

Certific	CATE OF 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 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.
	Francesca Veronesi
	Signature of Student
	Date: 17 July 2013

CANDIDATE'S STATEMENT	
I certify that all typographical errors, spelling and grammar have been of the thesis.	en corrected <i>in the final copy</i>
Francesca Veronesi	
Signature of Student	
Date: 2 May 2016	

ACKNOWLEDGEMENTS

This research would not have been possible without the help, support and encouragement I received from the many people who contributed to its development since its very start. I would firstly like to acknowledge the support and guidance from my supervisor Bert Bongers and academic colleagues, Anne Cranny-Francis, Susan Stewart, Petra Gemeinboeck, Lizzie Muller, Jacqueline Gothe, Joanne Jakovich. Thank you for sharing your ideas and time and bringing insights into my work.

This research developed in a collaborative manner with the many institutions and organisations which have engaged with the research practices. However, such fruitful collaborations would have not been possible without the enthusiasm and dedication of the many people involved. Very special thanks go to Joanne Morris and Paul Scully from Liverpool Library and Regional Museum together with their colleagues Sue Dredge, Emma Murace and Cheryl Farrow, Cinzia Guaraldi from Liverpool Council, Elias Nohra and Shakhti Sivanathan of Curious Works, John Petersen and Andrea Fernandes of the NSW Migration Heritage Centre, Paolo Rosa of Studio Azzurro, Paolo Ranieri of N03, Prof. Paolo Pezzino from the University of Pisa, Sara Kenderdine from the Alive Lab in Hong Kong.

I'm grateful to Tadgh O'Sullivan for proofreading my texts. His editorial advice has benefited the fluency of my writing and helped overcoming language matters for a smoother reading of the thesis.

Thank you to my friends and family who supported and encouraged me to pursue my interests and passions. This research has intertwined with my life, enriching and transforming it in many valuable ways.

ENCHANTED TELEIDOSCOPES: MULTIMODAL INTERFACES REFRAMING EXPERIENCE IN THE MUSEUM

Francesca Veronesi, PhD Candidate, Faculty of Design, Architecture and Building, University of Technology Sydney

Research supervisor: Associate Prof. Bert Bongers

A teleidoscope is a form of kaleidoscope that has a lens and an open view. It is used to form kaleidoscopic patterns from objects outside the instrument itself. I use the image of a teleidoscope to introduce the context of the research which explores mediatised environments in museums, here referred to as 'multimodal interfaces' given their potential to reflect and refract 'objects' from the outer world and to translate them within the time and space of the museum. Objects, in this context, comprise the tangible legacy of physical artefacts, artworks, material records, cultural objects, buildings and landscapes, and the intangible heritage of oral histories, customs, and knowledge that was inherited from past generations and held for the benefit of future generations.

Technology is transforming all aspects of museum activity, from access, to interpretation, representation, engagement and learning. Museums, heritage sites and landscapes can all be looked as part of an electronic ecology, that is, the pervasive and networked technological world in which we are immersed. Exploring 'experience' as a new territory for curatorial design, the research argues for an 'ecological' approach to the artistry of experience-making in museums and the devising of integrative strategies that enable encounter, intimacy and embodied interactions between people, places, memory, cultural objects and the things we preserve from the past. Opening up a discussion around experiential approaches to the interpretation of cultural heritage and its inherent ambiguities and paradoxes, questions are posed regarding the opportunities of digital technologies for embodied engagement as a new way of knowing about the world, the 'other', memory and ourselves. Participating in the current discourse on the inclusive role of the multimedia museum in a multicultural society, the research poses questions on how curatorial design practices can develop an integrative approach combining spatial design and digital mediation in order to create a zone of contact between cultures and histories that is both responsive to interaction and open to participation.

The research case studies explore from a critical perspective the strategies adopted by designers and curators to mediate difference and facilitate intimacy with contested topics and representation of marginal and counter-histories. The studies comprise both critical analysis of existing exhibitions in various museums, as well as original creative works developed by myself as a curator and designer. The research practices offer an experimental ground where to critically explore and reflect on the possibilities of the mediation of curatorial design in negotiating experience and (re)constructing the past, thus extending the notion of the museum beyond exhibition spaces to comprise landscapes, objects, digital spaces as well as physical bodies.

LIST OF CONTENTS

1 Introduction Interest and motivation and personal background	25
1.1 Why Enchanted Teleidoscopes?	27
1.2 Archival Memory	30
1.3 Opening up the Archive	31
1.4 Responsibility	32
2 Theoretical context: new museology, digital media and experience in museums	35
2.1 Introducing new museology	36
2.2 Difference and participation	37
2.3 The inclusive museum	38
2.4 Digital media	40
2.5 The multimedia museum: opportunities for curatorial design	42
2.6 Baroque aesthetics and new media	43
2.7 Wonder and Resonance	45
2.8.1 Digital experience	46
2.8 Audience experience	46
2.8.1 Digital exerience	47
2.9 The experiential complex	47
2.9.1 Spectacle	48
2.9.2 Experience and authorship	48
2.10 Moving towards the research problem	49
3 The quest for experience	52
3.1 The destruction of experience	53
3.2 In praise of profanation	54
3.2.1 Play and touch as profanating procedures	54
3.3 Paradoxes of playful and experiential approach to heritage interpretation	56
3.4 Introducing the research problem	58
3.5 Constructing an argument	59
3.5.1 Aims	60
3.5.2 Objectives	60
3.6 Research Design: introducing the case studies	61 10

3.6.1 The Audiovisual Museum of Italian Resistance 3.6.2 Place-Hampi at the Immigration Museum, Melbourne	61 62
3.6.3 Lost and Found. Belongings: a sensory experience of Australia's migration heritage	
3.6.4 Living Streams: Augmented Reality experience of the Georges River in Liverpool	63
3.6.5 Resonances: lives, objects and stories of Liverpool	63
3.7 Innovation and significance	63
4 Methods and interpretive framework	66
4.1 Immersion, empathy and engagement: the research as a situated and social process	6
4.2 Practice as research: emergent and situated methods	69
4.2.1 Interviews	7(
4.2.2 Exploring curatorial design strategies: embodiment and experience	7. 7.
4.2.3 Performative research: emergent and situated methods 4.2.4 Art methods	73
4.2.5 Simultaneity	74
4.3 Developing an interpretive framework	74
4.3.1 Knowing the 'Other': Difference and Intimacy	75
4.3.2 Silence as vehicle of engagement	78
4.3.3 Touch: exploring relationships between the performer and the instrument	78
4.4 Aesthetic knowing: Objects, Body, Senses	80
4.4.1 A return to materiality in the museum?	80
4.4.2 Embodied interaction	82
4.4.3 Affective experience	84
4.5 Questions for practice	85
5 Introducing the practices	89
5.1 Interactions in the electronic museum	9(
5.1.1 Physical interactions: the role of the interface	91
5.1.2 Interactions in responsive museum spaces	94
5.1.3 Enchantment	98 99
5.1.4 Questions for practice 5.2 Social interactions: Participatory decign	100
5.2 Social interactions: Participatory design 5.2.1 Co-curation: online collections and objects' virtual aura	100
5.3. Exploring interactions in practice	102
5.5. Exploring interactions in practice	102
6 The Museum of Resistance	105
6.1 Introduction	105
6.2 Virtual visit: Experience 6.3 Interviews in the form of conversations	102
6.3.1 The journey: A site of memory	110
6.3.2 Mission and vision	111
6.3.3 Strategies of engagement	112
6.3.3.1 Orality and touch	112
6.3.3.2 Narrativity	114
6.3.4 Approach to controversial topics and historiographical interpretation	116
6.3.4.1 Authorship	116
6.3.4.2 De-contextualised memory	117
6.3.5 Narrative and technical constraints	117
6.3.6 Affective experience	118
6.4 Themes, values and questions informing future works	119
6.5 Reflections on orality and truth	121

7 Place Hammi introduction	105
7 Place-Hampi: introduction 7.1 Introduction	125 125
7.1 Introduction 7.2 My Experience	123
7.3 Discourses	127
7.3.1 Embodiment	130
7.3.2 Interaction: immersion, engagement, co-presence and movement	130
7.3.3 Entanglement	130
7.3.4 Performativity	133
7.3.5 Co-evolutionary narrativity	134
7.3.6 Aesthetic resonance	135
7.3.7 Cross-cultural mediation	137
7.4 Reflections on digital aesthetics and virtual heritage practices	139
8 Belongings	143
8.1 Introduction	143
8.1.1 Motivation	143
8.2 Migration and Materiality: Sense Knowledge	145
8.2.1 Object biographies and migration memories: two exhibitions	145
8.3 Making sense of touch	147
8.3.1 Touching objects in museums	149
8.3.2 Haptic interfaces	151
8.4 The making of a haptic interface for <i>Belongings</i>	152
8.4.1 Design strategies: exploring connections between sound and touch	154
8.4.2 Relating objects and stories	155
8.5 Lost and Found: A first experiment	158
8.6 Reflections and further development	162
8.6.1 Relational and social interactions: object tagging	163
8.6.2 Evocative objects: the idea of home	164
8.6.3 What if objects cannot be touched?	165
9 Living Streams. Digital mediation and social engagement with place, commu	
the intangible heritage of the Georges River	169
9.1 Introduction	169
9.1.1 Questions of locality	170
9.1.2 The Georges River	170
9.1.3 Locative media and beyond	171
9.1.4 Creative applications of Augmented Reality	172
9.2 Places as networks: the Georges River	174
9.2.1 'Country' and knowledge	175
9.2.2 Project's partners	176 176
9.3 Curatorial design strategies	176
9.3.1 Walking as knowing: the landscape as an interface	177
9.3.2 Inclusion and participation	178 179
9.4 The making of a participatory interface	181
9.4.1 Knowledge transfer and strategies of engagement 9.4.2 Participation in action	183
9.4.3 Augmented Georges River experiences	185
9.5 Researching into 'Mobilities': Evaluation strategies	185
9.5.1 Mobility and resilience as ways of making and keeping place	187
9.6 Sustainability and future directions	188

ENCHANTED TELEIDOSCOPES: MULTIMODAL INTERFACES REFRAMING EXPERIENCE IN THE MUSEUM

Structure of the work

In order to facilitate navigation of the dissertation and for the reader to come to terms with its scope and themes I present in the paragraphs that follow the outline of the thesis which helps to understand how the work is structured and the content articulated.

1 Introduction

This chapter introduces my interest and motivation as a curator, designer and researcher, my experience in the field of museum making practice, the research's target audience and context. It presents curatorial design as an emerging practice at the intersection between spatial practice and digital mediation, interpretation and exhibition design, engaging visitors with mixed-media experiences in increasingly technologised museum environments. 'Enchanted Teleidoscopes', the title of the thesis, is used to introduce the context of curatorial design practices within the vast realm of digital applications, including the physical computing, interactive interfaces populating the museum space. 'Teleidoscopes' are a kind of kaleidoscope with an open view, they are used for their potential to produce enchantment, mediate, reflect and refract 'objects' from the outer world within the museum's space. Objects, in this context, comprise the tangible legacy of physical artefacts, artworks, material records, buildings, monuments, landscapes, and the intangible heritage of oral histories, folklore, customs, language and knowledge that was inherited from past generations and kept for the future.

'Multimodal', is here utilised in its widest definition, encompassing the notion from HCI, that is the inclusion of multiple sensorial modalities such as the haptic, visual, auditory and kinesthetic in the interaction with a system, as well as from semiotics referring to the multiple resources available in communication, such as the verbal, the visual and the textual. These resources of communication are defined by different semiotics modes, which contribute to create a meaning-making system, such as language, colour, gesture, quality of voice,

typography, spatial resources and so forth. The focus of the thesis is on the medium through which these modalities are materially realized.

Posing questions on how to make heritage relevant for our present, and thus mediate it into lived experience, I look at current artistic practices that choose the archive as a source material for their interventions. Situating their works in the archive, the repository of collective memory for Western culture, artists such as Raphael Lozano-Hemmer, Mona Hatoum, Christian Boltanski, Doris Salcedo and the Otholit Group are renegotiating heritage, experience, the body, thereby re-connecting past and present.

2 Theoretical context: new museology, digital media and experience in museums

This chapter examines current themes in museum studies and museum making practices by developing an overview of the theoretical background concerning the discourse on new museology. Current reflections and questions concern the changing role of the museum in a multicultural society and age of migration and its potential to perform as a 'contact' zone interfacing histories, identities and cultures, thereby acting as a 'differentiating machine'. It goes on to explore current themes and problems in museum studies and practices, discussing concepts within the contemporary curatorial practices of major contemporary art events and Biennale. These concern participation, intimacy, authorship, the cultural and social impact of travel and mobility, migration and interactions between art and civil society.

Curatorial design and the impact of digital media on interpretation and the art of exhibition

This sub-chapter examines the role of new media in museums, their role in expanding museums' reach and range of activities, as well as possibilities for interpretation, exhibition, social interaction and cultural production beyond the museum itself. Looking at current discourses on digital heritage, design and emerging technologies in museums, this subchapter examines the wide range of applications and possibilities opened up by technology for interpretation, mediation and access, their impact on visitor's experience, learning, immersion and engagement.

It draws a parallel between the baroque aesthetics of *Wunderkammer* and digital displays, in the way objects and artefacts are assembled and related and the role of viewers in createng these connections, thus exploring the further potential of 'interactivity' within museum-based interaction to renegotiate the role of visitors as meaning makers, their agency in the interpretation process, narrative and sensory space. In the increasingly mediatised museum, existing tensions between mission and market problematise the role of new media raising issues concerning the museum as an 'experiential complex'. Questions are posed as to how curatorial design can mediate authenticity, presence, negotiate meaningful experiences and interactions between objects, places, people and cultures within the museum.

3 The quest for experience: Developing an argument

This chapter explores 'experience' as a new territory for curatorial design, drawing on Giorgio

Agamben's speculations on experience as a profanating procedure, a freeing action of returning things from the sphere of the sacred – the sphere of spectacle and consumption – to the common use of man. This introduces the research argument which revolves around the renegotiation and reframing of experience in museums and the role that digital media can play in the process. The thesis reflects on the role of experience in museums and the inherent ambiguities and paradoxes of adopting experiential, playful and participatory approaches to the interpretation of problematic and contested topics within museums and heritage sites. The argument of the thesis is an exploration of the possibilities opened up by interactive media and physical computing to negotiate an embodied experience with the past, the 'Other', with ourselves and our memory. Questions are posed as to how curatorial design practices can enable strategies of embodiment, sensorial engagement and participation that facilitate intimacy and difference with problematic topics, representation of counter-histories and marginal memories.

The main concern of the research is the impact of digital technologies and their capacity to augment and/or simulate sensory engagement and embodied experiences as new ways of knowing, about the world, others, ourselves. The thesis argues that this way of knowing can be facilitated by curatorial design practices that utilise an integrated approach to spatial design and digital mediation enabling multisensory engagement through spatial, narrative and sensory forms.

The research case studies are here presented as curatorial design practices offering a unique, distinct perspective from which to look at the way curatorial design can mediate, spatialise and embody museological data in sensory and narrative forms. Two case studies analyse existing practices in the field, three develop my own works. Each case study analyses from a critical perspective the strategies adopted to renegotiate aesthetic experiences, affective and embodied interactions between present and past and look at the quality of the experience, its effect on time, space, and the body.

4 Methods and interpretive framework

In a methodological framework of performative research, the researcher's positionality and engagement with the context of the research is acknowledged as an essential element of the research's inquiry. I use choreography as a metaphor to examine my role within the field of study, with the bricolage intermixing choreographed and improvised methods forming the research's experimental ground. In the context of practice as research, methods are concerned with the exploration of interpretive approaches within curatorial design practices developing physical and online interfaces, digital applications, multimedia environments, and responsive exhibition spaces. A mix of situated, emergent and more established ethnographic methods, combining first hand accounts, audience studies, auto-ethnography and discourse analysis are employed to uncover curatorial and design strategies that can renegotiate intimacy and engagement with problematic topics such as counter histories of war and migration heritage – as in the case of the *Museum of Italian Resistance* and 'Belongings', the translation of Hindu place-bound mythologies and narratives to Western audiences – Place Hampi, the sense of

belonging and identity in relation with local history and community intangible heritage – in the case studies of Liverpool's 'Living Streams' and 'Resonances'.

Developing an interpretive framework

Given the specificity of its field, the research develops two theoretical threads running throughout the research in an open-ended, ongoing inquiry that entwines theoretical and practical tracks. These construct the research's interpretive framework, embracing more universal concepts relevant to the research problem of thinking about time, the past and memory, our ways of being in the world, the way we relate to the 'Other', how we negotiate difference, the ways knowledge is produced, how we generate meaning and the role of the body and senses in the process.

Knowing the 'Other': Difference and Intimacy

This thread is central to the idea of the museum in a multicultural society and age of migrations, its role as a 'differentiating machine', and performative contact zone between 'other' cultures and histories. Interpretive potential of silence and touch is here discussed from a theoretical perspective as vehicles of empathy, engagement and necessary elements in mediating difference.

Aesthetic knowing: Objects, Body, Senses

This thread explores ways of knowing and generating meaning, the role of the body and senses in the process, how we relate to the outer world, objects and places and their role in keeping knowledge.

The researches' significance and contribution is found in the connections it opens up between these domains and the significance of the questions on the role of curatorial design practices in negotiating the questions through an ongoing interplay between the researches' theoretical and practical tracks.

5 Introducing the practices

In the form of an introduction to the research practices I examine the context wherein the case studies are situated, that is the museum in the electronic age. In this introduction I discuss relevant concepts and emerging discourses pertaining to the electronic museum, here understood as an 'ecology', and thus looking at how technology is transforming physical and social interactions and the role of participatory and interface design in this transformation.

6 Museum of Resistance

This chapter examines curatorial strategies, spatial practices and digital mediation of the heritage of the Resistance movement in the provinces of Massa, Carrara and La Spezia within the Audiovisual Museum of Resistance developed by Studio Azzurro.

Dynamics between authors, audiences and the participants of the Resistance movement are

examined through analysis of texts, my experience of visiting the museum, interviews and conversations with the designers, curators and historians who took part in the interpretive and production process. Investigating the museum's approach to oral communication as the leading aspect of curatorial design opens up questions on the role of orality in maintaining and translating cultural heritage, enabling intimacy and mediating difference. This is also reflected in the possibilities that the project opens up for designers to reconsider their work, looking at how, in this project, this thinking was carried on throughout their practices, proposing a new way of conceiving museums as participatory platforms that can mediate more empathic interactions with cultural memory.

7 Place Hampi: Immersion, place, embodiment

Place-Hampi is a modular interactive cinema experience that engages audiences with embodied participation in the drama of Hindu mythology within the World Heritage site Vijayanagara (Hampi) in South India. The study delves into the design and curatorial strategies adopted to create an aesthetic experience for a virtual traveler exploring Hampi's sacred heritage site. Hampi is a place where history, the natural environment, mythology and everyday cultural practices are closely intertwined. Problems related to the translation of this place-bound knowledge, multi-inhabitation and situated/culturally charged memories from Hindu mythology to Western audiences are explored in order to understand the concerns that are intrinsic to this kind of mediation. This case study looks at how curators, designers, historians and practitioners have approached problems concerning cultural mediation, co-presence and technological simulation by virtually dislocating the Hampi site – together with its context-specific heritage – and the way embodiment and kinetic engagement are conveyed through a performative exploration of a dislocated virtual Hampi.

8 Belongings: A sensory experience of Australia's migration heritage

Belongings post-WW2 Migration Memories and Journeys, is a community oral history project and web site exhibition developed by the NSW Migration Heritage Centre between 2005 and 2009 which brings to life more than 150 oral histories from former migrants who arrived in Australia after the Second World War. Personal stories are told through people's memorabilia and special belongings that accompanied migrants in their life-changing journey to another country. The first exploration using of my own work, *Belongings* materialises the possibility to direct more specific questions driving the research into an artistic and curatorial practice. The rationale behind this exploration is the translation of migration memories and the belongings associated to them from a web-based experience to a responsive gallery space. In a collaborative way, I conceive and develop strategies of embodiment through object handling and affective interactions between sound and touch in the design of a tangible interface mediating this heritage of migration.

The second curatorial design practice developed by myself as a project coordinator explores ways of 'making locality' through the conceiving, development and performative application of Augmented Reality and location-based technologies in the area of the Georges River in Liverpool, a municipality within the Greater Sydney metropolitan area. The project is situated in the dialectic between a global-connectedness enabled by mobile communication and the place-bound locality of the river, its natural and cultural heritage. Using specific methods related to mapping and locative media, the project exposes the strategies adopted to renegotiate experience of, and engagement with, the river's heritage through interactions between place, histories and community.

The first part of the chapter looks at the making of Living Streams as a participatory cultural interface, the actors involved, and the implementation of engagement and outreach strategies within Liverpool's communities.

The second part critically reflects on the project's outcomes and findings looking at their capacity of developing innovation, cultivating technological imagination and fostering new collaborations within Liverpool's locale and beyond. Questions are also posed regarding the project's sustainability, asking how engagement and responsibility can be carried on into the future.

10 Resonances: People, objects and stories of Liverpool

The last case study develops a permanent exhibition at Liverpool's Regional Museum interpreting the museum's diverse and heterogenous collection consisting of historical photographs, oral histories and artefacts from working, domestic and everyday life, industrial heritage and family history.

The exhibition portrays the lives of people through the objects they donated to the museum in the last 50 years. Curatorial design strategies are concerned with ways to reach beyond the memory space of the donor, to a larger world, evoking in viewers common memories, shared meanings and collective histories of Liverpool.

Arranged as a cabinet recreating a room within a room, the collection can be browsed performatively by visitors. Illuminated trajectories across the exhibition displays materialise the choices of visitors and their sorting actions exploring Liverpool's heritage. This case study critically examines convergences and discrepancies between conceptual and development stages of the design, the role of curators, designers, heritage managers in the co-authorship of the work, and reflect further on possible strategies engaging Liverpool's citizens not only with a museum experience but also rethinking the museum as a site of interpretation and cultural production of new memories.

11 Reflections

This chapter re-connects relevant findings and situated knowledge produced in the research practices to current and ongoing questions, themes and investigations within the discourse of new museology and museum making, acknowledging existing tensions arising from emerging

theories of participation. Shifting and reframing the performative, embodied knowledge that has been produced in the case studies, this chapter attempts to systematically breaking down the 'movements' flowing between theory and practices and reflect on their transformative potential for the forming and articulation of the 'zone of contact'. This zone embodies the encounter that curatorial design practices in the multimedia museum can enable.

Reflections on the research findings examine how the practices respond to new challenges of museums in an age of migration proposing curatorial and exhibiting strategies enabling difference and intimacy. This attempts to formulate a provisional guideline for practitioners in the field, bringing together the theoretical and practical outcomes of the research in a systematic manner. Rather than aspiring to completeness or conclusion, these reflections are only tentative and partial, and therefore open to the contributions of other practices and other perspectives, and thereby in a constant process of being transformed. In this chapter, which is important as it also marks a physical dislocation – or perhaps relocation – of my self from Australia to Europe, I describe my encounter with the Holocaust Gallery at the Imperial War Museum in London. The experiences illustrate in a performative way the directions outlined in the capacity for curatorial design practices to enable the integration of social and cultural responsibility with the power of aesthetics.

List of tables from online and other external sources

3.0 The Quest for Experience

Image 1 Visitors at the Louvre: some engage directly with the art while others take pictures of pictures

Author: Michael Kimmelman

Published by Valerio Mezzanotti, 'At Louvre, Many Stop to Snap but Few Stay to Focus', August 2, 2009, New York Times.

Retrieved from http://www.nytimes.com/2009/08/03/arts/design/03abroad. html?_r=0

5.0 Introducing the practice

Image 1 The five senses

Retrieved from http://www.kringelbach.dk/skulptur.html

Images 2,3,4 Rebecca Horn, Scratching Both Walls at Once

Retrieved from http://we-make-money-not-art.com/archives/cyborgs

7.0 Place-Hampi

Image 1 Place-Hampi, 3D model

Retrieved from http://icinema.edu.au/projects/place-hampi/

Image 2 Place-Hampi, Navigation through the stereo- scopic panorama

Retrieved from http://icinema.edu.au/projects/place-hampi/

Image 3 The making of Place-Hampi. Ambisonic sound recording on site

Retrieved from http://icinema.edu.au/projects/place-hampi/

Images 4, 5 Place-Hampi, 'Magical Realism'

Retrieved from http://icinema.edu.au/projects/place-hampi/

8.0 Belongings

Image 1 Chafic Ataya: Binoculars, Self portrait

NSW Migration Heritage Centre Archive, Powerhouse museum

Retrieved from www.migrationheritage.nsw.gov.au/exhibition/belongings/

ataya/

Image 2 Ana Fox: Wedding photo, Self portrait with hat

NSW Migration Heritage Centre Archive, Powerhouse museum

Retrieved from www.migrationheritage.nsw.gov.au/exhibition/belongings/fox/

Image 3 Jacqueline Giuntini: Family knife, Self Portrait

NSW Migration Heritage Centre Archive, Powerhouse museum

Retrieved from www.migrationheritage.nsw.gov.au/exhibition/belongings/

giuntini/

Image 4 Helen Sowada: Koala bear, Self portrait with koala

NSW Migration Heritage Centre Archive, Powerhouse museum

Retrieved from www.migrationheritage.nsw.gov.au/exhibition/belongings/

sowada/

9.0 Living Streams

Image 1 Where are you?

Retrieved from: http://www.google.com/ imgres?q=where-are-you&um=1&hl=en&client =safari&rls=en&biw=1362&bi h=802&tbs=isz:m &tbm =isch&tbnid=1FHFFqiXqsMSEM:&imgref

Image 2 You Are Here.

Retrieved from http://www.google.com/imgres?q=you-are-here+neo+light&um=1& hl=en&client=safari&r ls=en&biw=1362&bi h=802&tbm=isch&tbnid=T509 weKF1YpEV M:&imgref

Image 3 You Are Here Now

Retrieved from http://sassafrass.typepad.com/.a/6a00d83451e78 d69e2016763944144970b-pi

Images 4, 5 MoMA Augmented Reality, 9 October 2010 Retrieved from www.sndrv.nl/moma/

Image 6 Stefano Arienti, *I Telepati*, Fondazione Zegna, Trivero, Italy. Retrieved from www.fondazion-ezegna.org/all-aperto/

Image 7 Matthias Gommel, 12 Films, ZKM Institute Retrieved from www.botaniq.org

10.0 Resonances: People, Objects and Stories of Liverpool

Image 1 Ex Voto Chapel, Altotting, Germany
Retrieved from http://fotoalbum.virgilio.it/konga/200712ger
maniaaustr/200712germania altot-2.html

Image 2 Photograph by Davide Papalini, *Ex voto chapel at Santuario della Creta*, Castellazzo Bormida, Piedmont, Italy, 29 August 2010. Retrieved from http://com-mons.wikimedia.org/wiki/File:Castellazzo_Bormi-da-santuario_della_Cretacappella_ex_voto4.jpg

Image 3 Photograph by Benjamin Mercer, *Paper prayers tied on string at a Japanese Shinto Shrine in Kyoto*, 2006. Retrieved from www.123rf.com/photo_667020_paper-prayers-tied-on-string-at-a-japanese-shinto-shrine-in-kyoto.html

Images 4,5 Photographs from the exhibition 'Plural Stories', at the Guatelli Museum, Reggio Emilia, Italy, evocatively displaying utensils from rural culture and everyday objects.

Retrieved from http://fondazione.ismu.org/patrimonioeintercultura/index.php?page=esperienze-show.php&id=46#

Image 6 Photograph by Kate Hartman, *Muttering Hat*, exhibited at *Talk To Me*, MoMA. The two "muttering" balls can be placed over your ears to 'extract' the noise of your thought process and translate it into physical world.

Retrieved from www.moma.org/interactives/exhibtions/2011/talktome

11.0 Reflections

Image 1 Droog Design, *Tree-trunk bench*. An example of hybridisation of the natural and the artificial. Retrieved from www.droog.com

