10 take photos of museum interpretative labels, with 5A1 capturing two object labels – the 'Balance scales' (which family 3 commenting on them being from their country) and the 'Volumetric measures', which are large copper jugs. There are many smart phone photos taken of all the family combinations (including the researcher) with the exhibitions becoming the backdrop to a family event. The family's literacy works between visits shown in Table 7 demonstrate the difficulty of trying to attach meaning to such activity. Their importance within the theoretical bracing is the level of engagement these works promoted, with any validation coming from them representing new spaces for thinking or expressions of identity.

Table 7: Comparison of literacy works between visits by family 5.

Visit 1	Visit 2
	<p>Gathered round the house was.....</p> 
<p><i>Literacy work by 5A1</i> This drawing does not seem to relate to anything in the museum nor referred to in her home photographs. 5A1 approaches this activity with purpose and focus and when I ask her to describe the drawing says 'this is a cat and this is a dog' and in reply to 'tell me more about it', she laughs.</p>	<p><i>Literacy work by 5A1</i> 5A1 repeats the same dog from Visit 1 by poking his head into the frame in Visit 2.</p>
	
<p><i>Literacy work by 5C1</i> 5C1 tells me she has drawn flowers, butterflies, a doll (head) and a marble. Objects with these adornments are all pointed out and/or photographed in the exhibition at the child's request. (Field notes). An inference could be made that the child is drawing objects she has admired and seen in the museum although the exact nature of the relationship is uncertain.</p>	<p><i>Literacy work by 5C1</i> 5C1 sits at a table with the other girls and they each make a story bowl. The girls report they are making a castle whilst talking about the blocks that went together to make a house in the exhibition. 5C1 places eggs in her basket. Eggs were photographed by 5A1 with the child present. 5C1 says the boat in the bowl is flying an Australian flag. She is driving the boat. There are also drawings of butterflies and girls pasted into the bowl.</p>

5C1 talks about her work more easily after Visit 2 than after visit 1. 5A1's works are similarly difficult to 'read' in both visits and I was unable to use these drawings to start any conversation. They are private 'lines of flight', as is the case with family 1 and family 5 repeat motifs in their drawings in Visits 1 and 2. Bond Store 3 is not included in any imagery, despite the family spending the most time and seemingly being the most engaged there.

The post-visit interview is wrapped into 5A1's repeated refrain of gratitude:
I saw different things, new things. I feel, amazing things I saw at the museum. And I'm happy and my daughter also happy at museum. 'Yes, aah' my friend said. I said my friend we are went to a museum I saw amazing things there. We are happy. And we are at the exhibition. My daughter is very happy, I said. And my volunteer name is Helen. She is help me.

The refrain is only broken in reference to the audio-visual projected onto the wall in Bond Store 3, which disturbs her:

Some sound is scary, about Aboriginal history. Blood in the video. Killed ...
About the Aboriginal. Very scary. Scary, this video. I felt unhappy as sound is very difficult ... This is sad history, the woman and child killed.

The sound is a powerful presence in the Bond Store and affects most of the family members, strongly cutting through their enjoyment of the outing.

Summary

Family 5's visits were characterised by exploration of spaces and extra-familial relations with the recruitment of mediators. Technology as a helper resonates strongly in this family. In Visit 1 the mother and child focussed on items of interest that included 'texts: museum objects' and written text to build comprehension of the museum space and protocols rather than a particular interest in label content. As with many families, there was little curiosity expressed about the meta-exhibition themes and museum interpretation, aside from the immersive experience in Bond Store 2. They did not ask for advice on wall panels, although the mother photographs them.

The family watch the large format audio-visual on both visits and engage with the building blocks, especially when reconstructing the house. The adult takes photos of family, the child and children (during Visit 2), objects and labels. The literacy activities after the exhibition interaction were taken without hesitation, but I could not provoke any discussion about their meaning.

Sound became an actor calling down to visitors and the audio-visual on level 3 amplified the message. This audio-visual mostly impresses those that have experienced dispossession, although 'Pack your bags; you are leaving home forever' graphic blocks fails to resonate as a theme of dispossession, despite the children enjoying the building blocks. The theme of literacy mediators emerged from close scrutiny of this family's experiences.

7.1.3 Family 3

The mother (3A2) and father (3A1) in family 3 came to Tasmania via a refugee camp and now live in Hobart with their three pre-school children (aged 5 and 3 years, and a new baby). Through speaking with me, audio transcripts and photographs, it is apparent the adults were interested in two content areas. They wanted to know more about Aboriginal people and anything familiar from their culture (such as the copper pots and weighing scales). Similar to family 5 they are drawn to Bond Store 3 by the audio of the Aboriginal women.

The authority is with the texts, with the family calling me in as an intermediary and occasional mediator. Both adults are observed stroking wall panels as they study them and the adjacent 'texts: museum objects'. Identity, or at least displacement, came out strongly in the adult drawings in both Visits 1 and 2. Both themes underpin Bond Stores 1 and 2, yet it is the Aboriginal story within the immersive that provokes an affective response and links to their own background. The children in the family (3C1 and 3C2) draw pictures of themselves after the first visit. The older child draws the model house which she had played with intensively (see Figures 6 and 7).

Visit 1

The family is quiet throughout this visit (although animated in Bond Store 2). The adults keep me close and do not engage verbally for long with their children. This is possibly because of the restriction to speak in English. My explanation of the taxidermied sheep and kangaroo on a plinth excites a lot of family discussion. Aside from touching wall labels, the adults need encouragement to engage with any mechanical interactives, including the weighing scales. 3A1 calls to his children to relay my explanation of the Punishment Box in Bond Store 1.

3A1: [calls to children in his language] These things belong to the prisoners. This is one of the old prisoners. A long time they used this one for. They put people inside this one [sound of disgust].

3A1: [calls to 3C2, 3C1, 3C1, 3C1 using sing song voice and a 'pet' name for child 3C2]: What, where are you looking? [picks up child who is looking at wall AV] What do you see? [speaks in language] What do you see?

[3C2 replies in language]

3A1: Let me look, [the children point to at the Broughman Carriage] King and Queen. King and Queen from England. The children. I think they like it here.

The physicality of the children within the bounds of the quiet, shy and polite family is evident. The children skip into spaces. 3C2 gets as close as he can to objects of interest, climbing under barriers, onto low showcases, across the illuminated floor map and (as with many participant children) contorting so that the text associated with the printing press can project onto his body. 3C1 takes photos of the printing press and the house model. The child spends considerable time building the house of blocks, running between and comparing the blocks and the house because she noted a model was the same in a nearby showcase. She enquires as to the tree shown in the showcased model but not represented on the blocks. Later 3C1 says she is drawing the house (and repeat pictures of a girl who she says is her baby sister). 3C2 does multiple drawings but none of the family is inclined to help me talk about them. He rolls up one drawing and carries it to his chest for the remainder of the visit.

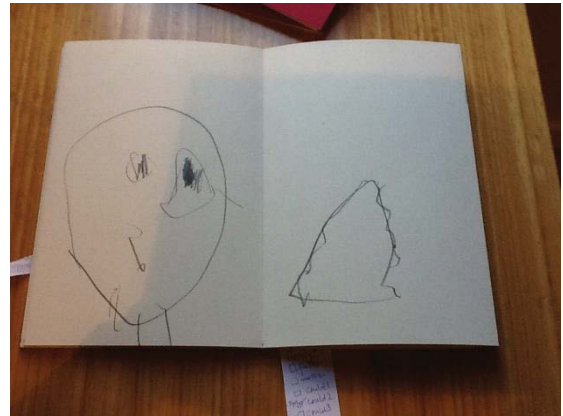


Figure 33: Literacy work by 3C1
3C1 makes a cover for her book with an image of herself. Inside are drawings of herself, her baby sister when she grows up and the house model.

Figure 34: Literacy work by 3C2
3C2 also did a series of drawings after the first visit, intently filling his drawing book with drawings which he could not or would not talk about.

The adults in this family seem to have the lowest level of conventional literacy and levels of English yet choose to write their response. Both adults write a thank you letter to me after the first visit.

Visit 2

This family joins families 5 and 10 in this second, rather more animated and social, visit. The second visit clashes with a community event which the mother attends. The children choose the museum with their father. Of note here is that 3A1 is heard continually calling to 3C2 as if in locating the child he finds himself in the space. 3A1 says the museum is 'fantastic' and then looks at his son and says 'He is an Australian'.



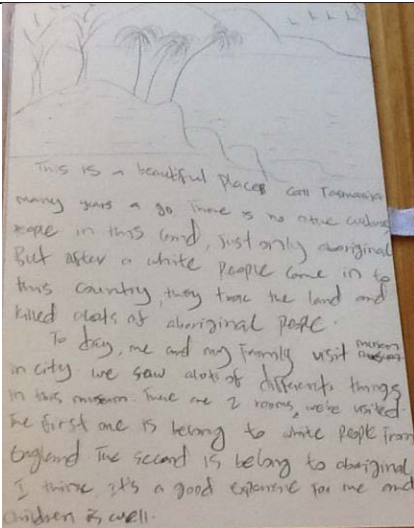
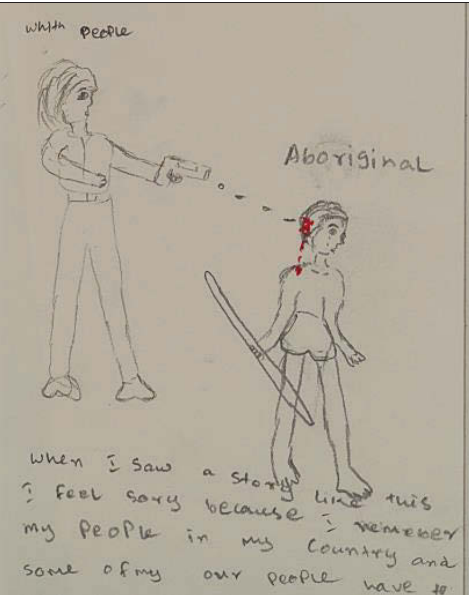
Depth Study: Immersive experience

The element at hand (or central actor) depicted is the immersive experience provided by *Our land: parrawa, parrawa! Go away!* in Bond Store level 2 where the entire space envelops the visitor with dim light punctuated by audio visuals projected on the walls. The immersive experience and/or its content is of great interest to families 3, 5 and 10, who make the second visit together. During Visit 1, family 3 translated the space into a literacy-in-action net through an extended conversation (the longest held in English that was recorded during both visits). 3A2 asks about the sound of women

wailing from above, to which I reply, 'It's upstairs. Its about Aboriginal people losing their land.' This comment excited a conversation in their first language and the adults ask twice to go upstairs. The creation of this literacy work was accompanied and supported by family photographs that include family members (see Table 8).

Table 8: Depth study of the immersive experience

Central actor	Literacy in-action net
<p>'3A1: This word maybe is not in English. [R: They say parrawa means go away]. Go away. White bungers [R: bungers? no buggers] buggers. Family 3: [speaking in language] (Laughter). R: It says they are following the story of a boy who lived here ... [starts to read the wall label aloud to the family] 3A1: Ship ... ship, ship [speaking in language] (Laughter) [language]. This is gun. Shoot. R: This is the ship's gun. [all family looking at wall labels] 3A1: Parawa, parawa go away R: This is the story of a battle where people were killed 3A1: So before they were fighting? R: Yes.</p>	<p>3A1: Stolen ... sheep [the literacy-in-action-net continues for a few minutes] 3A1: This one I like. It's an Australian story. History. History. History. Its nature, like a real one. Yes, Aboriginal, Aboriginal. Aboriginal people do they have their own language? R: There are many. 3A1: Many languages. Like our [language] we speak two different languages and we can understand 4, maybe 5. I met a young girl, Aboriginal at Hobart College. They learn English like me [R: from Tasmania?] No she came from another place'. (Audio transcription of family 3 during Visit 1)</p>

<p>Related literacy in-action net Visit 1</p>	<p>Related literacy in-action net Visit 1</p>
	
<p>Photo taken by 3A1 with helpers: camera and the 'texts: objects'</p>	
	
<p>Literacy work by 10A1 'This is a beautiful place call Tasmania. Many years ago there is no other culture people in this land, just only aboriginal. But after white people come in to this country they took the land and killed lots of aboriginal people. To day, me and my family visit museum in city we saw a lot of different things in this museum. There are 2 rooms, we've visited. The first one is belong to white people from England the second is belong to aboriginal I think it's a good experience for me and children is well.' (Text transcription).</p>	<p>Literacy work by 10A2 'When I saw a story like this I feel sorry because I remember my people in my country and some of my our people have to run because [country she fled] government are so bad.' (Text transcription).</p>
<p>Helpers: Objects Drawing books and home literacy</p>	
<p>Visit 2</p>	
<p>During visit 2, the researcher photographs 10A1 and 5A1 taking a photo of the wall as children watch the wall video. This photo is not shown here as it was taken in low light. Helpers: ipad and the text: building</p>	

Summary

Issues of identity, realism and accuracy, and how these concepts are constructed and configured, arise strongly in this data set. The family appear to want to immerse themselves bodily and cognitively into their engagement and they exhibit a multiplicity of literacies as their engagement criss-crosses spatial and temporal boundaries. This family surprised me. They are silent actors who speak loudly.

7.1.4 Family 8

Visit 1

Family 8 is a single-parent family of three daughters (aged 13, 4 and 2 years). 8A1 brings only the eldest on the first visit, saying she was worried that the other two would be disruptive (all the children attend the second visit)⁸⁴. Visit 1 is 45 minutes (with 30 minutes in the literacy activity). Neither family member leads, with interest being co-validated and family conversation suggesting a negotiated visit between peers to a place both can appreciate. Certain objects draw family member to them as demonstrated by their physical stance (see Figure 35).



Figure 35: Photograph by researcher of family 8. 8A1 and 8C1 huddle close to each other and the label they read together.

⁸⁴ Unfortunately neither I nor the City Women's Centre has been unable to contact 8A1 for the post visit.

Visit 1 is also marked with emotional intensity, primarily of gratitude for the experience, (see Figure 36).

8C1: Not many people would get to enjoy this. I'm glad I am. Whoa. Look, it's really good. Silver and glass look. It's got really cool drawing and embroidery on it.

8A1: Embroidery is on material. It's fine carved silver.

8C1: Something else I wanted to show you. It comes out.

8A1: That is awesome. I love shells.

8C1: The nautilus shell, I know because its ... oh it's turned off [the camera].

8A1: You learnt that ... the coat of arms (takes photo).

8A1: What have we got here? Moby Dick the white whale, 50s, 60s oh 40s (reading labels) 19th century. We've got a penny at home (laughs). That's about it⁸⁵.

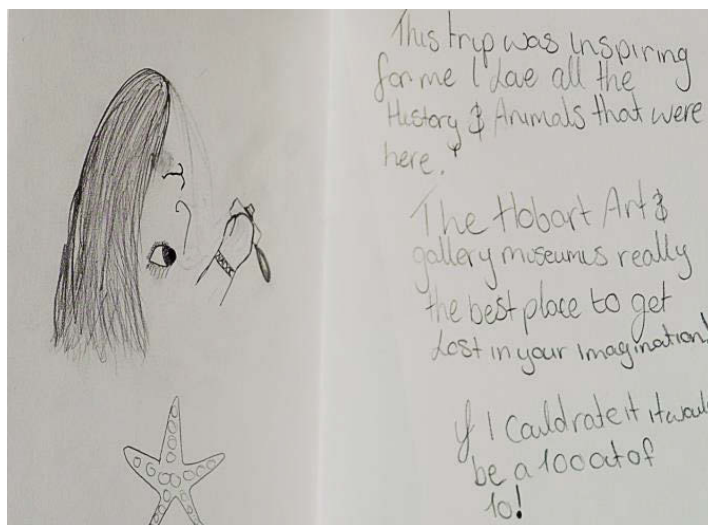


Figure 36: Literacy work by 8C1

8C1 drawing is on the left – a self portrait holding a camera. 8C1's comment on the imagination is interesting and unprompted.

'The trip was inspiring for me. I love all the History & Animals that were here. The Hobart Art gallery museums really the best place to get lost in your imagination. If I could rate it would be 10 out of 10!'

Text transcription.

⁸⁵ 8A1 brings her small coin collection to the next visit to show everyone. 1A1 is especially interested in them.

8A1 and 8C1 continue their dialogue looking at objects, reading labels, discussing and/or evaluating the content, particularly the content related to their family life and interests. The teenager plays with the building blocks (which in Visit 2 she shows to younger sisters) and the mother and daughter play verbally and physically with the scales.

Visit 2

Visit 2 takes around 50 minutes, with another 60 minutes in the literacy works. The second visit is marked by the strongest actor being the youngest child in the study's protocol, the baby 8C3. 8A1 attends to the baby. 8C1 accompanies 8C2, showing her sibling the space but is foiled by 8C2 who follows another line of inquiry.

8C1: Look at that 8C2. Don't touch it. Van Diemens Land. That's what Tasmania used to be called. Want to know why Tasmania is called Tasmania. A guy called Abel Tasman.

8C2: Did he die?

8C1: I don't know.

8C2: What does this say? [Referring to a wall label]

8C1: A new order.

8C1: What's a new order mean?

8C2: I have no idea, you ask too many questions.

The eldest sister expresses support for museum protocols about touching objects. These protocols disrupt the conversation about the large carriage:

8C2: Can I see the carriage? [Touching the glass barrier]

8C1: But you aren't allowed to touch the glass.

8C2: Oh I see its ... [Climbing over the glass].

8C1: Get down you aren't allowed. People used to sit up there.

8C2: People go in there. The horses were there with them [reaching over the glass to point].

8C1: 8C2 DONT TOUCH THE GLASS otherwise I will tell the security man.

8C2 spends around 30 minutes on the drawing shown in Figure 37. She starts by drawing a garden but grows quieter as she adds the tent.



Figure 37: Literacy work by 8C2

8C2 initially is happy to talk about her Literacy work. She says it is of flowers in her garden, and later she says it is a tent and people inside it. 8C2 then shuts down any discussion about who is inside the tent saying that 'I cannot talk about bad things' and then paints over the tent in gold. It is feasible that the tent is the installation in Bond Store 2 which 8C2 had wanted to see inside. She was shown that the figures were made of cardboard.



Figure 38: Photograph by family 8 of the tent.

This photo is from the research camera used by family 8. This photo is not shown to 8C2 during the activity but included here to show its grim message.

Summary

Despite spending considerable time looking at and talking about objects, and drawing and writing about their experiences, family 8 do not discuss exhibition themes, even though larger external themes are at play in their works relating to current and past circumstances, with 'texts: museum objects' promoting boundary crossing between home and museum:

8A1: I need one of these to protect myself these days. The cat-o-nine tails. I can't see if you put your head in it (laughing) ... What's that one. Can't read it.

... My grandad, mum's dad, he travelled. All over Tassie. Loved travel. We came from good woodchoppers. Heritage. Poppy [x] ... Oh 8C1, what is that? That's beautiful.

Literacy events spoken by this family in Visit 2 amplify the leading role that objects play as text. It is interesting to note the changing role of the older child. She licensed the mother to be playful in the first visit and then was in turn licensed by her younger sibling in the second visit. In both cases this licensing was also accompanied by disruption to anticipated roles. Various actors are boundary objects with this family. The mother brings old coins from her own collection to the second visit after commenting on the museum coins in the first visit. There is constant direct referencing to the home by the mother and connections are made and remade between the children as they engage with museum objects.

7.1.5 Family 10

Both adults of family 10 came to Tasmania as refugees and with their children, now aged 8, 6 and 3 years. This family has a range of information technology skills, notably the father, 10A1, uses the Google images function on his smart phone to decipher labels (a process he shares with other adults in Visit 2). The youngest child initially did not speak English (tapping for my attention or that of her mother pointing out objects of interest to her), though speaks English during visit 2, something her mother comments upon. The older children speak English, although on the audio they mostly speak to each other in the first language of their parents so that any transcriptions of literacy-in-action nets are patchy.

Visit 1

10C1 is an active agent within many assemblages. He is curious yet selective and discerning in his viewing. He leads the way into the exhibition and quickly moves through the space assessing items of interest such as the mechanical diorama and the stereoscope, which he then wants to show his mother and sister. 10C1 takes photos and shows his mother. The eldest children together and independently engage with the exhibitions, playing with the 'Pack your bags' interactive and the house model, with 10C2 spending much of the visit building the model house out of blocks (based on a showcased model) alone or with her family. Similar to the child in family 3, she notices

the connection with the model house and blocks and spends time looking into the showcase.

Although family members seem confident and deliberate, there is very little spoken interaction between them. The family play with the weighing scales together and, as with families 5 and 3, ask to go upstairs once they realise it is about Aboriginal people and then sit to watch the wall projection and closely view the smaller projections. The children are active but the family also interact closely, slipping in and out of the home language and English as they interrogate a text of interest – the audio visual interviews of Aboriginal people.

10A2: Kangaroo [reading] ' ... settled in Tasmania 1823' [speaks in language to 10C2].

10C1: [laughs] [sound of walking into space].

10C2: Here.

10A2: [speaking in language]

Museum staff: What are you up to? [10C1 has his hands on a showcase]

Museum staff: This one – you can touch. You have to wait now (showing them the audio-visual monitor and earphones).

10C1: Listen, listen to this.

10C2: Are they black?

10C1: Listen to what they say [children speaking together – not audible].

10C2: I am watching, watching.

10C1: Trading. This means [10C2] that ...

10A2: [speaking in language]

[women wailing]

10C1: Can we do that?

10A1: [echoing AV] Parawa! Parawa [speaks to 10A2 in language].

10C1: It is quiet now.

[10A1 using his phone to take images]

10A2: [10A2 seems to ask 10A1 a question. 10A1 asks whether the people on the AV are Aboriginal]

10A1: [speaks in language to the family]

10A1: I don't think they deserve that. What do you think?

10C1: [speaks in language].

Visit 2

The family recalls the impact of Bond Store 2 early on in Visit 2, as seen in this exchange between mothers of families 5 and 10:

10A2: My daughter is scared ... everytime.

5A1: ... different music, sounds.

5A1: You make a beautiful house [said loudly and brightly]

5A1: You are leaving home forever [reading label on 'Pack your bags' trunk.

Sounds of wailing from Bond Store 2 can be heard from above]

5A1: ... Aboriginal.

10A2: Black mother and children die.

10C1 continues his active exploration. He quickly realises the images on the 'Pack your bags' interactive blocks match objects in the exhibition and becomes busy finding these 'texts: museum objects'. He wants to see how things are made and projected, asking about the Printing Press and the print on the floor. He dismisses the children's book in the exhibition as it has 'too many words'. 10C1 asks how the silhouettes are made on the tent and peeks inside the flap to confirm the people are cardboard. 10C1 is interested in both content and process, especially in Bond Store 2 with Figure 39 showing him getting as close as possible to a 'text: museum object' to photograph it. This photo is re purposed in his literacy work after Visit 2 (see Figure 40).



Figure 39: 10C1 taking a photo

10C1 says little but after photographing the sheep (up very close) gestures to indicate the link between the dead sheep image projected onto the wall and the sheep/kangaroo display.





Figure 40: Literacy work by 10C1

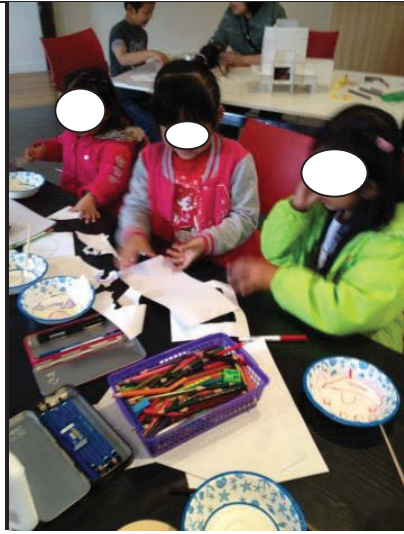
10C1 sits with his mother as she works on her 3D project (see Table 9) then decides to make his own. 10C1 asks me for the stamps starting with 'F' as he works. I assume that like other children he wants to write his own name but he stamps FIRE SHADOW and images from Bond Store 3 including the sheep and kangaroo and silhouette of a child arms outstretched.

The second visit is more animated than the first. For example, 10C3 is gathered up by 3C1 and 5C1 and they stay together as a 'kid's gang'. It is not only social but cooperative, especially in the literacy activity. Various groups assemble. The four young girls from three families, aged between three and eight years, sit and help each

other; the two fathers and a three-year-old boy focus on working through the software so they can caption an image, and the mother and son in family 10 work together (see Table 9). The adults' literacy works change from being declaratory statements about themselves to an expression of the visit, possibly because of the materials on offer, the available modes, the confidence gained, or a gathering of all these factors as actors.

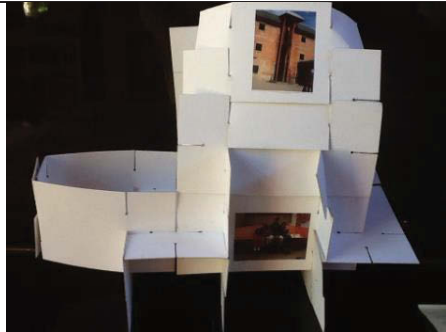
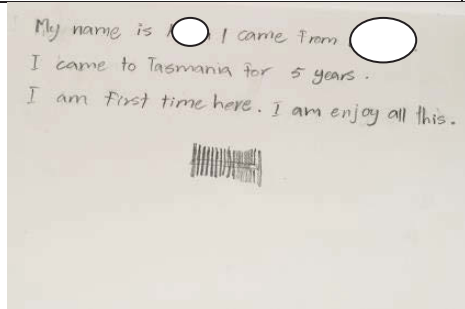
Table 9: Comparison of the museum visits by family 10

Visit 1	Visit 2
	
<p>10C2 carefully matching the house blocks with the label graphic in visit 1.</p>	<p>Family 10 looking into a showcase together with 5A1. Family members gather round to witness the match between object and graphic on the block as identified by 10C1 in visit 2</p>



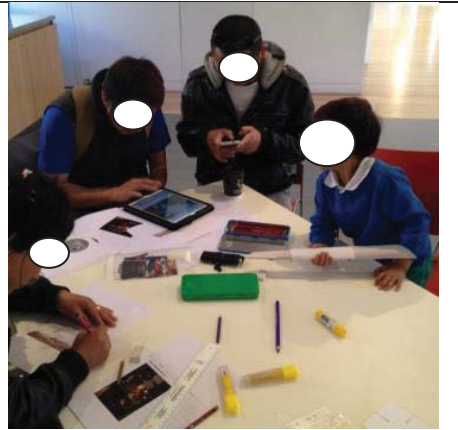
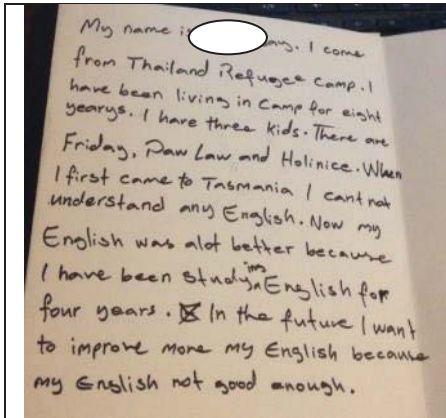
Literacy work by 10C1.
 10C1 writes and draws things which he later rubs out. This drawing remains of a spear which he has photographed and carefully looks at for the drawing.

The young children working together on a project
 The young girls do variations of a castle image (described as the museum or the house model) with favoured images previously used in their works.



Literacy work and transcript of writing by 10A2
 'My name is ... I came from... I came to Tasmania for 5 years. I am first time here. I enjoy all this'. The drawing is of a nit comb which 'they have in their country'. (10A2)

Literacy work by 10C1 and 10A2
 10A2's construction was very deft. In answer to my question whether she liked to make things she replied proudly that she had been very good seamstress in the UN Refugee Camp. The mother selects images of the family and the exterior of the building that they had taken at Visit 1.



Literacy work and transcript by 10A1

'My name is ... I came from [Asian] Refugee camp. I have been living in camp for eight years, I have three kids. they are 10C1, 10C2 and 10C3. When I first came to Tasmania I could not understand English. Now my English was alot better because I have been studyⁱⁿ English for four years. In the future I want to improve more my English because my English not good enough'.


The two adult males helping each other make their literacy work

10A1 sits with 3A1 to work on captioning the images on the ipad. They are worried over the accuracy of the texts and hand write drafts; check spelling on their smart phones; experiment with the software application and undertake a number of versions until complete.


Depth Study: Object

The element at hand is a museum object (a table), and the literacy-in-action nets arise from this actor. This translation is supported by many helpers as shown in Table 10.

Table 10: Depth study of Scott's Table

Central actor	Literacy-in-action net
	
	<p><i>Literacy work and its text transcription by 10A1 after Visit 2. ⁸⁶</i></p> <p>'This is a dog that has twin children. The dog was a female. One child is good and one child is bad. The dog dies in the end. After the mother dies she gives the good child a lot of gold. This is a [cultural] story. The story takes one and half hours to tell.'</p>
<p>Label and label graphic (image of table top)</p> <p>Smartphone: to take photograph and find correct words for caption</p> <p>Camera</p> <p>Home literacy</p> <p>Researcher</p> <p>Application: TypaInsta</p> <p>ipad</p> <p>Other participant (3A1) who collaborates</p>	

⁸⁶ *Scott's Table* a nineteenth-century Roman mosaic tabletop with marble frame brought into Tasmania in 1857 and acquire by TMAG in 2009.

Related literacy-in-action net Visit 1	Related literacy-in-action net Visit 2 and post visit
<p>'10A1: that dog is ... [R: famous story] in our language we have it. [photo] [photo with his own phone] Yes I have. That dog has two children. When they grow up they have a naughty one. There is a good one and bad one. [R: twins] Yes that is right. Yes in the end that dog is dead. That dog has a the daughter who is the good one and when the mummy is dead she takes the body and put in a big ... what is called. When is dead the body, the dog, it gets like gold (looks at his phone to find the correct word)' pottery.</p>	 <p>10A1 again focussed on the table photographing it with the ipad, the camera and also his own phone.</p> <p>10C1 later in the visit looks at the table with 3C2</p> <p>10C1 sends a photo of the table to his sister in Melbourne attached to a SMS text.</p>
<p>During Visit 2 both 10A1 and 3A1 take photographs of this table using their own devices-smartphone and ipad.</p>	

There are a number of related literacy-in-action nets involving 10A1, other family members and the researcher. I had pointed out the table to 10A1 during Visit 1 in response to him photographing its label graphic using his smartphone. The table provoked a strong affective response. I started to tell him the museum story of Romulus and Remus but he interrupted with the story from his culture whilst excitedly calling his family to see the table. The creation of this literacy work was accompanied and possibly supported by family photographs taken over both visits.

Summary

This family has been courteous, cooperative and conscientious throughout the research. They were reflective of their experiences, but I realised that they were not alone in this. All families commented on issues of inequity and cruelty, although

families 1 and 8 were looking into the past. For families 3, 5 and 10 these issues appeared more present, but to be investigated rather than denied or ignored. The child 10C1 sends me written feedback about the visit. The following is an extract from the letter.

The Aboriginal movie because it makes me scared.

Thankyou Helen for leting us go to the museum and look around the place.

PART B: COMMENTARY

7.1. Families as experts

Each family participated in a post-museum interview and provided insight into how they saw the deployment of texts and responses. 1A1 found this relationship between text and image/object was lacking in Bond Store 2 and was dismissive of the exhibition, although 1A2, 1C1 and 1C2 spent considerable quiet and focussed time in that space.

3A1, 10A1 and 10A2 saw the level of difficulty of written labels as a way they could improve their language skills. 3A1 explained that he was able to understand the written label through translating words and referring back to the object. 5A1 simply accepted the labels:

Some were very difficult. I didn't understand. Some words I know. (5A1)

Families 3 made special mention of the individual audio-visuals with personal headphones in Bond Store 3:

They were very clear. They ask question and the Aboriginal people explain what they feel and what they think about it. (3A1)

Taking photographs in the museum was generally seen as a helpful strategy. The Literacy activities were also well received but not by everyone. 10A2 thought simply looking at objects was the best way to understand them, whilst her husband, 10A1, found using the camera helpful with an added benefit being the sharing of the experience:

I just took a photo. Later when I got home I texted my sister in Melbourne and said I had been at the museum. I sent the photos of the twins [mosaic].
(10A1)

3A1 also found the camera helpful and more enjoyable than the literacy activities:

Mmmm, I think drawing a little bit boring for me. After which we take picture we learn. If the picture is clear we see and we know. (3A1)

5A1 told me she showed her parents the images from the visit and she sent a selection to her friend in Malaysia via Facebook.

PART C: SUMMARY OF CHAPTERS 6 & 7

7.2. What were the families' views of the visits?

Most families were motivated to participate in the research because of the value to their children in visiting a museum. Families 3 and 10 wanted to improve their own language skills and both offered written thanks for the experience offered to their families. There was agreement among those interviewed that they would participate in a similar research project, although with a cautionary note from 2A1:

Yes I would do it again. 2A2 may not do it again. He likes to sleep in on Saturday and then go to his mum's. He likes a beer in the afternoon. (2A1)

Part of the post-museum visit process was to ask participants to consider what literacy meant to them in the museum context. All participants, including those who visited TMAG, were shown a table of words (see Appendix J) and found it helpful, and they considered it at length prior to circling terms in red (words that meant 'home literacy') or blue (the 'museum literacy'). Although families had been receptive to my verbal and written descriptions of the research, the completed tables revealed an incomplete understanding of the term 'literacy'. As 9C1 (aged 8 years) commented, 'I keep forgetting what literacy means. And people say "We've got literacy," and I think,

I'm like uh oh what is literacy?' This is understandable in light of the sometimes conflicting theoretical positions that can be taken regarding literacy.

The words that were circled frequently by participants as relating to 'literacy' were *reading, writing, understanding, listening, words, thinking, valuable, searching, computer skills* and *texting*. The words that rated highly as relating to a 'museum' were *reading, pictures, thinking, understanding, valuable, stories, beautiful, symbols, signs, searching,* and *painting*. As indicated in Chapter Five (and also Appendices L and M) the interviews the reading level of any museum text would exceed many of the participants' capacities and yet reading was acknowledged as important and rarely identified as a barrier (aside from family 6). This negotiated meaning making was common throughout the interviews and the literacy-in-action nets. The terms 'thinking' and 'understanding' are used succinctly by 4A1 when describing what skills and experience would be helpful in the museum. 4A1 also helps make the case that museum are spaces of encounters where thinking changes:

Thinking outside the square. Looking at things and being able to get some understanding of the meaning behind it ... Good verbal skills so if you go with someone you can talk about and compare what you are looking at.

(4A1)

The physicality of circling words on a page as a way for participants to reflect on their experiences proved useful. This exercise was not undertaken as a survey but to elucidate the participants' thoughts on home and museum literacies. Nothing conclusive can be drawn from the use of the word table except that it was a powerful tool in which to engage the families, reinforcing their role as participants and advocates for diversifying the visitor base. Participants actively deliberated over each word and, indeed, took the post-interview as seriously as they appeared to experience the museum.

7.3 Synthesis

Literacy gathers up actors, human and non-human, that may never have previously been associated. In the Chapters 6 and 7 actors also known as texts were traced via the nine families. These actors do something, and in a sense are all mediators

in generating the unexpected through making other actors do things. The task at hand is to productively identify these relations.

Whilst accepting the complexity, ambivalences and potential multiplicity of worlds (Laws 2009), in my bounded setting some relationships persisted. The first is the child as a powerful actor in the interactions between humans and non-humans (including texts). The child made other actors act within the assemblages. Far from only being a cognitive interplay or a meeting of mind with matter, the affective and physical dimensions of literacy-in-action nets surfaced strongly. Also emergent was the presence and creation of literacy mediators who helped me take care of my troublesome role where I morphed from being the commentator on the family's museum world to becoming part of it. The technologies such as the camera and the MONA O were such active helpers they can be characterised as literacy mediators. At times these non-humans became the dominant actor. Activity materials used to actualise literacy-in-action nets became literacy nets in themselves. The properties of the materials as well as their form aroused discussion and for most adults the treatment of writing as only one of a number of responses was welcome.

Issues of identity, realism and accuracy, and how these are constructed and configured, arose strongly in the data set as new ways of thinking. The repeated use two words in particular was a key factor in my thoughts turning to the transformational potential of museum literacy practices. These words were 'real', which moved its meaning beyond authentic into a resonance with new thinking, and 'unreal', which denoted the impressive. Both words suggested different sorts of spaces that museum objects can occupy.

Witnessing museum visits has allowed me to trace how families make their own new social spaces and disrupt previous roles and literate identities. The links between home and museum literacies were most apparent in the family relationships. It is unsurprising that a family would take its roles and relationships along with them when they leave the house. However it is worth considering whether the museum visit supports, amplifies or indeed disrupts these relationships and in the process contributes to a changing literate identity.

My inability to quietly settle on a sharp summary of similarities and differences between sites is consistent with MS, which eschews smoothing the rough edges of research (Fenwick, Edwards & Sawchuk 2011). This chapter has set out a series of chronicles so that the 'ambivalent character of the network can be rendered more visible' (Mulcahy 1999 p100) quoted in Fenwick et al 2011). Amidst the complex relationships between all actors, human and non-human, within the museum environment nests literacy processes.

INTERLUDE #5

I am BOX

I am box. Nothing reflects from my surface, only the gloom of a dark corner next to the gold of a unicorn and the mane of a lion. I have holes but no eyes. Instead of looking I listen. I inhale and exhale. Quietly.

Child: What's that!

Mother: Oh that's ...

Child: That's a punishment box

Mother: I can see what it is by the look of it

Child: ... No it's, the black box, it's a punishment box. Dark scary place.

I realise that I am holding my breath and slowly exhale. This family can see me, even understand me a little. I am a box. I am a dark space.

The child reads my label aloud ...

'Locked up wet and cold lashed on deck ...'

Mother: Do you think ...

The child continues to read aloud, speaking over her mother. I start to feel uncomfortable. It is not altogether true what she is saying. I wish they would look at me again. The air grows cold around me.

Child: Do you think she would behave after that?

Who is *she*? I've heard of her before but she has no name.

Mother: That's crazy. Do you think we are so dumb or just so cruel. How inhumane is that. How many years fighting for freedom and get put in a box,

The child now reads other words about me. So much is written yet they know so little about me. What I did. Where I came from? I am solid but my story so insubstantial. I seem to suggest a past or indeed suggest a feeling about the past. It is not kind.

Mother: I understand people may have gone a bit crazy on the ship. I'm not sure. I forget what they call them . I'll take a picture.

I exhale slowly. People take pictures of many things around here. They love the Brougham Carriage. They imagine sitting in the carriage. I always thought they wouldn't want to imagine sitting in me.

Mother: Turn around Child. Give me a no sign. I was going to say give me a sign in front of the box saying 'no' ! blurry, hang on
What is the child doing I wonder. Is she crossing her arms in front of her heart? The child is not embracing but rejecting me.

Child: Look at the air holes
She can see I breathe.

Mother: That's a replica. It must be. I don't think they would have the original piece.
Hello, are you speaking about me? I may be miserable but I am real misery. The family today really looked at me; they thought about me, they read about me. The mother makes a drawing of me. It's called 'torture box'. And still they did not see me as real. I used to think I was invisible and only existed as words on the wall. I was the words that hung between the instruments of torture, chained and gloating in their glass case, and the original Tasmanian coat of arms. All of the stories around me are told as fiction and believed as fact, much after the fashion of a coat of arms with a lion and a unicorn. Perhaps today the talk and activity around me was not about me at all, but about something the family wanted to understand, or perhaps wanted to understand and leave behind, or perhaps they just wanted to be.

Figure 41 is me.



Figure 41: The Punishment Box by an unknown maker (1840s). TMAG image.

8.

CONCLUSION

This chapter concludes my thesis by presenting *what the research means* and *how it contributes* to scholarship. These realities are generated through synthesising the previous three fieldwork chapters within the study's theoretical bracing. The thesis attended to literacy practices by participant families within two museum sites to consider how these practices arose and what then happened. Part A distils and ascribes four meanings to these practices. Part B looks into the implications of the study for re-opening the door onto innovative research itineraries.

PART A: MEANINGS

8.1 Introduction

Literacy, families and museum objects were placed together within this study, the aim of which is to understand the reality and the potential of the resultant relationships. Literacy could be viewed as the odd player, as families and museum objects offer themselves so readily for analysis within the subject-object dichotomy. Rather than a limitation, this unusual triad became a study strength, forcing new ways to consider how meaning is assembled around collection objects and, indeed, what an understanding of these processes will mean for museums. Considering meaning through materiality has necessitated breaking more than the subject-object divide. It has resulted in the re-formation of relationships between human and non-humans within the study, the re-evaluation of the material and (im)material within the Euclidian territory of a museum, and closer consideration of the nature of a text as it evolves within literacy theories.

I argue that with the insights offered by theories of literacy and material semiotic tools, museums are more than what they seem. A museum visit can be a series of

encounters between people and things where each encounter is a change in thinking or a site of creative production. Museums can be transformative spaces. Families in the study made meaning from their visits through becoming part of an assemblage of actors that can also be thought of as texts. Many were comfortable within the rational museum (Baker, J. 2010) but often ventured into alternate arenas that were no longer stable and known but were fluid and at times on fire with possibilities. Museums offered families a 'space for thinking what is unthought' (p. 178). Various actors accompanied the families on this journey. Literacy in its various guises was one such companion.

Museums can enhance their transformative potential through the use of literacy mediators and choosing whether to utilise literacy as a boundary object or as a multiple coexisting series of realities. That either can be a productive path was revealed through close observation of families in the field. The families were caught within literacy-in-action nets that included other humans, as well as things, and observed within instances of discourse, movement and activities. These families actively used any resource which came to hand or to mind within the museum arena. They carried with them their everyday literacy practices and blended these with other literacies, creating hybrids such as photographs of objects combined with writing; three dimensional craftworks; extended animated talk and movement resulting in new expressive literacy texts. The museum and home literacy practices were part of the multiplicity of actors assembling to yield a productive unfolding of literacies.

Materiality, spatiality, affect and mediation are key working themes or concepts across this thesis. The identification of these themes shaped thinking; their deployment shaped stories; and their adoption revealed the four significant meanings. These meanings seem to clearly align with two of the four concepts, affect and mediation, however all four floated as informers throughout all meanings. Reality became done rather than known, and in this way meanings were often collateral (Law 2012) because they were unexpected. In summary, the meanings or realities of this study for museums are:

1. Literacy is an affective encounter.
2. Literacy is assisted and changed through the use of literacy mediators.

3. Literacy can be pursued as a boundary object between the museum and other domains.
4. Literacy in museums is multiple.

An implication of these meanings is their influence upon the museum's own literacy repertoire and practice. The next section synthesises observations made in Chapters 5, 6 and 7. This is followed by the full presentation of meanings in Sections 8.3 to 8.6.

8.2 Key observations

8.2.1 The home, the museum

Literacies in the family home were captured via photographs and accompanying family stories. Literacies in the museum were considered during my visits to make arrangements and when I observed non-participant visitors for around 25 hours over six visits per site. My eye for literacy was sharpened for both home and museum, yet each presented difficulties and opportunities for me as a researcher. In terms of the home, I had sought insight into home literacy practices via a discussion guide administered to the recruited adult. The results of the discussion read like a list of literacy technologies, and whilst the families recruited via community agencies were (surprisingly) well resourced or resourceful I felt that something was absent. This was uncovered by use of a research camera where family members took photographs and participated in discussing them with me. Passion, identity and a range of literacies surfaced strongly in the family recounting when the camera and images became actors.

The interpretive devices and display techniques used in each museum's public exhibition spaces and the engagement are described in Chapter 5 – an outline refined through observing non-participant families. That chapter is critical to demonstrating the preparedness and intent of the sites for visitors as well as their commonalities and differences. My writing of it confirmed that it would be critical to this thesis to pay close attention to practices as the nature of assemblages in which the family participants and their technologies are actors.

8.2.2 Museums plus families

Most of the literacy-in-action nets involved a museum object as text. Almost all of the recorded conversations by the families in the museum were about objects and the tools that helped create meaning, including those to be later given the attribute of a literacy mediator. The absence of talk about the weather, favourite television shows, dinner expectations and other visitors ⁸⁷ (even during the more social second visit) was not because these nets were omitted. It was because this talk rarely happened in the exhibition spaces or activity areas.

Home literacies, personal interests and occasionally literacies from formal settings such as school leaked through into the museum. Families used technologies in expected and unexpected ways, assessing materials for their activities, recruiting help, and negotiating practicalities in order to engage with museum collections directly or indirectly. Each family looked, talked about and photographed objects; read, talked about and in some cases photographed labels (print or electronic) and utilised mechanical interactive and immersive spaces. Engagement with objects as texts was dynamic and multi-faceted. Participants adopted multiple positioning. Examples of this were the adult in family 1, the mother, who became teacher, student, artist, commentator, connoisseur (see Table 6), and the eldest child in family 2 who was child, mascot, photographer and leader (see Figures 18, 19, 20 and 21). Interactions unfolded in sometimes unexpected ways, with the practices leading to other practices happening along the edge between the expected museum Discourse and the disruptive and unexpected. These boundaries between the ideal and real; controlled and messy; confirmed and interrogated; habitual and creative were often productive spaces and they were writ large within the family assemblages.

The translation heuristic visible across all family members and families was a useful tool in considering each family's response to the museum and its experience of the research. The fact that there were second visits with all families returning is a sign of interest, commitment and mobilisation, particularly considering that in the case of Families 1 and 2 the visits were three months apart. By the second visit all families

⁸⁷ The children from Family 6 were an exception, occasionally speaking about other visitors.

were tangibly more relaxed yet targeted in their exploration. The families chatted together in the second visit. The literacy nets became harder to corral amongst the hubbub of excited voices and participants reconnecting and connecting with favoured objects and spaces. Translation means change and it accepts equivalence where one actor can stand in for another, not as a placeholder but as a substitute actor in what becomes a new network (Latour 2005). These may be texts acting as other bodies or objects (Law 1992; Leander & Lovvorn 2006). This was evident in the families between visits as they occasionally substituted the most powerful actors in the group. For example, 2C2 became more and more influential in family 2 as the youngest child was ill; the teenager in family 6 influenced both her mother and younger sister in visit 2; the children in family 10 quietly transposed meanings for their parents; and all participants mobilising literacy resources independently of the researcher during Visit 2 (see Figures 30 and 32). I had recruited the families to the research but I was in turn recruited by the families during each visit. Technologies, such as the camera, were important throughout; whilst others assumed greater importance, for example, the extensive use of the MONA O to support literacy activities during Visit 2.

The differences that unfolded between the first and second visits to each museum were more marked than differences across the two museum sites. MONA fulfils the hopes of its owner in taking visitors away from the normal to surprise them. TMAG tells stories amidst its colonial imprint. Despite the branding of each institution and its literacies (as identified in Chapter 5), ringing through the data, similarities rather than differences became prominent in the exploration for explanatory patterns of behaviour and engagement.

Each family spent about the same amount of time in the space and activities across each site. The activities initially promoted some disquiet (1A1, 6A1 and 3A1) after the first visit, yet were all favourably welcomed and/or undertaken for the second visit. There was no particular preference for any mode in the families' choice of literacy activity. A significant observation is that families preferred to process meanings on their own terms rather than as suggested by the institution via an overarching meta-narrative. Families rarely read or related to theme panels or curatorial framing, an exception being *Our land: parrawa, parrawa! Go away!* in level 2 of TMAG. There is an

indication that the greater the range of senses engaged the greater likelihood of there being a repeat engagement in the form of Visit 2. These sensuously treated museum objects or artworks, which were self-contained within rooms at both sites, prompted extended literacy events, length of engagement and anticipation for visit 2 (such as the conversation between brothers in family 2 about *The Japanese Tea Room*, (pgs. 172). At TMAG families also made greatest use of mechanical interactives, where handling of component parts was inherent to the experience. Handling artworks is not an option at MONA, but in its case the monumental *The Berlin Buddha*⁸⁸ (Table 3) and the large array of taxidermied animals and insects presented in *The depraved pursuit of a possum*⁸⁹ promoted literacy-in-action nets (Table 4).

Part of the mobilisation of the families is the transition from provisional use of the museum space to owning it that is facilitated by actors that are to be termed Literacy Mediators (to be taken up later in this chapter). Another factor in their mobilisation was consistent respect for the families' opinions and choices. Recruitment of the family was pitched as a community favour to improve museums for all visitors. This pitch was sincerely made and reiterated throughout the fieldwork. Through close, non-judgemental observation of their participation, I saw the transition between actions that started cautiously and became confident. The participants were active players in translating and validating the research.

There were some differences between the sites but these differences did not trigger enduring themes. The visit to TMAG prompted more literacy works, with content reflecting the families' personal interests and in home literacies such as texting another family member or drawing familiar subjects. The immersive Bond Store 2 depiction of dispossession prompted a literacy-in-action net, by family 3 reflecting on their personal experience. At MONA five children drew pictures of themselves or other children, whereas only 6C1 (child) drew something outside the museum with her sister (6C2) later following with a similar drawing. The adults and children in all the TMAG families drew, wrote or created works based on objects and the five mechanical (hands-on) interactives. Generally MONA promoted more literacy works from the families

⁸⁸ By artist Zhang Hua (2007)

⁸⁹ By artist Tessa Farmer (2013)

than TMAG (an exception being 1A1, who was prolific). Similarly more photographs were taken (or at least retained) by MONA families, with family 4 the exception. Object labels were read at each site with *reading* the MONA O prompting an interest in an object in a way that printed texts at TMAG did or could not. The MONA O had the additional functionalities of enabling judgement via the Love/Hate function, the additional content and interpretation about each work, and being able to read it like a map where objects appear in the landscape. TMAG labels did not have the same functionality or even cache as the electronic MONA O, yet some families touched and photographed the print labels as well as reading the content. Ultimately the benefit of selecting two sites proved to be the sharpened focus on each literacy-in-action net facilitated by comparison between the sites.

Any similarities and differences were unsettled by each family's complex experiences, which were idiosyncratically individual even though they had points of commonality. The four guiding concepts of materiality, spatiality, affect and mediation provided the cut through to make sense of these interactions without smoothing away the rough edges of interest. The following four sections reflect on four meanings distilled from the Chapters 5, 6 and 7 recounts. These recounts were informed by the guiding concepts and theoretical framings. The nature of these concepts is that they interrelate. So whilst appearing to make a clear alignment each of the concepts is present in some way throughout each meaning.

8.3 Affective encounters

8.3.1 Introduction

Relationships between objects, families and literacies result in affective encounters and the nature of these encounters is such that a museum visit can be experienced as transformative. This meaning turns on the word encounter, which has taken on a specific hue within the research as influenced by readings in Multiple Literacies Theory (MLT) (Masny & Cole 2009). Within MLT an encounter or event produces change and, like Mulcahy's (2016) 'sticky' learning within museums, this change forces new thinking. These encounters grant the capacity of an actor to be a more powerful. There are two actors that helped with the identification of this

meaning: *the child* and *fire*. The child appeared as the catalyst or the spark that lit the experience or initiated the literacy-in-action net and therefore led the analysis. The children ignited the museum and it is their match, with its Fire imagery, that led me to this meaning. Ultimately the child and fire spaces are both assembled within the dynamics of the family.







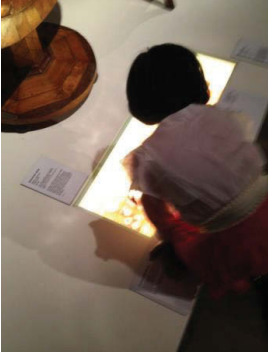

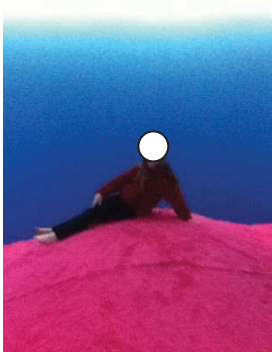
8.3.2 Humans

Child

It was the physicality of responses to museum objects by the children that first came to prominence in my observations, as seen in the montage of fieldwork photographs at Table 11. Children were 'zigging' and 'zooming' through the space (Hackett 2012) as a modality in their literacy repertoire. They danced, gestured, embraced and played with collection objects and spaces. Children break conventions. Children paced the visit by not keeping up; falling over; struggling with required footwear or the socks-only rule⁹⁰; spontaneous responses of wonder, amusement, irreverence and annoyance; and disregard or ignorance of the rules, or even the existence of rules. Some spoke too loudly; stayed silent; and crossed the visible and invisible lines to inspect and sometimes caress. Many museum rules are put in place for good reason and become part of the experience in the space. In the main, rules restrict running and touching objects and so contain harm to the objects. Yet other unspoken 'rules' prevail without basis and can falsely constrict the environment.

⁹⁰ The 'socks only' rule to enter the installation was difficult for 9A1 and 2A1, thereby changing their experience of the objects.

Table 11: Objects shown as embodied texts.

		
<p>1C2/3 dancing with projected text so it was reflected on bodies.</p>	<p>6C2 went in close to artworks, pointed and gestured.</p>	<p>3C2 embraced props.</p>
		
<p>4C1 viewing works from a different perspective.</p>	<p>8C1 embraced objects.</p>	<p><i>Photo by 10C1</i> 10C2 seeking reflection.</p>
		
<p>5C1 climbing onto a showcase.</p>	<p>9C1 using interactive or immersive works as <i>stages or sets</i>. <i>Photograph by 9A1.</i></p>	<p>6C2 posing within immersive spaces. <i>Photograph by 6C1.</i></p>

Photograph by researcher unless otherwise indicated.

Children were willing to overcome these constraining rules when they pushed and pulled the mechanical interactives, used the camera seemingly non-discriminately, and fiddled with the MONA O. Older children helped younger children; they took physical care of the younger ones but also offered technical and content advice within and across families, for example, 4C1 asked: 'What's an email? What's an email? What's an email?' and 9C1 replied: 'A way of getting mail, in your computer rather than a letterbox.' And whilst these engagements were not always pre-cognitive, these were bodily and verbalised responses (Mulcahy 2015). The child in family 9 wrote of the powerful affect that posing for a photograph had upon her whilst on the trampoline sling of a MONA artwork (Figure 30).

The child is an actor – and a powerful one – in these assemblages, but not the only actor. Through shifting the focus from exclusively on the child to the family more broadly, other meanings arise. The children under 10 years of age wanted to touch objects and found this urge irresistible. Almost all the adults adopt a teaching, coaching and even disciplinarian role in response to the influence of their children, and of course the influence of materiality upon them. Older children in a supervisory role understood touching things was unacceptable, as exemplified by the eldest child in family 8 being more intent on obeying the rules than engaging in dialogue with her little sister. The behaviour of noisy and disruptive children then becomes attributed to naughtiness in the museum environment, privileging the adults' experience and a type of behaviour consistent with a conventional museum Discourse. Yet the child's reaction to boredom or discomfort could be seen instead as a form of critical review.

It is likely that not only children were stepping outside of their comfort zone into an uncertain realm during the study. They were the ones to vocalise their feelings. Children of families 1, 4, 5, 6, and 8 at some time during Visit 1 (and less so in Visit 2) expressed displeasure and/or discomfort and were perceived by parents as not 'on task'. Bored or 'bad' behaviour that does not spill into unsafe practices could be productive, however. A range of emotions served to prod, annoy and inspire reactions that translated directly or indirectly into noticeable engagement with the museum environment. Adults were sometimes held in the museum space by the force of the

emotion (behaviour) expressed openly by their child. They were mobilised to consider their own place in the space.

Fire spaces

Network spaces assemble and disassemble but not simultaneously. Fluid is a visceral character, more blood than water, slopping around spaces at a slow and steady pace and not bounded as in regional space (Law & Mol 2001; Law & Singleton 2005). These spatial typologies often co-exist and interact with each other, depending on the other actors and how they gather. Fire is the spatial imagery that is both present and elsewhere. For family 4 during the visit to MONA, the five-year-old child continually intervenes, questions, draws on the absent whilst sitting in the present. The adult is positioned firmly in regional space, intent on being an intermediary between the child and the museum, but ultimately shifts in her engagement nevertheless.

Fire space thrives on the unexpected, outflanking intermediaries with their predictability whilst occasionally seeming to fulfil a similar role to mediators. 10C1 looks intently at works during his TMAG visit, photographing details and linking ideas. He is keen to understand the mechanisms of the audio visual displays, but very silently. 10C1 is quietly fire.

And the first thing a fire does is precisely to cover its own tracks, to destroy the clues and traces of its origin, giving rise, in the same movement, to the uncertainty and controversies ... the effect of the fire is to mobilize the common knowledge of locals in a search for origins, a search during the course of which this common knowledge is rehearsed, tested and reconfigured. (Candea 2008, p. 207)

Candea is speaking about a real fire but for 10C1 the *fire space* operates to similar effect. Fire assists to mobilise literacies through the different and sometimes explosive ways that the elements (all texts) are entangled and exposed by many of the probing children.

Fire, the element of 'passion, action, energy, spirit, will and anger, not to mention creative destruction and sexuality' (Mol & Law 2001, p. 7), is present when 1C2 (aged 10 years) catches 'alight' in TMAG. He simultaneously accepts and rejects objects whilst

creating an embodied response to them, spelling out the wording on *The Tasmanian Welcome Arch* through tapping on the research microphone as if it were a beat box. The discontinuity of experience is the space in which unpredictable literacy-in-action nets emerge (see page 212).

Order tends to be superimposed with mess, becoming 'othered' into a pattern of presences and absences (Law & Singleton 2001, p. 342). Fire depends upon 'otherness', and that 'otherness' is generative (Law & Singleton 2005 p343). There is yearning and seeking the other in the teenager's voice of family 6 as she explores MONA with her friend. 6C1 literally and spontaneously sings with emotion and excitement. She evokes an imaginary future where she sails through space onto the trampoline below (page 190).

Fire promotes both reverie and chaos when centred upon an object, including a text. The reverie can be symbolised in a star pattern that shoots ideas into multiple absent others. In the case of family 9, the mother is aware of the creative thinking going on and wondering how to shape it. There is both fluid and fire as her child builds her interpretative case whilst simultaneously musing on being elsewhere, like the bear floating downstream she is viewing onscreen. 9C1 often adds other literacy forms to the mix by humming and singing to herself (see pages 200-201).

Families

Though my initial interest was in the child, the significance of this meaning is that every family member played different roles and displayed different spatial typologies in response to other actors. All parents to a greater or lesser extent adopted a teaching role that involved reading labels, directing attention, asking questions and getting their offspring back 'on task' within the museum as they reach to grasp the museum's interpretation. Despite this steady hand, the *other* is continually evoked. Fire incorporates memories and imagination (Jóhannesson 2005), which can be (f)actors in producing and consuming literacies. The other finds adult 6A1 when she writes of one of the MONA works being like the inside of her grandmother's house and her own brain (Figure 26). Each family member distributed their bafflement, readying it to be actualised within the family or manifested as creative thinking. Either way the topology of the spaces overflowed, not always as a fluid but beyond the possibilities

expressed by dominant forms of anything (Blok 2010), which could include museum or personal literacy practices. The participant children were fiery but within shifting assemblages of others--their parents, other siblings, the museum staff and the multitude of texts surrounding them.

8.3.3 Non-humans

I watched the families, but the premise of MS is that human qualities arise in relation to other humans and non-humans within every expanding/contracting and changing assemblages of activity. Was I so distracted by the child in the family that key actors were being sidelined or dismissed within affective encounters? I need to honour what the non-humans did as well. Barab et al. (2001), in their methodology for capturing and tracing the design cycle of practices and technologies, circumvent this inequity by honouring the symmetry concept. Their methodology traces the human activity as part of the environmental conditions that promoted or restrained these activities. I adopted this approach in Chapters 6 and 7 through mapping out networks generated by central actor/text in vignettes called depth studies. The museum objects were revealed as powerful actors.

Believing in and demonstrating the agency of things through mapping interactions is different from accounting for some *thing's* subjectivity as participants. The approach I adopt is to account for the reciprocal action between the human and non-human material elements through a series of narratives told by a thing via the Interludes. It must be the case that if some 'body' is touching a text, that text is also touching that body, or if some 'body' is taking a photograph so too is the object (camera). These pieces of creative writing in the Interludes take observable activity into account and imagine this as reality for the non-humans (Muecke 2012).

Another actor not picked up in Depth Studies but across many of the literacy-in-action nets is sound. Sound in its praesentia mode (Hetherington 2003) called to the participants, especially for the three families who responded to the cries of the Aboriginal women from overhead in TMAG Bond Store 2. Sound permeates the audios of the MONA families and they can be located according to the surrounding sounds, especially the visitor-generated bells and gongs attached to the trampoline. The gunshot and helicopter act as attractors. 10A2 speaks to her child about the texts,

immersives and audio visuals depicting Aboriginal people and their suffering. She says 'I don't think they deserve that. What do you think?' 10A2 is perplexed by experience as it reveals 'the conditions, forces and potential that might be activated within a proposition' as a Matter of Concern (Ripley, Thun & Velikov, cited in Instone 2010, para. 33).

8.3.4 Synthesis

If the child or one of the identified non-human actors is 'not taken as origin but rather as a participant in a relay of forces, materialities, and affects' (Dawney 2013, cited in Mulcahy 2015, p. 2) their actions can be seen in a different way. They are part of an assemblage rather than an actor following a known script or way of being. Instead of recounting child-like traits, seeing the children as enrolled in a network positions them as powerful actors in enrolling others in that network. The child has authority that is often denied but nevertheless influential, and that influence has to arrive from somewhere and similarly be placed into something. This serves the research focus on the family and not the child, whilst acknowledging that not all children (or adults) in families acted the same way in the research and that the relationships were complex. Similarly 'things' are often overlooked in their influence. So in questioning literacy as an expression of a fixed essence or structure, I can position it as an effect of continuous processes where the family group plays a role within an assemblage of texts. The fire typology is useful in conveying this complexity as a spatial device that places the adult, child and other texts in relation to each other.

Regardless of their role, children do not visit a museum solo and are always part of a group (such as family or school excursion) and subject to the networks that unfold. Similarly the texts, including museum objects, sit in relation to each other. Family groups may appear chaotic and without purpose, but they are actually an interweaving of personal and cooperative agendas. Despite not always acting cooperatively, the family agenda and the effects of the surrounding actors result in active engagement with museum objects as texts, as expressed in literacy-in-action nets. The spatiality of fire was there to fan the flames of affect. The museum as a space of affective encounters becomes identifiable.

8.4 Literacy mediators

8.4.1 Introduction

Literacy mediators are brokers in events, situations or instances where their role leads to change. This change can impact on the overall situation and applies to any or all of the participants (Baynham 1987; 1995). The Depth Studies presented in Chapters 6 and 7 were literacy-in-action nets where humans bring in existing family resources or co-opt what the institutions and related 'outsiders' can supply. These resources were labelled 'helpers' as they variously could have been mediators, intermediaries or even boundary objects. This section takes up these helpers and places them in the context of literacy mediators, whether these mediators are human or not.

Literacy mediators employed by the families were:

1. Human⁹¹
 - i. Researcher
 - ii. Museum staff
2. Non-human
 - i. Photos captured on the research camera
 - ii. MONA O
 - iii. Activity materials.

8.4.2 Humans as literacy mediators⁹²

Researcher

A literacy mediator can be introduced into a theatre of problem solving conflict when literacy is the issue, to move the situation into cooperation and ultimately

⁹¹ At times individual children and adults acted as mediators, as did the art educator assisting me with the practicalities in supplying materials for the larger groups in three of the second visits, but were of less significance than the mediators identified in the main body of discussion.

⁹² The emphasis in Section 8.4.2 is on literacy mediation for the human/family participants. It is acknowledged that there are other ways that mediators could have been identified within a MS framing. For example, the family participants could be mediators for the research as object/actors, or the MONA O mediated between the artist and their works on display.

negotiation (Baynham 1987). The research did not generally present as a problem to be solved⁹³ and hence was not the motivating influence to secure a literacy mediator. Difficulties in this study arose when the families required assistance to navigate the crossing between the literacy domains of family and museum. Hence I was actively recruited by the participants to help them understand the museum ecology. I had thought that intervention in the lives of the participants, in enlisting and monitoring them as they navigated museum collections, would define my role. I would be a literacy sponsor facilitating access to a new learning environment (Brandt 1998), but as can be the case the participants diverted authority to achieve their own ends. They required my role to become much more than a bystander once they were within the museum.

The most intense recruitment for my services as a literacy mediator comes from those least familiar with the museum environment, such as families 3, 5 and 10 visiting TMAG. The adult in family 5 persists in her questioning so that I continue to step her through identifying objects and in the process the museum's labelling conventions, which she adopts very quickly. Family 3 wish to transition from identifying objects to understanding how they fit with other objects. 'I don't understand what it says', says 3A1 physically touching a theme panel about national identity in the TMAG exhibition. The exhibition acts as a regionalised container for layers of history not made explicit yet underpinning the entire display and its interpretation. After talking together showcase by showcase it becomes apparent that the adults hold a series of misconceptions that need to be dispensed with before any understanding can be achieved:

- The convict showcase showing penal objects is intended for Aboriginal people.
- White people in Tasmania are all wealthy.
- Aboriginal people are the only marginalised group.

⁹³ Family 1 at the outset of visit 2 deals with a sullen 1C1 who announces 'this is going to be boring' to which 1A2 soothingly and hopefully replies 'come on be good ... be good' with this brief exchange typical of the few times children appeared to be 'off course' (but probably on their own track). 1A1 in anticipation of the literacy works for visit 1 expresses discomfort.

- The objects on display are not 'real'. Later 3A2 asks me whether the story in Bond Store 3 is 'real'.

Families 3, 5 and 10 have great interest in the Bond Store 2 audio visual interviews, with 3A1 saying he had never seen an Aboriginal person. Each of the adults asks on separate occasions which interviewees are Aboriginal, not what they are saying or what they mean, but whether they have the authority to say it. The children in these families are shy, yet 10C1 asks questions on how the interactives work. In both these scenarios the families are not seeking the services of a guide or even an interpreter, but a bridge between domains so that they can easily cross between the two, on their own terms.

Family 10's first visit exposed the perils of a museum assuming objects have only one narrative, though there may be multiple stories. I observed 10A1 photographing an object label that included an image that had attracted his interest. The label was for the inlaid table some distance away (I had acted as an intermediary through pointing this out). The table then took his interest completely. Unbidden I started to retell the story I knew of the image. 10A1 interrupts so he can share the story from his culture of the two babies raised by a dog, and he calls his family to the table. Onwards from this experience I focussed on participants achieving their own purposes. And this purpose was sometimes only indirectly related to the museum's message via its objects and other Texts.

Amongst the MONA families the adults welcomed my orientation and presence throughout each visit, including me as a member of their group. The younger children actively engaged me, particularly when their parent has ceased to be a source of information and/or reassurance. Where possible I tried to act in response to the participants' needs and replied through connecting the participant interest with an object or other text, rather than pre-empt their query by offering a pre-prepared explanation. I made use of the phrase 'I wonder' with the children or offered an alternate hypothesis in reply.

Museum staff

Museum staff are contenders for literacy mediators, but they do not always operate as such as they stay within the confines of the museum space rather than attempt to cross boundaries into other spaces or together with the visitor occupy a border zone. Staff wear a uniform and whilst this makes them easily identifiable it further delineates their role as an agent of the museum who only assists visitors to understand the museum's interpretative message. This *could* be part of a mediator's role if guided by the visitor and context. Those unfamiliar with museums (such as 4A1, 8A1, 6C2, 10C1, 2C3) approached museum staff in the exhibitions with their queries after modelling by me, and at other times museum staff initiated conversations (families 5 and 1). However museum staff were infrequently mediators and instead issued instructions and information and so were primarily literacy sponsors (Brandt 1998). Literacy sponsors act as agents of the dominant Discourse, at best code switching, when interpreting, responding to questions and initiating interactions – which I observed to be that of representing the museum story.

Occasionally staff in the study actively try and understand the literacy needs of the participants as when the youngest child in family 2 (2C3) questions a gallery officer about the wind-powered drawing machine. The staff member provides an extended reply, responding to queries of the attentive child and showing him component parts of the work and accompanying wall illustration. 2C3 attenuates this explanation to his siblings through switching register. As confident, almost self-contained visitors, 1A1 and 9A1 engage spontaneously with museum staff and manage to lead conversations in directions helpful to both parties.

8.4.3 Technology as literacy mediator

Certain tools did more than act as intermediaries; they were used creatively to serve the purpose of the participant. These non-human technologies serving as literacy mediators were images captured by the research camera, the MONA O device worn around the neck as both an ornament and tool, and activity materials supplied by the researcher. All were incorporated via talking as well as reading into literacy-in-action nets. For example, images captured on the research camera were used to:

Create

- in an activity such as 'I want to interpret this' in this literacy work
- identity as users who wanted to be noticed using the camera or have in their possession something that the museum also holds in its collection

Read

- location-prompting comments such as 'this is here, next to this'
- and discuss, for example, 'I liked this'
- and check accuracy for literacy works such as how an object looked
- and record the value of familiar items for family recollections and discussion

Play

- by collecting objects rather like a hunter 'bagging game'
- by confirming that the participant can use a camera

Talk

- as a mnemonic with images acting as a reminder of the day; expressed as 'I was here' (for the individual) and 'we were here' (for the family)
- so that others to see what the individual or family saw.

The use of technology in the 'children raised by a dog' (Table 10) is an exemplary in the use of these non-human literacy mediators. 10A1 photographs the text: museum object as a memento. He sends the photo to his sister in Melbourne so as to connect with her via a valued story. He also uses his own phone as both camera and interpreter through speaking into it, obtaining the correct spelling and putting that into a Google image search. The mosaic of images helps to quickly convey the word's rich potential. 10A1 used this technique in an interview with me and during the visits. In the second museum visit, adults from families 5 and 3 cluster around 10A1 to decipher the wall labels together.

The MONA O was similarly used, with the additional functionality enabling judgement via the Love/Hate function; additional content and interpretation about each work; and location reading as with a map where objects appear in the landscape. The response of holding the MONA O at chest height in front of the wearer was

noticeable amongst the participants, as it is with most MONA visitors, and it thus became an identifier. Authorisation or validation was an interesting aspect of mediation as it was also unexpected. Children obviously appreciated wearing and using the camera and/or MONA O technology (1C2; 2C3; 1C1; 6C1 and C2; 9C1 and 10C1). TMAG labels do not have the same functionality or even cache as a MONA O, yet some families touched and photographed them as well as reading the content.

Activity materials were used to actualise literacy-in-action and as such were nets and actors in themselves. The introduction to the literacy activity focussed on the materials and their potentialities, an offer enthusiastically taken up by participants willing to experiment based on home literacy and school practices. Materials, silence and content all shared the activity space. The expression 'sociomaterial bricolage' (Johri 2011, p. 215) captures the opportunistic manner of using available tools and artifacts for new purposes that are promoted through activity rather than thinking and planning. Each example of bricolage was made within an environment where people were encouraged to work together. Families are a ready-made team, and the participating families were willing to cooperate and negotiate with the aid of literacy mediators in the situation of difference they were invited into.

8.5 Literacy as a boundary object

Literacy as a boundary object considers literacy epistemologically or in other words as an entity where what you are looking for is established at the outset. Literacy as multiple (covered in the next section) has an ontological framing where reality is multiple. Both framings depend in practical terms on observation. The study does not privilege either view, as each constitutes a productive way to consider literacy in relation to materiality within museums and beyond it, reconsidering its key relationship between the visitor and the object. As a boundary object the search is for the demonstrable match, and multiple literacies are essentially performative. Both approaches allow focus on the contributions that matter to literacy, and how what 'matters' get moved about (Law 2004). Literacy as a boundary object (Akkerman & Bakker 2011; Star 2010; Star & Griesemer 1989; Trompette & Vinck 2009; Worrall 2010) or immutable mobile (Latour 1986b; 2005, pp. 223-32) is framed as a single network

residing within the regionalised museum space with connections via networks into the outside worlds. Literacy as a boundary object is capable of movement and portability across domains such as school and work or home and museum. Multiple Literacies Theory (MLT) appears to have great potential for applicability to museums as, in theory, it can and does cross domains.

All literacies are legitimate within MLT (Masny & Cole 2009). Nevertheless there are significant departures from other theories that grant it the flexibility to cross the threshold between home and museum. This flexibility is even greater than that of Multiliteracies, which houses a similarly broad church of textual use, including the gestural, spatial, audio and visual. It is in the consequences of this multimodality where the commonalities break down. Multiliteracies and others of the New Literacy Studies ilk continue to be concerned with the meaning of texts within contexts, whilst MLT values the capacities of literacy 'to be' and 'to become'. For MLT it is where the text leads rather than what it means. The social agenda of MLT is in the many aspects of life that flow through the actor that constitute memories, desire and the mind, (Masny & Cole 2009, p. 4). It is this latter quality that lends itself particularly to a literacy that can cross boundaries between the museum and home. MLT has let go of preconceived definitions of what constitutes literacy practices and instead it looks to 'moments that create ruptures and differences that allows for creation to take off along various unpredicted directions' (Deleuze 1990, quoted in Masny 2013b, p. 341). MLT's repertoire could therefore conceptualise visitors and visitor bodies as part of an ever-evolving textual resource, as they take up the 'visual, oral, written, tactile, olfactory and ... multimodal digital' (Masny 2010, p. 339).

Boundary objects emerged from consideration of materiality and translation (Star 2010; Star & Griesemer 1989) under the influence of Latour (1986b) and Callon (1986). Ground zero MS (as Actor Network Theory) worked on demonstrating the strategic logics within networks of materiality that hold the network actors together. As long as the relationships between actors held so too did the object. Literacy could emerge, stabilise, hold and/or disintegrate to be reformed with regionalised space as a single reality that could cross between Domains such as school and work, or home and museum. Energy could go into maintaining all the conditions necessary to stabilise this

form. But there is an alternative approach: instead of taking literacy for granted it could provide learning opportunities (Christiansen & Varnes 2007, cited in Akkerman & Baker 2011) due to the capability of boundary objects to promote unpredictable outcomes from known inputs. Literacy could act as a change agent in both Domains through being treated as a 'trading zone' (Law & Singleton 2005) between the regions.

This trading zone metaphor is supported by the materiality of boundary objects which can be 'stuff and things, tools, artifacts and techniques, and ideas, stories and memories' (Bowker & Star 2000, p. 298). These objects do not sit at the boundary crossing between realms like guards but occupy both spaces, playing different roles in each space (Edwards 2005). This allows for literacy in the museum to be different from that in the home but still within the relationships and network identifiable between domains. Therefore, rather than being confined to looking for traits that are exclusive to each zone, productive spaces can be found in both, giving rise to hybrid and mediated domains. The crossing can be a partial and temporary bridge which is unstructured when used by both domains and highly structured when only used by one domain (Trompette & Vinck 2009, p. 5).

Family 1 demonstrates MLT as a boundary object in their literacy practices. This family of five makes things in their leisure time in a literacy-rich family home. The family start the visit by laying a selection of boundary objects on the table, and these are emblematic of a family that brings their relationships and interests into the museum space. Museums collect and so do the family. The father confides to me at the conclusion of the visit that they have better stuff at home. On the first visit the middle child brings in some of the rocks from his collection. He is keen to tell me something about each rock. The father says he collects tools. Their literacy works are not always about the museum (apart from 1A1) but represent both continuity and change across the visits. Within MLT this is irrelevant as the family were sufficiently engaged to follow 'lines of flight' which could be viewed as pre-personal and virtual (Masny & Waterhouse 2011). Museum content (where it exists) is taken up in unpredictable ways. As for the children in visit 2 shared by families, 3,5 and 10 their works are a continuation of home or school literacies, representing other modes of thinking or even inventing and creating (Masny & Cole 2009; Masny & Waterhouse 2011). And whilst it

is difficult to determine the affective mood, the creativity of the family activity, the dissonance within the group and the changing experiences of the family members, including their home life, all contribute to the richness of these works (Cole & Pullen 2012, p. 49). The capacity of MLT to encompass their literacy practices and how museums may work with it as a theory can be amplified by treating literacy as the boundary object.

8.6 Literacy as multiple

MS has the resources to imagine literacy as multiple co-existing versions of itself (Mol 2010) enacted into being by multiple actors occupying different spaces within the same domains. This ontological position is explored in key MS texts covering, for example, the 15th-century Portuguese shipping empire (Law 2002), the Zimbabwean bush pump (de Laet & Mol, 2000) alcoholic liver disease (Law & Singleton 2005) and atherosclerosis (Mol, as discussed in Law 2009). Through rich descriptions of practice, doors open to each version of an entity as they are manifested. Objects become situated. Literacy within the New Literacy Studies paradigm is situated, but instead of being located in the socio-cultural in this research, literacy is within assemblages of people and things in space. Literacy is enacted rather than uncovered. For example literacy, after the fashion of a 'mutable mobile' in a fluid space, could be a system of using an iphone to supply a montage of images of a word to enable a shorthand translation⁹⁴.

Adopting Law and Singleton's (2005) methods in accounting for alcoholic liver disease, literacy is now explored as a different object enacted within regional, fluid and fire spaces. My review of museums in Chapter 5 assumed that both museums, particularly TMAG, undertook invisible and visible work to support an Autonomous Model of literacy predominantly residing in the regional and networked space, and like a school, work was continually undertaken to maintain a standardised form. It is possible to locate this model within the widespread culture of museums supported by museum objects themselves through their long reach and control via institutional loans and associated contracts. A few of the participants reached for into their armoury of

⁹⁴ An example of this practice is by Family 10 in Chapter 7.

structured writing in their literacy work (4A1, 2C2, 8C1). However, a clear positioning is wobbly as many participants disrupted the surface rigidity of imposed interpretive forms.

Fluid objects and spaces can be imagined as a set of relations that are maintained yet can change form to achieve the same sort of work. For example, a museum may change its mode and medium of communication but still have the intent of interpreting a museum object in a specific way. 'The metaphor of gentle flow and undisturbed reshaping is what is important here' (Law & Singleton 2005, p. 338). The adoption of electronic literacies within Multiliteracies and New Literacies is testimony to this space. Arguably MONA, in particular, could be imagined as a Fluid space with sets of relations that are different to other museums (particularly around the intent to shock) but essentially it retains the authority of the exclusively rational museum where the museum message has primacy within the two-way interaction between subject and object (Baker 2008).

During the second visit I planned to immediately return to The Red Queen on level 3 with family 6. However, 6C1 wanted to show her family objects she discovered going 'off road' during Visit 1. The mother and I agree to follow the girls. The subsequent literacy-in-action nets reveals the intensity of the visit as each member tries to make sense of what the institution means for them, globally and at an object-as-text level. Reflections from the previous visit flow into and inform this visit. The children from the previous visit are proficient MONA O users. In this net 6C1 chooses to consult her O to position herself in the space whilst 6A1 is now intent in discovering content. 6B2 seems to have temporarily relinquished her MONA O expertise to follow her older sister. The Fire space is present as each is enjoying shock and surprise, but in doing so there is an air of stability, confidence and confirmation.

Literacy is of concern to the community, yet it is an ambiguous term amongst groups of people and, in particular, it matters in different ways to different populations. Literacy as multiple works can meet this concern constructively. There are elements in the vignette above that net the family's meeting the gallery's expectations in a fixed way as well as disrupting them through Fluid and Fire spaces. This creates consistencies with many theories within the Ideological Model (including Multiple

Literacies Theory), validating family members having different experiences of the same space. This does not preclude cooperative interaction but allows for actors to engage and provoke their own literacy practices within the generative family assemblage as they strive for self-improvement within family identities. Arguably this change is not simply one of uncritical subjectivity but a form of critical engagement leading to personal transformation within the family as a collective.

Summary

The ensemble of meanings in the four preceding sections was used to activate the identification of literacy from three sources: the stories generated by the families in their homes; the stories generated on behalf of technologies (stuff or things) and by the museums themselves. The stories were streamed in varying degrees via the concepts of materiality, spatiality, affect and mediation which nested within the meanings. In this thesis every chapter is an entry point into the complex relationships between context, theory and practice of literacy within museums. The thesis now enters its final stages heading towards the exit.

PART B CONTRIBUTION

8.7 Research questions addressed

On the basis of the contextual, theoretical and methodological reviews in combination with the fieldwork, the research aims of this study were galvanised by the following research questions:

1. What can the understanding of literacy offer to museums and galleries?
2. Which resources are of use in identifying and mobilising literacies?
3. How are the concepts of materiality, spatiality, affect and mediation useful to literacy in museums?

The answers to these questions and implications are synthesised in the next three sub-sections.

8.7.1 What can the understanding of literacy offer to museums and galleries?

Literacy is a slippery term. Even within this research literacy can be referred to as engagement, viewing, reading, communicating. Each of these descriptors can be consistent with different literacy models. In other words, the potential benefit to museums in understanding literacy is to see how theoretical models may be working or put to work in achieving different outcomes for the museum and their visitors. The approach to literacy can depart from only being a response to an externally determined standard.

This research interrogated various theoretical models of literacy, acknowledging their relevance and contribution and, as such, an a priori concept of literacy was not selected to analyse the fieldwork. This study positions literacy as a Matter of Concern (MoC) object, in the presence of museum objects, as practised by families. As a MoC, literacy is an assembled 'object' rather than a scientific Matter of Fact (Latour 2005). This allows literacy to be located as an explicit values position, recognised within 'a gathering of elements' and durable through devising it a style that 'does justice to what is given in experience' (Latour 2008, p. 55). Viewing literacy in this way allows for multiple imaginings of its processes and impacts as a powerful union of alternatives to the seemingly disinterested objective imagining presented by the Autonomous Model. As part of the rationale it is instructive to reflect on this model to reveal the unquestioned assumptions that may be at play within museum spaces.

The Literacy network of the Autonomous Model extends from the systems embedded in curriculums, syllabi and activities for children attending school or participating in formal learning activities in community settings. Adults must be part of a formal network to be adult learners. There is no community of learners as such within this model, rather an assembly of individuals requiring help. Literacy is buoyed along these byways as an unchanging 'immutable mobile' such as evidentiary literacy levels acquired through testing and mapped into geographies of low literacy resulting from a focus on demographics. Literacy becomes part of the moral economy of stability and so it is supported by institutions in the name of sound social policy reflecting broader social and educational policies. With literacy as the Autonomous Model,

imagining is precluded from being seen as a dynamic landscape of practice, which is at odds with the life and purpose of cultural institutions.

The values of this thesis questioned the Autonomous Model's logical outcome of judging people as proficient (as readers) within individuals or groups, but acknowledged that it needed to be named for museums. The literacy theories nested within the Ideological Model promote both greater abstraction whilst simultaneously putting practices at the centre of the enquiry (Bhatt 2014). Literacy becomes a gathering of concerns, terms and meanings (Latour 2008) and, significantly for museums, assembled in practice. This study asserts that literacy is value-laden matter brought into being via practice that aligns actors in a particular way and works iteratively within spaces. In drawing attention to how literacy arises as sociomaterial assemblages within museums it also shows how that literacy can function as a platform rather than an end in itself. The end in itself could be changes in practices by museums. All Ideological theories would value the visitor and their literacy practices within the museum. Theories within New Literacy Studies incline towards critical reading and writing of texts as a literacy outcome, with other modalities playing a supporting if not significant role. Multiple Literacies Theory takes reading and writing along with an expanded range of modalities to support the outcome of personal transformation. Therefore, whilst literacy is temporally and spatially problematised it is not a problem, rather an opportunity to transform the museum's own literacy practices in keeping with the practices that exist.

The socio-cultural framing of the Ideological Models has legitimated the place of literacy within museums and the importance of practice, whilst the sociomaterial turn has explained the changing relationships with interpretative technologies whilst increasingly anointing objects as text. This study has journeyed through theories moving literacy across various continuums: from an individual reading and writing printed texts associated with each museum object to decoding the object as a text itself; from literacy being an individual pursuit to a collective activity; from that collective assemblage being made up of only humans to also including non humans; from literacy not simply decoding a message but kindling novel experiences and ultimately

validating each assemblage and the engagement with texts that it engenders. Each theory could be used knowingly in a museum's armoury of literacy practices.

Each theory made a contribution to the study but is one literacy theory preferable to another? In the spirit of Laws (2009), there can be no synthesised view but there may be a particularly *helpful* one. The helpful theory that most aligned with the fieldwork observations is that of Multiple Literacies Theory (MLT). MLT encompasses previous theories within the Ideological Model whilst aligning with the transformative nature of museum visits as witnessed via the process of translation within observable family literacy-in-action nets. This helpful model should be treated selectively. Within the expansionary MLT, literacy can take 'in a word, markings, gestures, attitudes, and ways of communicating, human and non-human' (Masny & Waterhouse 2011, p. 291). The cautionary note is that texts are events and so can never be representative. Therefore reading is not about interpretation; rather it is about the sense that emerges (Masny 2012). The logical conclusion to this is that museums should dispense with their story and interpretation which would be ultimately unhelpful as we would be simply left with storerooms. MLT instead could be deployed to acknowledge the importance of the self in reading worlds whilst situating these senses within a range of senses, meanings and, indeed, museum and visitor stories.

8.7.2 Which resources are of use in identifying and mobilising these literacy practices?

Within this study resources effectively became actors within assemblages specific to the issue and situation at hand. To further grant the study portability these actors are also termed resources, which include relevant key tenets of MS. Theory assisted the research at every juncture, including the forms in which it was analysed and presented (Johri 2011), with MS promoting variations on the formality of the academic canon (Latour 1996a; Latour 2005, 2005, 2012; Law 2016; Muecke 2011, 2012, 2016; Porsander 2005). This section presents the powerful actors in the research machine.

Writing into the research

MS promotes actors to have a voice in the research, and this has been achieved through writing the families within their stories prior to distillation into meanings and

the unfolding of ideas through the creative writing of the Interludes. The turbulent and interrogative qualities (Wylie & Anderson 2009) apparent in the fieldwork linked affective materialism to the writing process. This had two outcomes for the research. In connecting to the space between the virtual (Masny 2009) and the actual, I was propelled into a different way of thinking about objects, people and things in museums, through activating a *material imagination*. 'What it once was is no longer. It is different' (Masny 2009, p. 3). It is difference that allows for creation and invention to occur continuously. The dialogues forced closer consideration of each literacy-in-action net and actively expanded the number of actors participating in the conversation and, indeed, in the emerging literacy networks.

Working with non mainstream visitors

The choice of families using Standpoint Theory facilitated the intensity of interaction between the participants and the museum by throwing differences into sharp relief. The participants were not deemed as highly resourced people of influence and were placed in a praxiographic position of rupture (Bueger 2014, pp. 395-96) having been taken to a new place replete with new experiences. Despite the seeming chaos of a family group visit their willingness to mobilise creative processes within the museum mark them as particularly valuable resources for identifying practices including literacy. The child was a particularly strong actor in any ensemble encompassing all stakeholders in the research including the sites and other educational providers.

Forensic attention to practice

The methods used in the fieldwork were congruent with literacy practices and used via the praxiographic research strategy. The observations and reflections were deeply and practically forensic, resulting in detailed transcriptions and intensive memoing which in turn promoted new avenues of thinking.

Take joy in your digressions. Because that is where the unexpected arises. That is the experimental aspect. If you know where you will end up when you begin, nothing has happened in the meantime. You have to be willing to surprise yourself writing things you didn't think you thought. Letting

examples burgeon requires using inattention as a writing tool. (Massumi 2002, p. 18)

The close observation addresses my contention that museums can be performative spaces where assemblages of families, objects and texts are simultaneously demonstrating and generating literacies, and where families, staff and stakeholders can creatively engage. The minutiae of the research intervention becomes dynamic, innovative and continually in conversation between objects, bodies and texts 'foster[ing] affective flows between event and research audiences' (Masny 2013, cited in Fox & Alldred 2014, p. 410).

Crossing boundaries

Boundary objects and boundaries is a contributing theoretical imagining seen within Figure 42. Three types of activity are identified at a boundary (Akkerman & Bakker 2011, p. 151). Most relevant is that of reflection and transformation where the former makes explicit the knowledge and assumptions mobilised in the interpretation of the object (in this case literacy, but the term could equally apply to a museum object) and the latter quality of transformation which can lead to changes in literacy and museum) practices. Both are predicated on dialogue at the boundary about the discourse and practices.

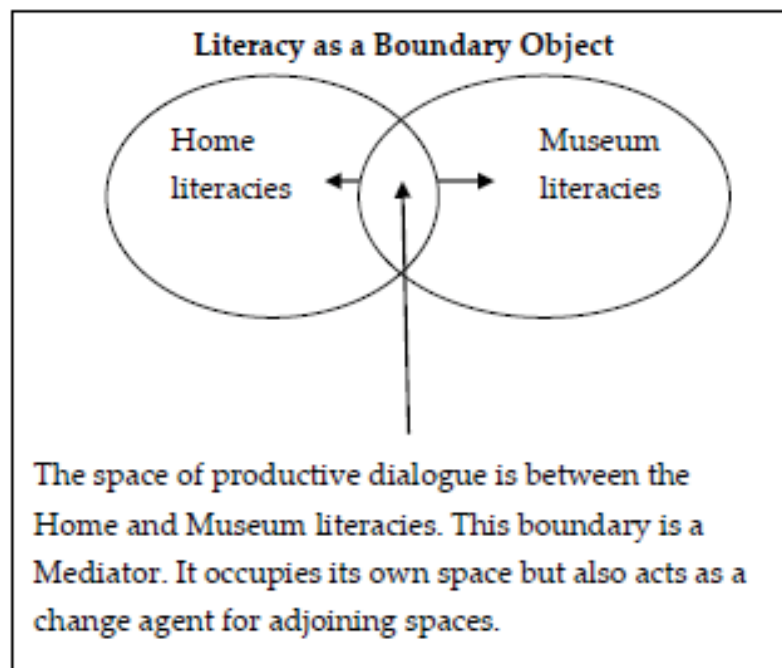


Figure 42: Literacy as a boundary object

Dialogue is the focal point of interest for transformation, which can also be a site of conflict, such as a clash of Discourses. For museums and their need for change, dialogue could yield a welcome result with a cautionary note: continuous work between actors is required at the boundary to preserve and amplify this productive space. This communication is not intended to flatten the differences but given 'a certain problem space, practices that are able to cross their boundaries engage in a creative process in which something hybrid – that is, a new cultural form – emerges' (Akkerman & Bakker 2011, p. 145).

The *thingness*

Whilst the potential causal power of museum objects has been acknowledged in the literature (Latham 2013; Navaro-Yashin 2009, Hetherington 2003, 2010), it has not been applied in practice by museums. Each Ideological Model supports 'reading' objects, but this alignment has yet to be fully exploited by museums. The 'thingness' of literacy arose strongly due to the uptake of affordance capabilities within electronic technology. This 'thingness' has swung to artifacts and their role in literacy through MultiLiteracies and Artifactual Critical literacies. Illuminating the relationship between objects and literacy has facilitated the potential for museum objects to be increasingly valued as texts. This appreciation of materiality could be extended to better understand the potential dynamic between the significant domains of home and museum. This was demonstrated in the study through requesting families to photograph their home, as prompted by meanings identified as arising in museums. The consequence of this was that families exposed items and elements of value and these in turn exposed examples of and attitudes towards home literacy. Materiality was a presence and a driver, with attention turned to not only the potential of museum objects but all the stuff families bring with them when crossing from home to museum (the family smartphone, iPod, iPad, clothes and their own technological skills).

The encounters

Encounters are based in action and movement enabling bodies, including museum visitors, to think differently and creatively and also to affect others around them. The concept itself becomes a useful tool. In applying it I could not only identify

change in the participants I too think differently – about the participants and museum engagement. This is consistent with the MS view of actors assembling and enticing others into previously unknown spaces of possibility and 'alterity' (Law & Mol 2001). Take the families first. The praxiographic research strategy enabled the use of methodological tools so that changes in the families and literacy practices were tangible between visits. They were observed as having new confidence to enter the museum, find familiar objects of interest, utilise existing literacies, and combine a range of actors to suit their own tactical and unplanned engagements as well as those literacies provoked within the museum. The families as *experts* within the strategy were sufficiently confident to reflect of their visits:

Thinking outside the square. Looking at things and being able to get some understanding of the meaning behind it ... Good verbal skills so if you go with someone you can talk about and compare what you are looking at. (4A1 adult visitor to MONA)

Nevertheless *thinking, understanding, searching* and *valuable* were words identified by the participants as crossing between home and museum. Some adults had never been in a museum before, either in Australia or their countries of origin or transit, yet they developed strategies to negotiate a new territory through mobilising resources as actors around them:

I think if I read I do understand probably more than fifty percent I think. Not too it's difficult to understand the whole paragraph and any word. I have to work on it. If you know the main word you can make up the whole story ... I think, the first day for me I look, any picture, if any photo, some ... *thing that make you feel like it's different* you know. For example if I see something I have never seen at home or at school or at public area that for me is interesting and that if I don't understand this one then I go and read the information, if I do not understand maybe I ask someone maybe the words maybe a difficult word for me. Yes, the first day we look we think what is this and then we read the information. (3A1)

The families surprised me, yet with ongoing close observation and reflection I was led to new insights within the museum. I was initially disappointed that they did

not respond in the literacy activities in the same way that my 'write-your-label' projects (outlined in the Preface) had managed. Yet if I stopped looking at what the works meant and looked instead to what they did, I then could see how actively engaged they were. Their engagement was affective, cognitive, pragmatic and quixotic. Changes in visitors occur through 'an unfolding of the self ... compelling as an expression of an affective museum visit or encounter' (Baker 2008, p. 23).

8.7.3 How are the concepts of materiality, spatiality, affect and mediation useful to literacy in museums?

It is not a 'matter of reference, but as one of manipulation' (Mol 2002, p. 5) as to who and what you stand with, where you stand and how the realities are crafted. Reality is the result of heterogeneous assemblages (Latour 2005), never completed (McCoy 2012) and enacted through overlapping and coexisting realities of 'more than one and less than many' (Law 2004, p. 162). The concepts materiality, spatiality, affect and mediation were found to be strong linking threads within the study's framing theories. These threads are interrelated across the theories of literacy, material culture and material semiotics, and between each other. Each was separated to serve specific purposes within the research, which had made its positioning explicit. Take the material.

Materiality

The material turn within literacy was evidenced in three ways, with each relevant to museums: interrogating the changes in literacy practices as a result of interactions with technology, particularly computers, but equally applicable to interpretive technologies used in museums or objects themselves; acknowledging literacy as a system and therefore a technology capable of persuasion, branding and identity, including use within museum print materials and digital communications; and the use of artifacts as a sort of text within literacy episodes or action nets that *explicitly* includes objects, technologies and people.

The study incorporated materiality in its units of meaningful analysis, where the role of a text is that of 'any entity that is part of an assemblage of entities from which meanings can arise and perspectives change.' The nets are used to illustrate *how*

materials perform in practice and *what* are thereby performed as instances of literacy practices by participants in the museum. These instances of use can be aggregated into events or practices, depending on whether they are framed within New Literacy Studies, Multiliteracies or Multiple Literacy Theory.

Within material culture, museum objects were revealed in the literature and in practice by the participants as having multiple material roles and realities. Objects resonate as treasures. They are used as mnemonics. Despite being regionalised via tight classificatory systems, they maintain extensive and fluid networks. They are multiple and at times they manifest as hybrids within print texts and display systems. They can be animal, vegetable or mineral, animate, inanimate, large, small, or nothing but an idea documented in code. They play different roles depending upon their relationships to people and things within and outside the museum. They can be anointed with institutional meaning or shimmering with their own vibrant materialism (Bennett 2010). Objects exist materially in relation to other objects and people – rather like literacy.

Spatiality

Spatiality features in literacy theory such that the treatment of time and space could be an indicator of the model of literacy adopted by an institution, either consciously or unconsciously. The spatiality markers applied in the study moved beyond objects tightly bound within a Euclidian physical container to markers of identity within assemblages of people, texts, tools, artifacts, locations, and communities of practice (Mills and Comber 2013; Hetherington 1997). These assemblages could be seen in light of other kinds of spatial forms such as network, regional, fluid and fire. These spaces extend beyond the tangible where objects exist in relation to visitors as a hybrid or 'a continuously enacted relational effect' (Laws 2004, p. 161) It is in the Fire space where we can think of a different museum, one where presences and absences flicker continuously. Fire is emblematic of the virtual, unreal yet creatively sparking 'alterity' and the 'becoming'.

Affect

It is within affect that the concept of an 'encounter' emerges in both literacy and MS and it is within encounters that transformation is the most apparent. Affect is an actor within a literacy network and an endless network in itself able to act upon all other entities. This study looks to these networks in a broad way, encompassing humans, non-humans, minds, actions, social forms, abstract concepts and processes, calling them all texts⁹⁵. This concept of encounter has been used in relation to learning as in 'if encounters in and with the world force us to think, then learning should be understood as the outcome of those encounters which enable a body to expand or increase the array of bodies, objects and entities it may affect and be affected by' (Duff 2013. p. 195). A literacy encounter grants a body the capacity to be a more powerful actor in the network. These encounters were manifested through the literacy-in-action nets.

Affect, like the fire space, is an unsettling process variously described as evoking the imagination, building empathy and rupturing space and time (Witcomb 2013; Baker 2008). Affect was unlocked within the research through its manifestation as emotion through observations of delight, disturbance, intrigue, surprise and validation of the human bodies via the participants. Where objects and literacy can encompass 'a visual, a sound, a word, a movement, animation, spatial dimensions' (Rowse & Walsh 2011, p. 55) this means that 'reading' an object can be relayed through the body, not simply the mind via language and discourse. Physicality and emotions are intertwined in the range of responses, as emotions roved across faces and postures, surfacing as unbidden or intended elements of literacy-in-action nets.

Mediation

Mediation played two roles within the study. Mediators feature as a kind of boundary objects and as literacy mediators. Literacy-in-action nets were collective experiences and arose in the museum from an assemblage of actors and activities,

⁹⁵ In the study bodies could be texts and texts are many. Whilst it is difficult to avoid the human centeredness of the analysis, technologies were given a voice and that voice is via the narratives in the Interludes.

spoken, read and made together in relation to a museum object. At times the families were assisted in their negotiations by some form of helper (human and non-human). These helpers could be viewed as other actors within the assemblage. These actors were drawn in and picked up, and occasionally they intruded into the inner circle of family members. Not all helpers were mediators and of these not all worked consistently as literacy mediators, yet they were useful to acknowledge within the museum as the different roles and capabilities can be put to work in different ways. The literacy mediators, both human and technological, identified in this study are action infused, and of greatest import is their capability to assist as change agents. They can work within the museum but also at the boundary crossing between the museum and other domains.

Together

Through gathering materiality, spatiality, affect and mediation within the relevant theories, these key concepts contributed to stabilising the findings as meanings through their potential focus as change agents and denominators where literacy was gathered up as an *object*. Objects are *material* and within literacy-in-action nets are foregrounded through discussion by hybridised family members (for example, person/camera; person/label; person/everyday literacy) within the family dynamic. Using different *spatial* objects affect is manifested in different ways and becomes identifiable. *Affect* circulates through extensive networks of objects and technologies as entities or via their hybridised states within the museum. Literacy *mediators* can be recruited as actors to extend these assemblages. These hero concepts or themes occasionally overlapped and in their tumble could be confusing, even when directed at one object. A principle that assisted in enabling unified thinking is where the material is no longer separate from the immaterial realm it becomes an affective or relational materialism (Anderson & Wylie 2015, p. 319). This principle is the logical extension to symmetry within MS and encourages the thinking deployed in the implications for literacy: matter can be many versions; matter can be interrogative; and the liveliness of matter can be internal yet able to re-affect (Anderson & Wylie 2015).

8.8 Synthesis

[C]oherence is simply an aspiration. In practice, practices are always more or less non-coherent. They work by enacting different versions of reality and more or less successfully holding these together ... If we look for non-coherences within practices we will find them. We will discover collateral realities (Law, 2012 p. 175).

This study aimed to identify fertile ground at the intersection of families, literacy and museum objects. As anticipated by Law (2012), the search led along surprising pathways. The literature covering this triad is scarce and non-aligned. The scarcity is even more apparent when searching for studies supporting the agency of marginalised groups, including families within a museum's scholarly discourse. Families plus objects is my site of interest, which is exposed through generating and observing literacy practices using a sociomaterial lens. Whilst attention to experimental and novel relationships has proved compelling, the connection between assemblages of people, technologies and ideas was initially complex and confusing. The complex remained but transferring the material from the *lumpen* to the *networked, affective, spatial* and *discursive* has enabled the imagining of a static fence and a field to be converted into a landscape of potentialities. A landscape where

...what is not can still become, what is realised pre supposes possible in its material. There is an open dimension in people, and dreams, plans live within it. The open dimension is also in things, on their leading edge, where becoming is still possible. (Bloch, cited in Anderson & Wylie 2013, p. 330)

The dimension referred to by Bloch in the quote above supports the vision of intangible spaces that exist in tandem with the known museum (Baker 2008; Witcomb 2013). This parallel space was uncovered through the close observation of visitors talking, reading and composing within the museum, assisted by the resources they were attracted or drawn to. Home literacies were invited into the museum and, together with literacies that arose, were validated through the research methods. Visitors were not judged by their ability to 'crack the code' of the museum messaging

around objects but were assisted in their exploration of these objects. The research enacted the realities that could be useful in further museum practices. Changes in visitors occurred through 'an unfolding of the self ... compelling as an expression of an affective museum visit or encounter' (Baker 2008, p. 23). This change is not simply one of naive uncritical subjectivity but a form of critical engagement which, when informed by theories of literacy, can lead to personal transformation. A distinct and enduring collateral reality of this study is the valuing of the multiple yet shifting relations inherent in materiality. Things do not act alone; they have friends, compatriots and co-conspirators. Within a museum these relationships can be uncovered through theoretically informed performance and practice. The strength of this study is not in definitively identifying an object called literacy but in understanding the possibilities the search enables within the museum space.

8.9 Implications

Museums currently operate in denial or ignorance of the literacy practices of their visitors – potential and present. This research does not deliver a new definition of museum literacy. Instead it uncovers ways that cultural institutions might think and talk about literacy based on what visitors actually make and do with their own literacies, rather than the meanings or learnings the museum would like them to have. It also introduces tools that can enhance this new thinking. Therefore, whilst the outcomes of this study are not necessarily scalable its methods and methodology are eminently adaptable.

A significant implication is the way that museums can work with visitors. After the fashion of Grek (2004) and her suggestion of using critical ethnography as a research and programming tool, museums can use literacy practices in the same way – they are practices after all. Whilst there is some interest in research focusing on how visitors interact with installations and negotiate their meaning (Fyfe 2006) visitor counting, interviewing and tracking within an individualised constructivist paradigm are the more popular techniques within museum and visitor studies (Falk & Dierking 1992; Hooper-Greenhill 2006, cited in Greenblatt 1990). Such studies employ mixed method and quantitative strategies to assess exhibition traffic and demographics so as

to generalise more broadly and improve attendances. This research constitutes progress in moving away from the constructivist perspective, with its concomitant focus on the individual in relation to any meanings the museum may or may not offer. It suggests museums can better utilise the strengths of all visitors, including families; by moving away from the object-subject dichotomy into an ensemble of material relationships, into instances called literacy-in-action nets that can be deeply mined for notable interactions.

Through this study museums can consider 'things' in a new way. The principle of relativism is extensively exercised by MS and challenges the human/non-human divide and traditional powerbases. This approach sits comfortably with previous literature on vital materialism that grants things immanence (Coole 2013; Bennett 2010b; Navaro-Yashin 2009). Rather than being suspicious of visitors disappearing into 'their laptops and smart phones [are] replete with memories, social relations, micro-cosmologies, rituals, and performativities as the bricks and mortar of homes or the tangibility of objects' (Clarke 2014, p. 25) these laptops, phones and other devices can become part of the loci of enquiry within museum literacy practices.

Literacy is a way to not only investigate relationships between families and objects but also to illuminate potential spaces that activate literacy practices within families. Looking at the spaces opened up by the literacy practices, the abilities and interests that family members bring to the museum's interpretation of objects is potentially exciting for museums as it could lead to offering that space's affordances to all visitors. In looking and listening at the relationships and potential spaces, museums will be given the opportunity to see their own communicative practices in a new way and make changes. In the spirit of the Interludes, museums can view and write about their objects differently. In the same way that visitors are no longer judged by their literacies, objects are no longer confined to static immovable interpretations. Based on this research, museums have the grounding to instigate the following activities:

- Undertake a literacy audit within their museum by identifying prospective actors as resources and the roles they could potentially play in re-framing exhibitions and programs. Boutique literacy programs could then become part of range of activities within their response armoury.

- Form partnerships with literacy providers, including ways to attract visitors with self-identified low literacy into the museum to start a relationship with them.
- Identify potential literacy mediators amongst staff and offer training within a literacy paradigm.
- Validate and enhance the visitors' own technology as a literacy mediator within the visit.
- Consider deploying electronic assistants (such as the MONA O) from the museum as literacy mediators.
- Incorporate families (including young children) and their home practices into visitor research.
- Re-purpose the style of research methods used in this study as public programs to link homes to museums via a range of literacies.
- Amplify the opportunities to engage all senses in object engagement, not to achieve a pre-set affective reaction but one that is responsive to the visitor's own affective engagement.

Based on this research, museums can look at the range of materialities within their domains in ways that include an understanding of literacy concepts, theories and practices. They can deploy a material imagination, not so as to dispense with the 'rational' museum but to acknowledge that the 'delirious' museum exists (Baker 2008) and can be equally as powerful. Within material culture, museum objects were revealed in the literature and in practice by the participants as having multiple material roles and realities, and therefore should be treated as such by museums in their interpretations.

8.10 Future research

There is a potential disjuncture between the local scale of the study and needs of museum administrators, particularly considering the complexity inherent in studies undertaken in the ethnographic shadow of New Literacy Studies and other theories that prioritise practice. To generate achievable policy strategies, further praxiographic studies at the local level based on the theoretical methodology advanced here would

facilitate sector-wide consideration of literacy and potential stakeholders locally as well as nationally. The study could be replicated where each family visits both a museum and art gallery to further consider differences between the types of sites, particularly in view of the nature of the meanings. It would be also of interest to take the research within the museum 'family' of visitors to, say, their membership base.

The link between literacy and identity was touched upon but not extensively exercised. The application of 'figured worlds' as a concept in relation to objects would be a fruitful avenue for scholarship and visitor evaluation. The net in these 'worlds' are cast wide in encouraging items of popular culture and presumably cultural objects to form attachments as figured worlds to transport people from their current position into another (Bartlett 2005; Bartlett & Holland 2002). A concept that is caught by this broad net is that people may author themselves new identities and create new worlds through an emerging sense of a powerful self through interaction with objects.

This study focused on families rather than children; nevertheless, the child was a strong actor. Another research avenue would be to specifically account for the adult within the group participating in exhibitions designed for families. The impact on adult literacy within the family could start to break down the misconception that exhibitions for families are only ever about the needs of the child. Indeed spaces of 'alterity' as inspiration and new thinking may be found here.

8.11 Exit

A myriad of technologies and texts, stakeholders with interest and expertise and two museum sites, all located in Tasmania, joined me in this exploratory study. Happily not everything met expectations, liberating the research to deliver collateral meanings: innovative methods that can be re-purposed within museum programs; theoretical insights for identifying and tracking literacy within museums and the rich dynamic vein of transformative experiences that assemblages of objects, people and ideas can yield. This study brings literacy to the forefront in museums assisted by material semiotics

Considering literacy in museums is more than the search for a more 'readable' label. I have not dismissed the value of a readable label able to speak to the interests of

visitors but alone this search will limit museums in their understanding of the full repertoire of literacies associated with collection objects and the benefits this repertoire can bring. Museums present thematic exhibitions that integrate a range of texts, including objects, written copy, graphics and multimedia, in increasingly complex ways to tell a story (or stories) or to support a particular perspective. Engagement with these objects within the multimodal environment could be characterised as interaction between multimodal languages within a social, emotional and physical, rather than purely cognitive, set of experiences. The study has established that the written text is not the sole weapon in the museum's communicative armoury as otherwise; reading and writing is the extent of literacy within the museum; the solution to label comprehension will involve fitting the cognitive level of the text to the reading abilities of the visitor; and objects are merely props. The participants in my study indicated that whilst reading is valued they are willing and able to tackle the totality of what objects can offer in their own way within the museum, drawing upon available resources, including people and things. Reading a label is one part of an entire host of ways that visitors enact literacies in their engagement with objects. Similarly this engagement extends beyond understanding the museum message into hinterlands and alternate spaces.

Modes and media of communication vary meanings within the streams and flows that make up the texture of the contemporary world, and historically literacy is one of the most important channels through which meanings have crossed space and time. (Kell 2006, cited in Bhatt 2014, p. 243)

Literacy is not a set of skills carried through the door of the museum to be judged as useful or inadequate. This suggests a barrier to be climbed each time a visitor is tempted to cross the museum threshold. As a result of the research, instead the imagining becomes a line of dialogue between museum and visitor, where literacy is activated. Museum objects have the potential to re engage the museum with the diversity of visitors and the host of things, including those literacies assembling within museum spaces.

INTERLUDE #6

RE-SET MUSEUM LITERACY!

Re-set⁹⁶

MUSEUM LITERACY!

FIELD BOOK

English

Museums were once a way to differentiate past and future, north and south, progress and regress, radical and conservative.

However, at a time of profound ecological mutation, such a compass is running in wild circles without offering much orientation anymore. This is why it is time for a reset. Let's pause for a while, follow a procedure and search for different senses that could allow us to recalibrate our detectors, our instruments, to feel where we are, where we might wish to go and where we might find ourselves anew. No guarantee, of course: this is an experiment, a body experiment *ein korper experiment*⁹⁷

⁹⁶ Interlude#6 inspired by the workbook prepared for the 'reset MODERNITY' exhibition curated by Bruno Latour, Martin Guinard-Terrin, Christophe Leclercq, and Donato Ricci. The exhibition was staged during 2016 at ZKM I Center for Art and Media Karlsruhe. The exhibition and publication of the same name is based on continuing work by Latour and others that aims to overturn the 'modernist project' and its related ethos of separating humanity from nature, science and culture as documented in the 'Inquiry into Modes of Existence' (Latour 2013). The workbook can be viewed at <http://www.bruno-latour.fr/sites/default/files/downloads/RESET-MODERNITY-GB.pdf>. This Interlude is a tribute to Latour's contribution to the thesis through adapting the workbook format to present the thesis outcomes.

⁹⁷ The original reads 'Modernity was a way to differentiate past and future, north and south, progress and regress, radical and conservative. However, at a time of profound ecological mutation, such a compass is running in wild circles without offering much

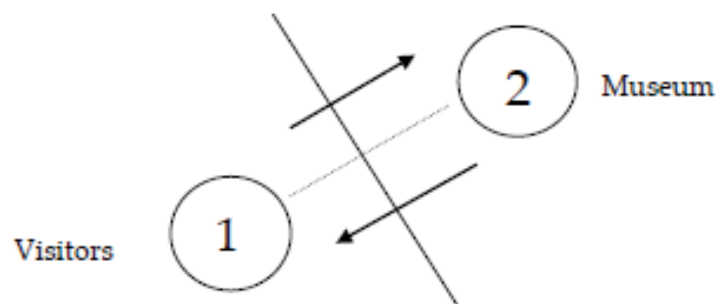
'HOW TO USE THIS FIELD BOOK

This field book could be your companion as you re think how your museum might be. ⁹⁸ There are six recommended procedures, each allowing for a partial reset. Each reset is accompanied by a sample literacy-in-action nets from a doctoral study. Look out for such samples in your own museum.

'LET'S TOUCH BASE...

How do we transmit [museum] culture from one generation to the next? *How can we orient ourselves in time and space?* It is never an easy task. Especially for those who used to call themselves “moderns” or “postmoderns”, because they always have an uneasy relation with tradition and inheritance. Are they not supposed to break away from tradition, so as to free themselves from the weight of the past? But free themselves for what?⁹⁹

Procedure A: re-think the museum



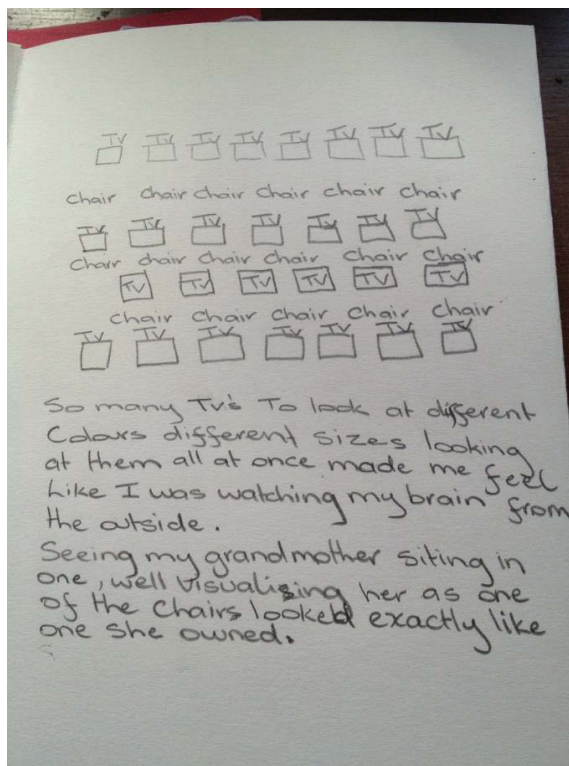
orientation anymore. This is why it is time for a reset. Let's pause for a while, follow a procedure and search for different sensors that could allow us to recalibrate our detectors, our instruments, to feel anew where we are and where we might wish to go. No guarantee, of course: this is an experiment, a thought experiment, a *Gedankenausstellung*.' Latour 2016, p. 3.

⁹⁸ Latour 2016, p.4.

⁹⁹ Latour 2016, p. 5.

This is the way that museums can be seen. An invisible line separating the visitor from the institution and only two ways for communication to flow as self-contained bundles of literacy skills. The museum composes its message sending them back towards the visitor who reacts, unpacks and carries the message forward. It is not entirely unsatisfactory as an intangible line links the two entities. But this line is only available to some actors held in tension and forever separated. Modernists would stress the difference between the spectator and spectacle; the subject and object; the inside and outside world. Could there not be a third place in which the museum and its visitors could unite? Let's try to see whether we can be within the museum instead of seeing it from *without*.¹⁰⁰

Procedure B: re-consider the meaning of meaning

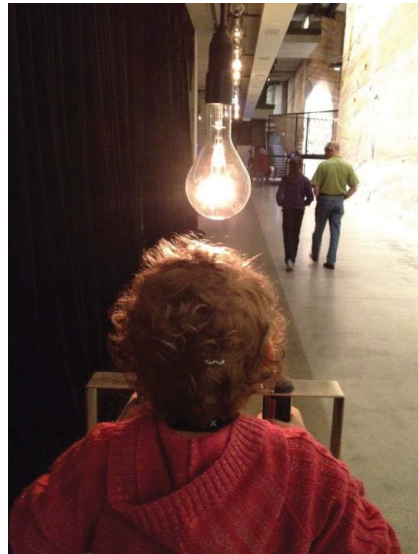


A museum visitor's response to an artwork by Kutluğ Ataman (2005). The visitor's drawing and writing reminisce about her grandmother but also jolt her into considering her own thinking processes.

¹⁰⁰ Adapted from the original quote 'Let's try to see whether we can be within the world instead of seeing it from *without*' (Latour 2016, p. 20).

The meaning of objects is not just the one ascribed to it by the museum. Meaning can be individual or generated within a group. Meaning can be meaningless unless it produces change or a new way of thinking. This moment of change is called an *encounter*.

Procedure C: re-invigorate the body



This visitor is captivated by an artwork called Pulse Room (Rafael Lozano-Hemmer, 2006). The child's touch translates her heartbeat into a flashing light bulb which joins the heart beats of other visitors. She recalls the memory of this touch verbally as 'boom, boom, boom' and wonders aloud how an artwork can feel her heartbeat when she cannot.

The body through movement, touch and *possibility* can make an important contribution to literacy and engagement through generating new connections and layers of engagement. The use of a range of senses expands the repertoire of texts to be assembled into literacy practices. Whilst children and 'hand on' experiences go together in museums the association is a black box. Its contents are assumed with little consideration of the affect activated by the 'child-within-the family' and its potential to *infect* other visitors. We are our body and the body is throughout the museum.

Procedure D: re-imagine objects



A child visitor uses interlocking cards not to stack as others might do but to make a kind of panopticon interpretation of an immersive room. He incorporates a family photo of his sister casting her shadow against the projection of fire on the room's wall. He also selects an image of the taxidermy kangaroo and sheep – the edge of tension between Aboriginal people and colonial pastoralists. He places a fingerprint, possibly to stamp his identity and ideas.

Objects are quixotic entities which are both shy and camera ready, memorable and uncertain, real and shadowy. As museums are busy redefining themselves, objects are reasserting their identities as they morph between solid, fluid and fire states. Their knack for transformation sits well with literacy and new ways to understand it. Literacy is an ongoing process where the opportunity to read and reinvent your own world is as important as decoding meaning. Objects can be displayed not simply for interpretation but to promote experience and experimentation.

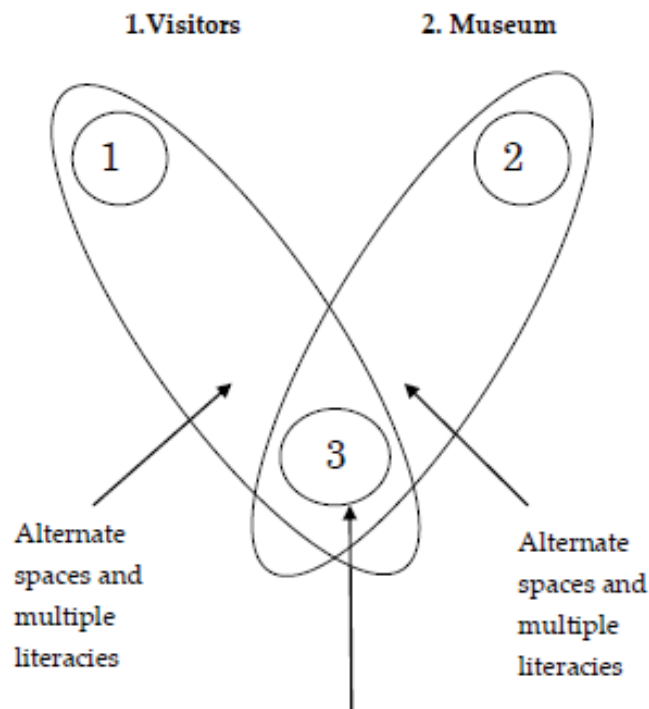
Procedure E: re-value visitors



This is a home photograph of a basil plant that has seen better days as it travels from place to place seeking safe haven. This fading plant promotes talk between a mother and child, a blog post, a reminder of a favourite television shows and happier days of the past and the future. Home literacy practices are complex but can be revealed with some help and interest.

Visitors bring their own literate identities into the museum making them available to use but also for change. This can be facilitated through the use of literacy mediators such as staff sensitised to co constructing new spaces between the interests of the visitor and the museum message or social media technology where visitors are encouraged to assemble new content from the museum offer and their own literacies. Home stories may seem mundane but can connect in multiple ways to new means of generating literacy in other domains such as the museum. Literacies can be visual, oral, written, tactile, artifactual and multimodal.

Procedure F: reposition museum and visitors



3. The hybridised participatory museum combines innovation and care where the museum:

- visitors and staff share concerns and skills within networks of activities.
- contributes to collaboration and accepts complexity.
- connects with new ideas and supports creativity
- accepts the materiality of visitors, stories, affect, things and objects as actors of influence.
- promotes understanding of processes.

The hybridised participatory museum acknowledges co-existing multiple spaces where literacy can be fluid or multiple. The literacies of the home and museum have equal validity and work to shape each other.

APPENDICES

Appendix A: Table 12 Family demographics

Family	Gender	Age	Tasmania, Mainland Australia or overseas	English spoken at home	Centre link benefit	Highest education attained	Visited a museum in last 10 years
1A1	Male	Under 40	Australia	English	yes?	Year 10? Carpenter	Yes, not these exhibitions
1A2	Female	Under 40	Asia	No		?	
1C1	Male	11	Tasmania	English			
1C2	Male	8	Tasmania	English			
1C3	Male	3	Tasmania	English			
2A1	Female	38	Australia	English	yes	Year 10	No
2A2	Male	Under 40	?	English	no	?	Yes
2C1	Female	14	Australia	English			No
2C2	Male	11	Australia	English			No
2C3	Male	8	Australia	English			No
3A1	Male	Under 30	Asia	No	yes	Year 9?	No
3A2	Female	Under 30	Asia	No		Year 9?	No
3C1	Female	5	Asia	No			No
3C2	Male	3	Tasmania	No			No
3C3	Male	3 months	Tasmania	No			No
4A1	Female	Under 40	Australia	English	yes	Year 12 Cert IV's	No
4C1	Female	6	Australia	English			No
5A1	Female	32	Asia	No	yes	Year 10	No
5C1	Female	5	Asia	No			No
6A1	Female	50	Tasmania	English	yes	Year 9	No
6C1	Female	14	Tasmania	English			No
6C2	Female	10	Tasmania	English			No
8A1	Female	Under 40	Tasmania	English	yes	Year 10	No
8C1	Female	13	Tasmania	English			Yes -school
8C2	Female	4	Tasmania	English			No
8C3	Female	2	Tasmania	English			No
9A1	Female	Under 40	Australiasia	English	yes	Year 10?	Yes -not this exhibit
9C1	Female	8	Australia	English. Identifies as Indigenous			
10A1	Male	27	Asia	No	yes	Year 9?	Yes -school
10A2	Female	26	Asia	No		Year 9?	No
10C1	Male	8	Asia	No			Yes -school
10C2	Female	6	Asia	No			No
10C3	Female	3	Asia	No			No

Appendix B: Family literacy discussion guide

(Anderson et al.2010; Flewitt 2005; Grieshaber et al. 2012; Taylor et al.2008; van Steensel 2006).

Date and time:

Location:

Present:

Comments:

Method of delivery

This questionnaire treated as a guide for a face to face chat with one adult member of the family and/or one or more family members (including children over 8 years old). Children under 8 years can attend the meeting if this is the wishes of the family.

Interview commences

[to say] As you know our research looks at what happens when you mix museums with families and the way they communicate with each other-let's call this literacy. Adults and children in families may read, write, draw, talk and listen, take and look at photos and even make or listen to music and this research calls it practicing literacy. Not everyone practices literacy in the same way as people have different lives, backgrounds and demands on their time. Even so if we better understood these practices we might be able to make visiting museums more interesting and enjoyable for all families not only those who visit museums a lot. We might also be able to help people improve the literacy skills they most value. The research pays special attention to what happens between, and for, family members when they look at, think about or even play around the things in museums-the objects and artworks. This part of the research will help us all better understand the range of literacies you practice in your home and so a better understanding of what you are bringing into the museum.

Before we start does anyone want to go over the forms you were asked to read and sign again and if still you agreed with what they said? [wait for questions and respond]

Tell me about the people who live with you at home-your family
[Allow comments to flow; when it seems appropriate invite all family members to join; and if not already covered specifically ask the following]

Let's start with how many (electronic) screens you have at home.

1. Do you have a computer or a laptop?

[how many]

1.2 Aside from school do you use a computer or laptop somewhere else? For example at:

- the home of another family member or friend
- the library
- community agency

1.2 Does this computer have internet access?

1.3 What do you use the computer for? [wait for answers and then prompt]

[Produce]

Write an email

Write a report for school or a community group

Upload photos

Make a picture

Mix music

[Consume]

Find information [prompt if necessary]

-for homework

-recipes

-sport scores

-hobbies

Buy something eg EBay or GumTree

Watch youtube

Watch a movie

Listen to music

[Share]

Maintain a Facebook page

-write on your page

-post photos

Like and Share on Facebook

or perhaps you have a Myspace page

Social media for children such as Webkinz or ClubPenguin

Play games over the internet

1.4 How many hours a week do you use a computer?

Adult

Child

1.5 Do you ever share this time, talk about what you are doing, ask for help?

[Parent-Child]

[Child-Child]

1.6 How many hours a week would you share time on the computer?

Adult

Child

2. Do you have television?

2.1 How many hours a week do you watch television or a DVD?

Adult

Child

2.2 Do you share DVDs with other family members and friends?

2.3 Do you ever watch television or movies together and talk about what you are watching?

[Parent-Child]

[Child-Child]

2.4 How many hours a week do you play a game such as PlayStation, X Box, videogames, Wii on a screen?

Adult

Child

2.5 Do you ever play these games together?

[Parent-Child]

[Child-Child]

Now let's think about books.

1. Do you have books at home?

1.1 About how many?

1.2 Where do your books come from?

-from school

-from work

-from friends and other family members

-as gifts

-purchase by a family member

-the library

1.3 Are these print books or on a screen such as a kindle or phone or tablet?

1.4 How many hours a week would you read a book (not at school)?

Adult

Child

1.4 How many hours a week would you read to another family member?

[Parent-Child]

[Child-Child]

...and now magazines

2. Do you have magazines, catalogues, and newspapers at home?

2.1 About how many?

2.2 Where does this material come from?

-from school

-from work

-from friends and other family members

-as gifts

-purchased

-the library

2.3 How many hours a week would you read a magazine, catalogue or newspaper (not at school)?

Adult

Child

2.4 How many hours a week would you read a magazine, catalogue or newspaper to another family member?

[Parent-Child]

[Child-Child]

We are still looking at print here-reading, writing and understanding it

1. How often would read a label, bill or sign to another member of the family?

[Parent-Child]

[Child-Child]

2. How often would you hand write something (not at school)?

Adult

Child

2.1 How often would you write together?

[Parent-Child]

[Child-Child]

3. How often would you paint or draw something?

Adult

Child

3.1 How often would you do this activity together, talk about it or offer help?

[Parent-Child]

[Child-Child]

As I said there is more than one literacy, there are many literacies and we'll talk about some examples of these in this last segment.

1. How often would you make something-say from building blocks such as plastic, fabric, wood or metal?

Adult

Child

1.1 How often would you do this together?

[Parent-Child]

[Child-Child]

2. How often do you listen to music?

Adult

Child

2.1 How often would you do this together?

[Parent-Child]

[Child-Child]

3. How often do you play music, sing songs or rhymes?

Adult

Child

3.1 How often would you do this together?

[Parent-Child]

[Child-Child]

4. How often do you tell each other a story or retell something that happened?

Adult

Child

4.1 How often would you do this together?

[Parent-Child]

[Child-Child]

5. Do you have a camera?

Adult

Child

5.1 How often do you take photos?

Adult

Child

5.2 How often would you do this together?

[Parent-Child]

[Child-Child]

6. Do you have a mobile phone?

Adult

Child

6.1 How often do you use it?

Talking

Texting

Games

Internet

Photos

Music

6.2 How often would you do this together?

[Parent-Child]

[Child-Child]

7. How do you feel about doing this interview?

-too long?

-too short?

-not enough laughs? [etc etc]

Appendix C: Table 13 Family literacies

As identified by the guide at Appendix B

Family	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
1					
2 adults 3 children Interview with father, 1A1	Adults have laptop for web searches (from phone nos. to downloading music) Children use ipads and computer at school/library and connect to internet with free wifi Watch Youtube, movies and music	1A1 for talking, text, internet, photos and music 1C1 and 1C2 for texting, games, taking and storing photos, storing and listening to music	Children on ipads	No TV Watch DVDs from the library	1C1 messages friends using AppleLite and Bluetooth. Programs groups into ipads Note: 1A2 and 1C1 have fb
Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Many books at home. Also library users	1C1 plays guitar Listen to music	Emails (father's legal/political) Children-to make comic books	1A1 makes something everyday Children draw (oldest not so much) Including woodwork, cooking, Photography	Watch movies (DVD/internet) Listening to music Electronic games (males) Reading to youngest child Photography Cooking	Many books at home. Also library users
2					
Family	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media

2 adults 3 children Interview with mother, 2A1	Laptop for the children Adult uses internet for celebrity gossip Children watch Youtube and download music for themselves and adult	Texting	Children play games on internet XBox	Blackbox for movies	2C1 and 2C2 use laptop for facebook, tumbler and twitter 2A1 has fb Mother and daughter talk to each other on fb
Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Books for the youngest child Catalogues 2A1 does not believe in libraries	Everyone has their own music which they download. Radio listeners		2C2 likes to paint and draw Youngest makes things with Adult male. Family photos on iphone or ipad	Radio Females talk to each other on fb. 2C3 and 2A2 make and do things together	Books for the youngest child Catalogues 2A1 does not believe in libraries
Family 3	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
2 adults 3 children Interview with father, 3A1	Go to the library for the internet to download music and Asian movies YouTube for the news in country of origin. Shopping online (adult)	Talk not text. Use the internet	3A2 and 3C1 + 3C2 use mini ipad	Movies from library (3A2) 3A1 TV for Soccer	Facebook international

Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Children's books Catalogues	Yes, cover bands Plays guitar Sings English songs to children		Photos using mobile phone and ipad	Church service Singing	Children's books Catalogues
Family 4	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
1 adult 1 child Interview with mother, 4A1	Laptop with internet used for Ebay	Text No internet	Yes for 4C1	TV cartoons DVDs	Not for awhile
Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Occasionally the newspaper (Flea Market)	4A1 sings to child before bed	Email Diary	Child likes to draw Mother occasionally takes photos	Watch TV together Read to child	
Family 5	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
1 adult 1 child Interview with mother, 5A1	One computer with internet to watch Christian movies on Youtube	Talk, text and photos. Internet	No	Christian movies DVD TV Cartoons TV Soccer	Facebook-contact internationally and locally Adult shows her own parents posts on fb

Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Books for the child Reads the paper and her brother assists. Reads the Bible 'God of words'	Attends Church-singing and music	email	Child likes to draw	Church service Home church Christian movies Singing hymns	
Family 6	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
Family 6 1 adult 2 children Interview with mother, 6A1	3 laptops Internet for adult and supervised use for children	2 Samsung Galaxies for adult and eldest child Adults texts but prefers to talk. Uses calendar function etc Children also use wifi off mother's phone so she can supervise		4 TVS Downloaded movies	Facebook to keep an eye on child. Teenager uses FB Youngest uses moshi monsters
Reading print	Listening to or making music	Writing	Making	Family literacy shared	
The home has books although unclear if they are read	3 ipods		Mother cooks for pleasure Oldest models Youngest dances Children draw/artwork All photograph,	Parent accompanying children to activities	The home has books although unclear if they are read

			eldest child takes mostly selfies		
Family 8	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
Family 8 1 adult 3 children Interview with mother, 8A1	1 computer, no internet Interest in developing computer skills Ebooks from the library downloaded onto ios8 Eldest has ipad from school	Mother and eldest child has mobile phones. Text	Yes eldest child	TV for weather, news, docos	
Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Adult uses library (just completed 6 book challenge) Non fiction Picture books for youngest children	Downloads music, daughter helps onto itube-a free music app Music CD player to sing a long too		Interest in jewellery Children draw and paint Phone as a camera	Borrowing books from the library Mother and eldest daughter imessage each other	Adult uses library (just completed 6 book challenge) Non fiction Picture books for youngest children
Family 9	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
Family 9 1 adult 1 child Interview with mother, 9A1		Mother has smartphone and daughter phone. Both text	Given a Nintendo. DS used like a kindle	TV for news, medical and science shows Buys DVDs Brother downloads movies	no

Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Collect books, reads Magazines in regular hospital visits, catalogues, newspaper	RAGE on TV Brother downloads movies	yes	Cooking and gardening Child takes photos on camera Adult takes photos on phone	Reading, cooking, gardening together	Collect books, reads Magazines in regular hospital visits, catalogues, newspaper
Family 10	Searching the internet and/or downloading	Searching the internet and/or downloading	Playing electronic games	Viewing TV/DVDS/ Movies	Social networking with social media
Collect books, reads Magazines in regular hospital visits, catalogues, newspaper	RAGE on TV Brother downloads movies	yes	Cooking and gardening Child takes photos on camera Adult takes photos on phone	Reading, cooking, gardening together	Collect books, reads Magazines in regular hospital visits, catalogues, newspaper
Reading print	Listening to or making music	Writing	Making	Family literacy shared	
Books borrowed from school library Mother borrows books	All borrow music from Library. Father plays music at church	Children attend community school to maintain language	Children like drawing and colouring All take pics on ipad	Community school and church	

Appendix D: Information sheet for fieldwork sites

a museum ecology

information for research sites

This project is part of the Higher Research Degree Program at the University of Technology in Sydney supporting Doctoral research that is looking into the relationship between the display and interpretation of museum/gallery collections, literacy and families (see related Information Sheet 'about the research'). Fieldwork will be undertaken in Tasmania and it is hoped the results of will have impact and applicability for cultural institutions and Literacy providers locally and further afield.

Research Methodology

The research will use a mix of qualitative and quantitative data from current museum evaluations and new research material collected as part of the project. Qualitative data will be gathered through researcher observation, in-depth interviews, focus groups and participatory methods. A significant feature of the research will be the use of lapel mikes to record conversations and novel creative responses such as photographing objects, writing responses, drawing favourites, story boxes and research specific mini dioramas. Up to 10 diverse families will be recruited. Within the broad definition the groups will be multigenerational, multi relational with diverse abilities, experiences, individual and community resources, literacy practices and cultures.

Site expectations

1. One to three separate or concurrent museum visits by up to 10 local Tasmanian families over a period of up to 6 weeks. These visits would be free of charge. A minimum of 2 week notice would be given of any visit and visits held at a mutually agreed time.
2. Up to 20 hours of observation of other museum visitors by the researcher. Visitors' privacy and experience of the gallery or museum will not be compromised.
3. Acceptance of research methods such as photographing of objects, capturing family conversations.
4. Use of a private meeting room for interviews and activities during opening hours. Children will be accompanied and supervised by a family member at all times.
5. Identified site liaison staff for visits and research dissemination.
6. Visitor research (psychographic or demographic) already held or planned by the institution within the research period (excluding data which is commercial in confidence).

Definitions

Families in the study are defined as any small multigenerational group visiting a museum with at least one child between 3 and 12 years of age. **Material culture** (termed objects) can be a document, picture, artefact, specimen or artwork that has been acquired by a museum for its collection. **Literacy** is a series of social practices intended to support the creation and negotiation of meaning in context, rather than as a set of technical and transferable skills. Literacies in the museum context can be any form of

object interpretation that could be transferable and reproducible such as print or electronic labels, audio guides, music, video, graphics, replicas, props, mechanical or electronic interactive and arguably the object itself.

Research outcomes

1. Better understanding of the family visitor and their literacy practices (including those who are not regular museum users)
2. Changed perception of exhibitions which engage families—from 'attractions' to 'enrichments'
3. Consideration of alternative participatory relationships between families and museums, and in particular with the collection.
4. New partnerships between museums and Literacy providers for literacy based family programs.

Issues

- The research will be conducted within the University Policy on Responsible Conduct of Research and is subject to clearance from the UTS Ethics Committee
- The research has informal support from Hobart LINC to assist the research including recruit families.
- Sites will be informed of any additional funding sought to support the research. No commitments will be made in any application beyond the agreed scope of support without prior written permission.
- The research will work within partner agencies constraints and timelines.

Benefits

The research aims will be reflected in the relationship with the research sites, participants and partners and will include engaged dissemination of the research experience and outcomes. The researchers will give ongoing feedback to all stakeholders through their preferred mechanisms. In addition to the formal dissertation, research will be reused in conference papers and journals with appropriate acknowledgment for the research sites and partners. The researcher has 20+ years of museum programming experience which she is happy to share within available time.

CONTACT HELEN WHITTY

•University of Technology Sydney •www.uts.edu.au

museumsliteracies.blogspot.com.au

November 2012

Appendix E: Adult consent form



CONSENT FORM –to SIGN

I [insert name.....] agree to be part of the research project called 'A museum ecology' being conducted by Helen Whitty of the University of Technology, Sydney for her Doctorate of Philosophy (PhD) degree.

I understand that the purpose of this study is to help museums make better displays by having a deeper understanding of family literacy practices including my own. The research can also be used in future for literacy teachers and learners.

I understand that my participation in this research will involve all the members of my family home who wish to be in it and must include at least one adult and one child. I am being asked to go with the family members who want to help with the research to the Hobart Library and one museum. We are to be interviewed by the researcher as a family about our literacy practices; listened to and watched by the researcher when in the museum; be asked to choose from different materials to describe our museum visit and talk about our visit with up to 11 other families also involved in the research. My child or children will be with or watched by an adult member of my family including myself at all times. The research will take place in the month of [insert month] and will take between 2 ½ hours and 5 hours over 3-4 contacts with the researcher.

I understand that [tick the box next to each statement where you agree]

- I can contact Helen Whitty, her colleague Patricia Lucas or the university if I have any concerns about the research
- My children and I are free to withdraw from this research project at any time we wish, without consequences, and without giving a reason.

I agree that: [tick the box next to each statement where you agree]

- Helen has answered all my questions so far fully and clearly and is available to listen to other questions and comments during the research.
- The original drawings or writings or photos or craftwork I make at the museum will be offered back to me after their display at LINC.
- I will explain the research to my children and if I agree for Helen to give them the Child's Consent Form to sign.

I give my permission for: [tick the box next to each statement where you agree]

- For my children [insert names] to participate in the research.
- The research data to be published in Helen Whitty's PhD thesis and other related publications and papers in a form that does not identify me or my children in any way
- For me and my child(ren) to be photographed and our voices recorded during the research and published in a form that does not identify any family member in any way
- One or more of the drawings or writings or photos or craftwork I make at the museum to be displayed at Hobart LINC in a form that does not identify any family member in any way

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- For the drawings or writings or photos or craftwork I make at the museum to be used in future print or online publications to help other families learn new literacy practices. This will be in a form that does not identify any family member in any way

Signature (participant)

____/____/____

Signature (researcher or delegate)

____/____/____

CONTACTS:

Helen Whitty (email: _____)

Patricia Lucas _____

NOTE:

This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer _____ and quote the UTS HREC reference number-201300118. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

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Appendix F: Child consent forms



My name is [insert name.....] and I amyears old. I want to help Helen Whitty with her research project. I understand her project is to help museums make better displays and to help teachers and students.

I am being asked to go with my family to the library and one museum. We will talk to Helen, walk around the museum and write or draw or make a model about the visit. We might be lent a camera to take photos of the museum or each other. I also understand that I will be with my family at all times during the project and that Helen will also be watching us and listening to what we talk about. She would stop listening and watching if we asked her to stop.

The research will take place in the month of [insert month] and will take between 2 ½ hours and 5 hours over 3-4 times with Helen.

I understand that I can talk to myabout the project at any time. Helen will also answer my questions. I can stop helping with project if I feel unhappy or uncomfortable about it.

[tick the box next to each statement where you agree]

- I want to go to the museum with my family.
- I want to make a drawing or a photo or a model of our visit.
- I want to go to the library and see my artwork on display.

Signature (participant)

____/____/____

Signature (researcher)

____/____/____

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My name is

I amyears old. Today is

Colour in the smiley face if you agree with what it says.



I want to help Helen with her project about museums and families.



I want to go to the museum with my family.



I want to help take photos at home.



I want to make a drawing or a photo or a model of our visit.



I want to go to the Library and see my artwork on display.



I understand that I can ask my family or Helen about the project. I can stop helping the project if it is making me sad.

Appendix G: Information sheets



READ and KEEP this sheet. It tells you about the research

The research is called "*A Museum Ecology*" and your time will help a student with her university degree called a doctorate.

WHO IS DOING THE RESEARCH?

My name is Helen Whitty and I am a student with the University of Technology in Sydney. I now live and work in Tasmania. Before this research I worked for a museum for many years.

WHAT IS THIS RESEARCH ABOUT?

This research looks at what happens when you mix museums with families and the way they practice literacy. Adults and children in families can practice literacy in more ways than reading a book. People may read, write, draw, talk and listen, take and look at photos and even make or listen to music. If we better understood these practices in museums, we might be able to make visiting them more interesting and enjoyable for all families not only those who visit museums a lot. The research pays special attention to what happens between, and for, family members when they look at, think about or even play around the things in museums-the objects and artworks.

IF I SAY YES, WHAT WILL IT INVOLVE?

I will ask you and others in your family who live with you to meet with me, go to the local library, Hobart Library and one museum. You will not be separated from your child or children at any time. I will ask you to choose from different materials and ways to tell me about your museum visit. I will help you with travel money and a small gift for your family. Here are the meetings that will take place in the month of July and later in October.

Meeting or telephone call number one: A talk with the researcher about the literacy you use at home. I would like to talk to everyone in your family but if this is not possible I can talk to you alone or with one or two others. We could even talk by telephone.

Where: Mission Australia in class hours or a LINC Library close to your home.

When: The time is up to you during library opening hours.

Time: 15-30 minutes sometime between the 15 and 18 July

Meeting two: Your family is invited to visit the Tasmanian Museum and Art Gallery to look at an exhibition in the Bond Store. I won't walk around next to you but will record what you talk about and look at. I would stop listening and watching if you asked. Your family will then be asked to think about their visit through writing or drawing or model making. This activity is in a private place in the museum.

When: Between 11am and 1pm on Saturday 20 July 2013

Time: Two hours. You can stay longer in the museum if you wish OR

When: Between 2 and 4pm on Saturday 20 July 2013

Time: Two hours. You can stay longer in the museum if you wish.

Telephone call: A talk with the researcher about the museum visit and any follow up literacy practices. I would like to talk to everyone in your family but if this is not possible I can talk to you alone or with one or two others.

When: The time is up to you.

Time: 15- 30 minutes.

Meeting three: Your family is invited back to the Tasmanian Museum and Art Gallery to look at one or more exhibitions with the other families. I won't walk around next to you but will record what you talk about and look at. I would stop listening and watching if you asked. Your family

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will then be asked to think about their visit with more activities. This activity is in a private place in the museum.

When: Between 11am and 1pm on Saturday 12 October 2013

Time: Two hours. You can stay longer in the museum if you wish

Meeting four: If you give permission your work will be on display in a room in the library for one week. There is also an opportunity to meet other families in the research and talk about what you have made. Attendance at this event is optional.

Where: Hobart LINC

When: 2pm Saturday 19 October 2013

Time: One hour

ARE THERE ANY RISKS/INCONVENIENCE?

There are very few if any risks because the research has been carefully designed, any contribution is valued your contribution and I want us all to enjoy the experience. It is possible that you may feel a little nervous about going somewhere you haven't been before or uncomfortable about telling me what you think about the research or your museum visit or find that travelling to different places is not very convenient for a busy family. Remember you can stop at any time.

WHY HAVE I BEEN ASKED?

You have been asked to participate in this research because in your family there is at least one child aged between 3 and 12 years and you share a house with them. The way your family practices and learns literacy will provide valuable and new information to museums who may have not thought about the display of their objects for adults and children especially those who are not regular museum goers and/or have different literacy practises to their own staff.

DO I HAVE TO SAY YES?

You don't have to say yes.

WHAT WILL HAPPEN IF I SAY NO?

Nothing. I won't contact you about this research again.

IF I SAY YES, CAN I CHANGE MY MIND LATER?

Yes, you can change your mind and stop at any point and you don't have to say why. I will be grateful for your time so far and won't contact you about this research again.

WHAT IF I HAVE CONCERNS?

If you have concerns about the research that you think I can help you with, please contact me, Helen Whitty or Patricia Lucas. If you want to speak with someone else about the research or make a complaint, you can call Rachel Laugery who is part of the university's Ethics Committee. She won't tell other people about who made the comment or complaint but she will look into it fully, and you will be told about the outcome. Tell Rachel this number 201300118 when you call.

Key contacts: Researcher, Helen Whitty (email: [redacted])
[redacted] LLNP Team Leader, Patricia Lucas; [redacted]
Ethics committee [redacted] or email [redacted]

Addresses: Hobart LINC [www.linc.tas.gov.au] 91 Murray St Hobart TAS 7000
Tasmanian Museum and Art Gallery [<http://www.tmag.tas.gov.au/>] Dunn Place, Hobart

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This sheet tells you about the research you have been asked to help with.

WHO IS DOING THE RESEARCH?

My name is Helen Whitty. I am a student and I also work in a museum.

WHAT IS THIS RESEARCH ABOUT?

This research is about ways to visit a museum. I want to know what you see and hear and think about when you go out with your family to a museum. If you have never visited a museum with your family here is your chance! You will visit the Tasmanian Museum and Art Gallery.

IF I SAY YES, WHAT WILL IT INVOLVE?

I will ask you and others in your family who you live with to meet with me, go to the Hobart Library and one museum. I will ask you to tell me about the visit in words or pictures or photos.

WILL I ENJOY IT?

It might seem like a test and not many people enjoy those. It is not a test. I hope it will be fun. But if you feel unhappy about it you can stop at any time. Just tell your parents or tell me.

WHY HAVE I BEEN ASKED?

I want to know what children think as well as adults in a family.

DO I HAVE TO SAY YES?

You don't have to say yes 😊

You can say no 😞

WHAT WILL HAPPEN IF I SAY NO?

Nothing

IF I SAY YES, CAN I CHANGE MY MIND LATER?

Yes

Talk about the research with your parents and friends and if you have any questions ask them to ask me. They have my telephone number.

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Appendix H: Literacy activity samples

Drawing book



Figure 43: Sample of writing books (1C1's drawing book).

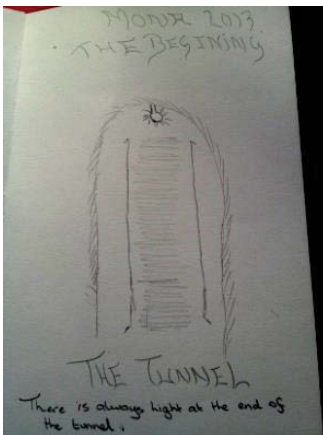
A number of children (and some adults) chose to make a title page adding their name.



Figures 47, 48, 49 and 50.

Drawings of the same tunnel installation leading to library.

From left to right 4C1, 6A1 and 2C2, 6C2.



Writing book

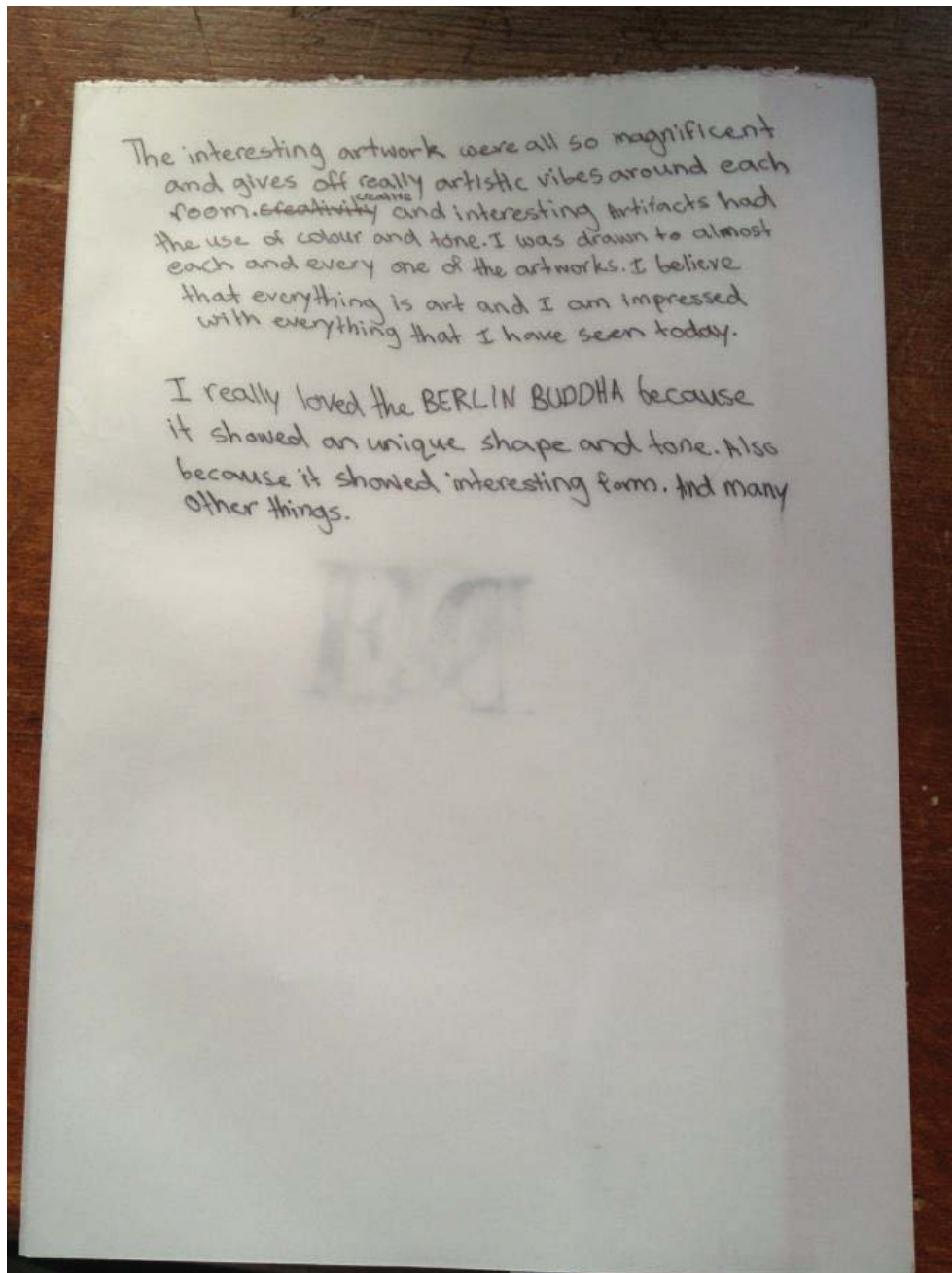
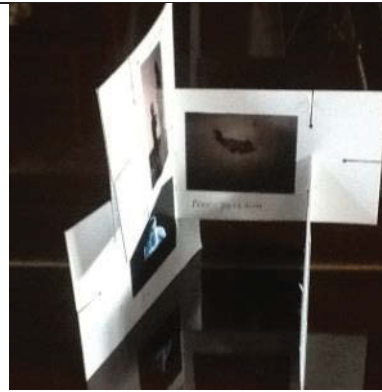
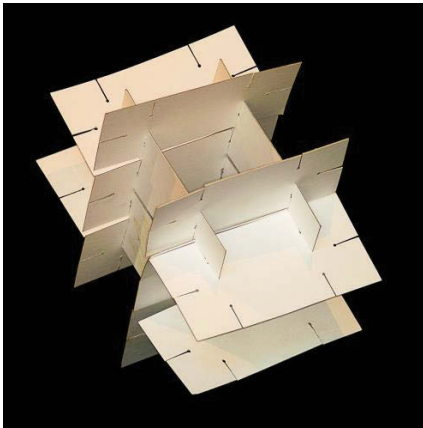


Figure 44: Sample of writing book. Writing undertaken post visit 1 in MONA by 2C1

Interlocking cards



Figures 45: Samples of interlocking cards

The card option was mostly taken up by female adults, though 2 male children took up this offer in very different ways. From left to right 1C1, 4A1, 6A1, 10C1 showing the variations in responses.

Ipad

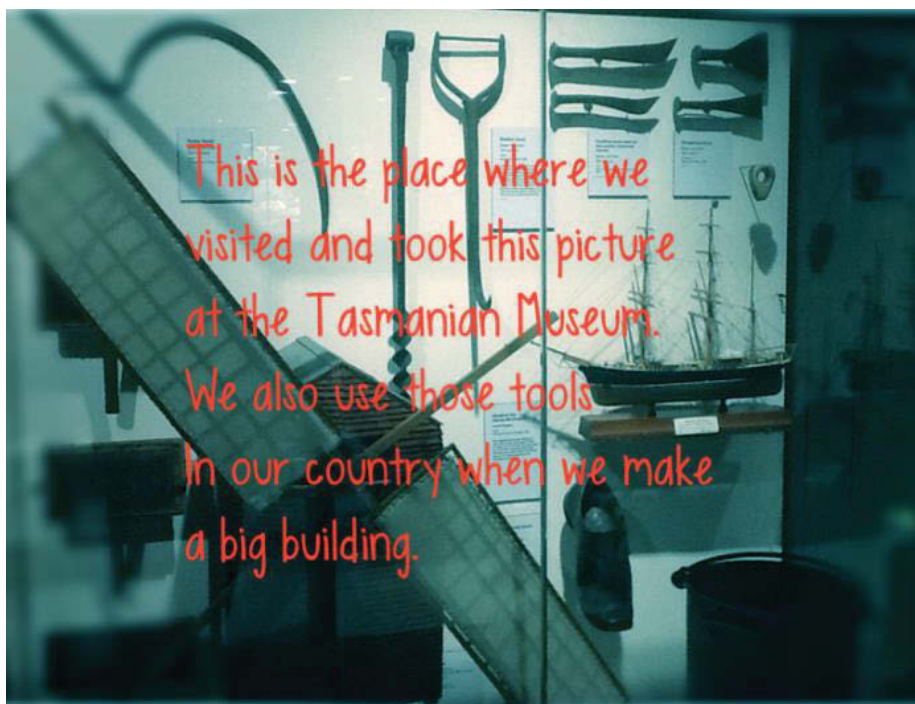


Figure 46: Sample of electronic caption using an ipad (by 3A1 and others). The ipad image and caption option was selected by 3 adults and three of the older children in the study.

Story bowls



Figure 47: Samples of storybowls [(clockwise): the sample, 1A1 'secret story' and 5C1's interpretation].

Cloze exercise based on an object

I'd like to buy.....



Figure 48: Sample of cloze exercise

Appendix I: Post visit discussion guide

Date and time:

Location:

Present:

Comments:

Interview commences

[script] Thank you for helping me once again. This last part of the research is about what you thought of the museum visits, the things or people that helped you understand and enjoy it. As my research is about you and your literacies there will also be some questions about that as well.

Part one

You were invited to take a photo of something at home that could be described as:

- my hobby
- valuable to me
- clever or interesting
- who I am
- reminds me of a family memory or a good story
- makes me happy or sad

Would you use these phrases to describe any of the things or artworks at the museum you visited?

Part two

Have you ever visited a museum without me?

-with your children?

How many times have you been to a museum in the last 3 years?

Is this the first time you've been to MONA/TMAG?

Is this the first time you've been to the Bond Store/Red Queen?

How many times have you been to MONA/TMAG in the last 3 years?

What were your main reasons for visiting TMAG/MONA with me.

[await answer] [Prompt with]

- You had wanted to go but had not got to it
- Your children had said they wanted to visit
- People talk about going to TMAG/MONA and you became curious
- You wanted a break from your routine
- You wanted to know more about Tasmanian history/Art
- It was recommended to you [by who?]

- An experience for your family to enjoy together
- Things for my children to enjoy
- Things for my children to learn
- It was a way to improve my English
- A way to improve my Literacy
- It would give me new things to think about
- It would give me new things to talk about

What did you expect to do/ see at TMAG/MONA?

[await answer] [Prompt with]

What do you think about TMAG/MONA now you have visited it?

- It gave you new things to think about
- It gave you new things to talk about
- It was a welcome break from your routine
- You learnt more about Tasmanian history/Art
- You would recommend it to your family/friends [by who?]
- It was an enjoyable family experience
- My children enjoyed it
- I enjoyed it
- My children learned something
- It extended my English
- It extended my Literacy

We are going to look now at the museum-what it presented to you. We will talk about the things you or I brought into the museum later....

Reading

Did you read any information, signs, and labels at the museum?

Did you read any information, signs, labels or the O at the museum?

Did you read this alone or with your family?

Did reading help you make sense of the museum?

Have you thought about what you read since?

Audio visuals

Did you look at screens?

Did you look at screens alone or with your family?

Did looking at screens help you make sense of the museum?

Have you thought about what these videos since?

Interactives

Did touch or play with things/works at the museum?

Did you touch or play with things/works alone or with your family?

Did touching or playing with things/works help you make sense of the museum?

Have you thought about what you touched or played with since?

Now we'll talk about things I asked you to do...

Photography

I suggested that you take photos in the museum.

Did you also take photos with your phone?

Did you enjoy taking photos?

Did you enjoy looking at the photos later?

Did taking photos help you make sense of the exhibition at the time?

Did you talk about the photos with your family?

Have you shared these photos with anyone else?

Did this help you make sense of the exhibition later?

Drawing/activities

I asked you to draw or make things during the visit.

Did the drawing and the craft activities help you make sense of the exhibition?

Did the drawing and the craft activities help your children make sense of the exhibition?

Have you noticed the children drawing or making similar things since the exhibition?

The O

Did you use the O?

Did your children use the O?

Have you looked at your tour online?

Smartphones

We've talked about taking photos during the visit but did you use your smartphone during the visit for anything else?

- internet
- translation
- spelling
- texting
- talking
- social media

Online

Have you visited the TMAG website?

Other

Were there things you needed help to do? Who or what helped you?

Were there things your children needed help to do? Who or what helped them?

Reflection

Do you remember any of the things or artworks you saw?

Which ones?

If you were to recommend three things to do or see or listen to at TMAG/MONA what would they be?

I've talked about the visit with

my children other family members/ my friends people at school/work
on facebook twitter

My children have talked about the visit with

me other family members/their friends people at school on facebook
twitter

Was there anything you did not like at or about MONA/TMAG?

Was there anything your family did not like at or about MONA/TMAG?

What would you change about MONA/TMAG if you were the boss or you owned it?

Part three

I want you to write down all the things you think about when you see this word [write literacy]

[reading, writing, photographing, making, new ideas, computers, navigating]

Let's think about the things you did at the museum and the skills you needed to do them. I'll write them down.....

Can you see any matching skills? Did you find these things when you visited the museum?

Part four

Are you glad you were a participant in the study?

Would you do it again?

Appendix J: Word Chart

Please CIRCLE words you think of when you think about LITERACY in **RED**. CIRCLE the words used when you visit a MUSEUM in **BLUE**

reading	writing
talking	thinking
understanding	stories
pictures	sounds
symbols	body language
who I am	who I want to be
rhythm	composing
texting	drawing
crafting	singing
form filling	find your way
ideas	colour
clever	hobby
listening	listening
making	making
words	words
beauty	beauty
belonging	belonging
who others think I am	who others think I am
shape	shape
painting	painting

APPENDIX K: Codes used

Open Codes Cycle 1

Adult as teacher	Authority transfer	Child as teacher
Clothing as driver	Courageous curiosity	Cross purposes
Embodied experience	Everyday literacy	Group dynamic
I appreciate this	I know this	Insatiable
Helpers	Museum protocols	Museum texts
Negotiation	Not the museum	Objects as text
Positioning	Recall	The lure of the aspirational
Thrill of the macarbe	Thrill of the real	Uncomfortable questions

Second codes Cycle 2

Comfort zone inside outside	Does creates photographs plays with reads sets talking and listening	Emotion
Literacy event	Literacy mediator	Positioning disturbing intriguing surprising validating
Roles coach commentator connector distractor interrogator judge minder motivator wayfinder	Thrill of the real	

Relationships types Cycle 1

remembers	evaluates	values	responds
understands	creates	organises	organises
applies	receives	characterises	characterises
analyzes	responds to	reads	reads
converses with	plays with	perceives	sets
makes	adapts	originates	

Relationships types Cycle 2

creates
photographs
plays with
reads
responds
talks about

Thematic codes

- Centrality of the child: reason to do something; 'good for the children'; 'good for the family'
- Child as catalyst
- Does
 - creates: to show the link between what is experienced in the museum and the activity undertaken at the museum
 - photographs: where a participant takes a photo using the supplied digital camera or their own as evidenced by the photo or the indication that the photo was taken.
 - plays with: where a participant touches and or manipulates a mechanical interactive object or artwork. This is not intended to capture playful activity between participants but between participants and text.
 - reads: where a participant reads aloud (on the audio); is read to; is observed to be reading (being read to) or there is evidence of reading eg saying aloud the name of the work
 - responds: where a participant moves away from the family, points, leads or physically shows something to another family member

- Literacy event
an activity, interaction or observable episode where literacy has a role, usually through use of a text, or texts and there may be talk around that text.
- Literacy helpers
someone or something that helps a participant accomplish a task or goal such as read or understand a text and/or engage in a literacy event. A text could be a museum object. More than a guide who assists with orientation. Helpers can be a Machine or Person.
- Positioning, assumptions, tensions
 - Delighting: when a participant is clearly enjoying the experience such as they sing, exclaim, laugh, leap.
 - Disturbing: this creates tension for the participant including boredom such as the irritant that needs to be ignored or dealt with
 - Intriguing
 - Surprising
 - Validating: refining their definition of image of self how parents, children and/or families then looked to find themselves
- Thrill of the real: where participants question the 'real' or authentic in the object, artwork, presentation

Appendix L: Examples of labels offered by the MONA O

Neige et Renard Snow and Fox

'1. Art Babble'

'Léopold Rabus

Mixed media on canvas, two panels

Born 1977, Neuchâtel, Switzerland, where he lives and works'

'2. Ideas '

"Deeper meaning resides in the fairy tales told me in my childhood than in any truth that is taught in life." Johann Christoph Friederich v. Schiller, 1759–1805

"The way to read a fairy tale is to throw yourself in." W. H. Auden, 1907-73'

'3. Gonzo'

'One way to look at it

Leopold Rabus dabbles in the realm of fairy tale and fantasy but, crucially, there is an inner coherence – a kind of madman's logic, if you'll pardon my hyperbole – to the worlds he presents us with. This has something to do with the strange-but-familiar forms he depicts, and a lot to do with his mastery of the genre he is using: painting. He constructs his generic outlines with reverence and skill, and then imaginatively and expressively colours them in. I don't mean that he actually does this, literally, in this order. What I mean is that he is, consciously or otherwise, striking a rather sumptuous balance between creative innovation (his works are distinctively *his*; you can sense just from looking that he is expressing something natural to him) and reverence to the tradition he is working with. In other words, the boy can paint. My eye is spectacularly untrained but still, to me, his stuff just looks right, pulls together without any seams poking through, and at the same time is disorientating and intriguingly difficult to decipher.

You may have noticed by now that in this exhibition, *The Red Queen*, we are starting to consider the arts as an evolutionary adaptation. An adaptation is a trait modified by natural selection that improves the individual's chances of surviving and procreating. (Other more obvious examples of adaptations include eyes, wings, and the tendency to care for children and other kin). In order for art-making to be established as an adaptation, a number of criteria have to be satisfied. Most importantly: how or

why might the trait confer some sort of advantage over others who lack it? There are a number of possible answers to this. In brute sum: art-making enhances sexual status and attractiveness; or it coheres and unifies individuals so they are better placed to thrive as a social group; or it isn't an adaptation, it's a by-product of other related ones. And finally, perhaps the arts allow individuals to exercise and develop their flexibly abstract social imaginations, so that they are better placed to walk that tightrope – so important to our hyper-social species – between competition and co-operation?

Keeping this last point in mind, consider again Leopold Rabus' creative ingenuity. Brian Boyd, one key proponent of the 'flexibly abstract' theory of the arts as adaptation, explains in his book *On the Origin of Stories* the need for artists of all kinds to strike a balance between innovation and tradition. From an evolutionary perspective, economy is key: the 'cost' of a behaviour (in energy use or exposure to illness or danger) must be more than cancelled out by its benefits (increased social status or access to attractive mates, for instance). That is one reason why we do not reinvent new genres each time we write a poem or a book, or paint a painting or compose a symphony. Such extreme acts of creativity are too costly to be sustained. Observing and imitating established artist forms – such as the fairy tale, or the use of perspective in painting – 'reduce invention costs by posing well-defined problems and offering partial solutions'. At the heart of creativity, therefore, lies the ability to build on what came before – but, crucially, to twist it, or pervert it, or thwart or react to it in some new way, in order to retain the attention of your audience. 'We appreciate,' says Boyd, "even minor variations within established forms as worthy of attention and repose. With our senses highly tuned to basic patterns, we enjoy repetitions and variations on a theme in art as in play".²

This is one way to look at this painting.

[2] Both quotes come from Brian Boyd, *On the Origin of Stories: Evolution, Cognition, and Fiction*, The Belknap Press of Harvard University Press, 2009, p. 122.'

'4. Media'

[A recording of the artist yodelling.]

Appendix M: Examples of labels offered in TMAG

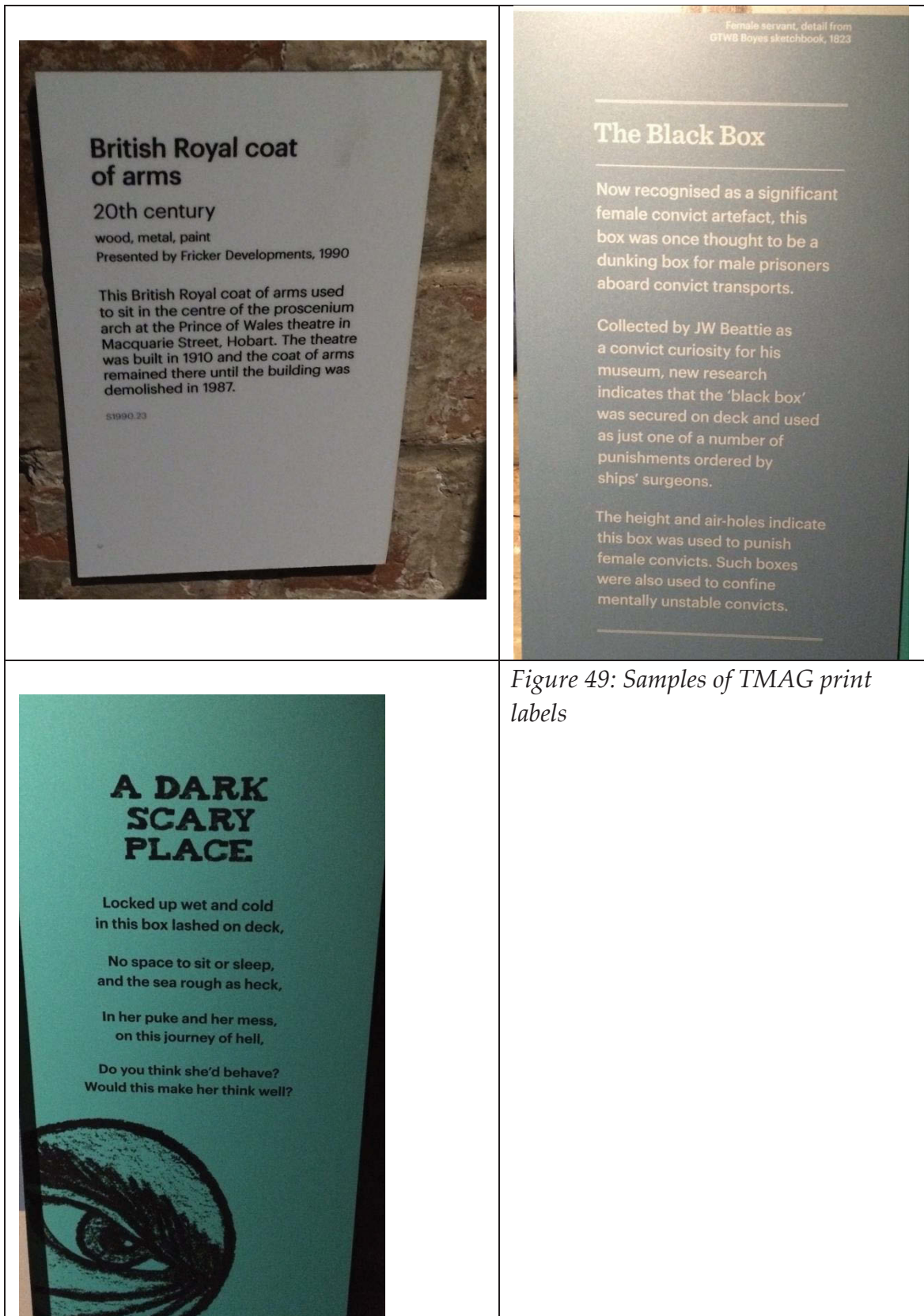


Figure 49: Samples of TMAG print labels

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