Design and Social Histories: Heritage on Harbourside

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Abstract

This explorative paper begins by describing a project that is in development. First proposed by staff and students of the Otago Institute of Design, and Otago Polytechnic, the project offered solutions in response to a City Council urban planning brief and tender. As a result of changing local economic and political conditions however, that brief changed. The paper will outline the highly creative propositions, developed by designers for interactive outdoor Museum experiences in industrial urban sites, and offer user-focused processes employed through these designs. As the brief changes, the paper outlines the processes of gaining support for the project from local communities: creative; technical; financial and social. The project proposes new roles for designers as change-makers for the development of urban spaces and communities, as well as brokers for new collaborative partnerships. Analysis will consider the changing role of Museums, and the importance of telling local social histories with and for communities. Here connections are made with designers as storytellers, creative producers and social architects, in ways that propose and articulate participative urban experiences.

KEYWORDS: urban design and storytelling, local social histories, community building, interactive outdoor Museums

Introduction

This paper outlines a project undertaken by students and staff at Otago Polytechnic, in Dunedin, New Zealand. The project brief is outlined, and the concept development and pitch described. The broader context for the project is defined, including sites and communities. Analysis is focussed around the role of social objects and engaging publics in the telling of context-specific historical narratives. As the project brief changes however, the focus of the proposed designed experiences shifts too. The role of designers as place-makers and change agents is examined through the development of a live brief.

STAGE ONE: The Initial Project

The Harbourside Signage project brief

The Harbourside Signage project was first proposed by Dunedin City Council's city development team and tenders were sought for wayfinding and signage in the historic harbourside area of Dunedin, New Zealand's fourth largest city. The Harbourside is adjacent to the older central city area, a working port, but with many of the main port services relocated to Port Chalmers, a small town nearer to the harbour mouth. In the height of the gold rush in the 1860's Dunedin was a major port. Many grand buildings were erected and remain today, in varying states of repair and reuse. This area of the city includes a number of historic buildings, some still in use for their original shipping-related function, others converted to include a range of mainly light industrial purposes. A few artists and vocational fishermen also populate the area, and several restaurants and bars occupy historic buildings. A popular tourist boat takes cruises from the wharf to visit the area's seals and albatrosses. The brief and tender process issued by the City Council was part of a larger 50 year plan to redevelop and eventually gentrify the area, creating a mix of land uses, public spaces and amenity areas, ranging from apartments to shopping and recreational facilities. The Harbourside signage project aimed to identify 20 particular locations, and provide heritage interpretation signage. "These signs will provide a welcome to the area, set a distinct identity for the area, interpret key heritage buildings and other features, and may establish a "heritage trail" or walking route." (Dunedin City Council Tender 3421, 2011) The signage project proposed change in the way the area was perceived and used, and the signs were to frame the precinct. The project was timed to coincide with a large influx of visitors to the city as a venue for the 2011 Rugby World Cup.

The Design Team context

In 2010 the Otago Institute of Design, and Otago Polytechnic, comprised of a Design School, an applied design research centre and digital design workshops including 2D and 3D printers and scanners, and audio-visual equipment. All housed on the Otago Polytechnic's small campus, the Polytechnic's current aims are to provide educational resources for students as well as a research and development interface with local industry and communities. Otago Polytechnic is one of only two polytechnics in New Zealand to be included among the research organizations able to offer research and development vouchers to New Zealand industry. The scheme is administered by the government's Ministry of Science, and Innovation and runs on the basis of a 50% subsidy for research from government. (Fowler, 2010). Through the Polytechnic some industry research projects are able to receive a subsidy to develop new design-related capabilities.

The Design Team

A number of design lecturers and managers co-ordinate projects, and when possible students work with staff on collaborative projects. This is sometimes undertaken as classroom-based studio briefs, and at other times as individual supervised student projects. In other cases staff and students undertake projects outside of the classroom in collaborative teams. Professionals from a range of industries are contracted to supplement the range of skills already available on campus. This approach provides both valuable applied learning opportunities for students, and a wide range of creative concept development and applied design research for local industry and communities. The team discussed in this paper have worked together on a number of projects and concept pitches in the field of interactive exhibits since 2009, ranging from museum installations to outdoor public sculpture.

Initial Proposal

"The waterfront industry is a name for a set of operations carried out at a point where transport by land and transport by sea meet. The ramifications of these operations are widespread. The industry presents a scene of great activity with many occupations, all of which, however, are related more or less closely to the primary occupation of servicing ships and cargo." (Bauchop, 2012)

The design concept proposed by the Otago Polytechnic team envisaged the area as it had once been: as a scene of great activity. Shipping once provided the main source of travel for people and cargo to and from this colonial city, and the waterfront was a gateway.

Our response to this brief reconsidered the signage project as a people-centred outdoor living Museum experience, and planned to "enhance the area as a vibrant people-oriented place". (Otago Polytechnic Tender document 2011) Families and tourists were identified as key audiences.

We proposed to tell histories through the use of personalities.

The concept redefined the signage system as a group of characters, oversized figures from the past, who reveal their socio-cultural contexts through costumes, props and text and audio narratives. Ranging across time zones and cultures the historically accurate characters reveal personal knowledge of the area, through their attention to local detail and use of the area. Twenty characters were proposed, each based on a particular or likely person. Potential characters included an industrial worker, high profile merchants, an architect, pre-colonial Māori (New Zealand's indigenous peoples), and immigrants arriving to New Zealand as well as a recreational fisherman. Themes, such as wildlife, architecture, travel and the natural environment would connect the historically different characters, with narratives affecting each other as a result of historic events and changes.

Key user-focused processes

Drawing upon specific local social histories, and researched through primary and secondary source material via libraries, archives and local historians, the project proposed collaborative user-focused methods of research, development and iteration.

Six key user-focused processes were identified as necessary for the success of the project. The first three processes we identified related more closely to local perspectives, including research and project's conceptual development and script-writing. The latter three processes are more generally accepted as good human-centred practices for interaction designers, working on digital and material exhibits for display in museums and in public spaces.

Involvement of local communities:

The first required the involvement of local communities and current users of the area, with community development identified as a key process and outcome of the project. While the City Council as client had existing relationships with the local harbourside communities, these were not always the type required by the design team. We needed to develop cooperative and collaborative relationships, particularly in the task of seeking out authentic local knowledge, including the contribution of social and industrial histories relevant to the area.

Close involvement with runaka (indigenous communities).

Here it was identified that close collaboration with local runaka (indigenous communities) was required by the design team to ensure indigenous perspectives were appropriately heard, recorded and told, for the benefit of both indigenous communities and non-indigenous visitors. Such consultation is a mandatory process for designers and researchers working at the Polytechnic, but also is identified as good practice in New Zealand community development projects of all types.

3. Adopt user-testing and a user-focused perspective.

Drawing upon the highly human-centred design approaches of 'design thinking' (Brown and Wyatt, 2010) we identified a need to reconsider the initial brief and to ideate as a multi-disciplinary design team, through a combination of field observation and iteration. Our aims included prototyping, testing and refining our proposed solution, with the communities that would be living and working in the precinct we were designing for.

4. Use of more than one form of media in each 'sign/character'.

Research on visitor learning in museums suggests that interactivity promotes engagement, understanding and recall of exhibits and their content (Schneider & Cheslock 2003). Our aim to include multimedia and hence multi-sensory interactive components aimed to increase visitor attention and experience, and to incorporate opportunities for a wider range of learner types. (Hein 1998)

5. Must appeal to various age groups, with multiple heights and activities.

Similarly motivated to attract a wide range of community visitors each exhibit design required multiple access and entry points to a connected story.

6. Positioning the work as connecting the past with the present and future.

In this process, each exhibit is a node in a network of time, providing a slice of history with elements that suggest or provoke an understanding of a broader historical narrative. The visitor is encouraged to consider themselves as a character too and a potential contributor to this historical narrative.

A further process (extrinsic to the design) included connecting the trail with an existing and developing bicycle route, to enable more than one entry and exit point into the precinct. Encouraging cyclists to visit the area also proposed historically relevant engagement with

transport methods, along with a large sculptural horse and cart acting as an entry way for vehicular traffic.

The proposal to the City Council, provided an expanded team of contributors, ranging from local sculptors, graphic and sound designers, through to local runaka (indigenous communities) historians and scriptwriters. The combined experiences of the team were tailored to achieve compelling storytelling through the development of characters as expressions of histories. The proposal pointed to similar figure-based historical works in international waterfront areas, and detailed how the proposed concept would expand and develop this approach, into interactive Museum experiences, through the use of historically relevant research and character design, and multimedia interactive elements.





Figure 1: Mallaig harbour sculpture, Scotland. This sculpture of a fisherman and child was made by local sculptor Mark Rogers. Creative Commons license

Figures 2 & 3: Fremantle 'The Fishermen' Fishing Boat Harbour, Fremantle, Western Australia, 2004 Bronze sculpture series by local sculptor Greg James, with Jon Tarry, Commissioned by Fremantle Fishermen's Monument Trust (images copyright Greg James)

REFLECTION AND ANALYSIS

An emerging design practice: storytelling and objects in context

The Heritage on Harbourside project can be read as part of an emerging practice of the design of social history storytelling projects in public spaces in Dunedin. These projects enlist practices, tools and techniques from a wide range of disciplines outside of design. They do not grow from preconceived forms or products, but begin with research into site-specific stories, and narratives are developed with the design of experiences in mind. In a time of intense screen mediation, these outcomes are designed to be experienced first-hand and in material spaces. Indeed these material spaces define and provide a context for the stories that are produced. The designs include characters, objects and images that have connections to their sites. These are particular stories and couldn't have happened anywhere else. And implicit in their stories are embodied audiences.¹

Storytelling is not new to, nor the sole interest of, design. While the methods and materials of design give "form" to communication design outcomes, Roger Sametz and Andrew

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¹ See also McCaw, Caroline 'Social histories in conversation' conference paper presented at Expanding Documentary AUT Auckland, New Zealand, December, 2011

Maydoney (2003) argue that "the ultimate goal is to tell stories – to engage "teller" and "listener" in a dialogue that builds comprehension, commitment, participation, loyalty and trust." Stories are built into objects and images, which participate both with the environment and with the people who experience the environment. Here the stories make connections between visible and invisible, natural and built environments. They combine representational and metaphoric aspects and imply the regular users and visitors to the area in these stories, generating connections with local people as 'knowers' of this local content and culture. The result is at times, a powerful sense of identification and ownership. In this sense we have made associations with these designs as like outdoor Museum experiences.

Partners with communities

Contemporary museological thinkers such as Mike Wallace (1995) consider a Museum's potential role in forging a community of public discourse.

"I urge museums to seek not simply customers but constituents, ...and to become partners with communities in effecting change; to continue to think imaginatively about new ways of saying things, and boldly about new things that are worth saying" (Wallace, 1995)

The Harbourside project addresses Wallace's ideas and identified the need to work not only with the object or story as a system, but also the strong need to link with the various communities, past and present, who connect with the site. Museums worldwide are responding to ubiquitous computing and interactive entertainment, and see the need to extend beyond the walls of a building. Contemporary museum solutions can be found in a range of initiatives including *Museums 24/7*, and *Museums Anytime, Anywhere*, both approaches to making Museum content and interpretation available digitally.

Experiencing histories in real time

The crafting and telling of stories, through exhibitions, objects and characters in public spaces, reveal a co-mingling of histories that can be experienced in real time. Shedroff et al's model of Experience Design develops ideas of the value of experience. Shedroff defines experience with reference to Pine and Gilmore's term 'the experience economy'. "To experience something requires that we recognize an alteration to our environment, our bodies, our minds, our spirits, or any other aspect of ourselves that can sense change" (Diller, Shedroff and Rhea 2005 p18) [5] Interactive elements within these contextually specific designs contribute to the significance and meaning of the visitor's experience. Buildings and objects are moved from passive and potential containers of narrative, to active and interactive triggers for ongoing, and meaningful experience. The designs aim to reach Shedroff's three inner core emotional engagement rings, namely a value or identity driven sense of participation in order to create a meaningful experience. Viewers or visitors can make direct connections to their own identities, and position themselves in a more developed sense of community, that spans time as well as locale. According to Shedroff "design is the process of evoking meaning" (Whitbread 2009). The Heritage on Harbourside proposal incites visitors into imaginative reflection, and action. Their engagement, from taking part in walking trails to identifying industrial histories allows visitors an immersive and thoughtful reflection.

Sharing public spaces with social objects

Contemporary Museum curator Nina Simon (2010) suggests that we should look at an image or object "not for its artistic or historical significance but for its ability to spark conversation." (Simon 2010) These artefacts and experiences she defines as social objects. "Social objects are the engines of socially networked experiences, the content around which conversations happen. Social objects allow people to focus their attention around a third thing rather than on each other" (Simon 2010). Simon is refering to Jyri Engstrom's (2005) term 'social objects' addressing that role that objects have between people relating in online social networks. A social object is one "that connects the people who create, own, use, critique, or consume it. Social objects are transactional, facilitating exchanges among those who encounter them." Simon uses the example of her dog as a reliable social object. The dog allows for the transference of attention from person-to-person, to person-to-object-to-person. (Simon 2010, ch 4) In fact a dog would be a good "character" to include in the series of signs in the harbourside project. Spanning histories, a dog (even a life-size 3D model of a dog) is likely to engage visitors as a social object in the heritage trail.

The consideration and use of Museum material as social objects, according to Simon, doesn't separate visitors from the material. Rather, "It let us onto the stage to share it with the actor, the objects, and the story at hand". (Simon 2010, ch 4) The Heritage on Harbourside project considers public spaces as both a living exhibition of history and a theatrical stage, regular users and visitors can continue to explore it imaginatively and beyond the terms offered by the designed experience.

STAGE TWO

New parameters: an unexpected change to the design brief

Around the same time that the urban development team was considering Harbourside design proposals, several city-wide changes occurred. The city had heavily invested in the building of a new stadium in order to be a host city for the 2011 Rugby World Cup. A new CEO (business leader) was appointed for the City Council and quickly declared a financial crisis as a result of overspending on the stadium. One local councillor recently summarised the situation bluntly in the local newspaper:

"In fact, pretty much everything has got to go on the backburner, because there is no money. When people wake up to that fact, I think we'll be much the better for it." ('Councillors at odds over spending cuts' Otago Daily Times 2012)

Along with many other development plans, the Harbourside signage project was put on hold.

Also around the same time some of the local light industrial businesses in the Harbourside precinct protested the change of use proposed by the City Council. As a result of successful lobbying, the City Council agreed to amend its designated Harbourside Zone retaining only a small area as a mixed-use environment.

"The removal of the plan change on the northern side means that the Harbourside Zone no longer exists and the area reverts back to its industrial and port zoning." (Otago Chamber of Commerce website, 19 September 2011)

Coincidentally the City Council was also undergoing a ten-yearly spatial plan process, involving local consultation. Along with this consultation, Kobus Mentz a high profile

sustainability-based urban designer working in Auckland, New Zealand was commissioned to consult and propose relevant urban development concepts. He held a series of workshops with Council staff, retail, community, environmental and property groups as well as a public forum. Mentz's initial feedback was to ensure preservation of the heritage and historic built environment of the city. He also placed a new focus on the area we had been researching: the harbourside:

"Through "a series of micro-interventions" Mentz considered ways that could assist pedestrians, public transport and parking to work better together. A focus of his was the harbourside area and southern end of town." ('Urban Designers to Develop Vision for City', 2011)

Mentz suggested that the warehouse district adjacent to the harbourside, be developed as a potential creative precinct. His suggestion came about by observing a number of small high tech and creative industry professionals with offices in the area. A relatively large number of empty buildings remain and the area itself has no official title, mainly used as an arterial traffic route. The buildings are historically connected to the Harbourside area, and were once mercantile traders and warehouses, storage facilities for traders by sea. The histories and people associated with this adjacent warehouse zone, are closely connected to those of the harbourside that we had researched and developed for the Heritage on Harbourside proposal. And though now separated from the water by a vehicular overbridge, the area was just a few bocks away from the water's edge. Many artists and designers in the city have pictured the development of a creative precinct as a timely opportunity, however there is no official community or representative group of domestic or business residents in this area.

STAGE THREE: Redefining the design problem

As a result of these coincidental changes to formal urban zoning and informal discussions of a creative precinct, several staff and two students decided to rework our initial design proposal. The area now proposed for the heritage walking trail included both the harbour's edge and the warehouse district proposed as the creative precinct. Existing characters were shifted to relevant sites, and new walking trails were researched and developed to connect the various sites.

The students presented their research and revised proposals at the graduate industry night, to council planners, property owners and some of the tenants of the proposed precinct. There was enthusiastic response, but with less focus on the design concept and more emphasis on the need to identify with and share a vision for the potential use of public spaces in this newly identified neighbourhood, or proposed creative precinct.

The design proposal however developed a new focus and direction. No longer was a wayfinding system the central design problem, but the development of a robust community with and through these urban storytelling projects had become the main priority for our community partners.

New problems, new models and the future of the project

The earlier key user-focussed processes we had identified, centred around building relationships between the design team and local communities have become even more important. The new communities we were including in our scope were also potentially creative businesses and brought with them new ideas, stories and resources. This emphasis

has shifted from an opportunity to an imperative to develop this community, and invite interested tenants and groups to join with Otago Polytechnic and the Dunedin City Council to become project partners and collaborators in all areas of the precinct's development.

In terms of wayfinding and signage, the project has been returned to the drawing board in all areas including funding, design and technological development. Here the role of the original design team has significantly shifted and two types of new problems have emerged:

- If the project is to move forward, the Otago Polytechnic design team are the most likely new brokers for future collaborative partnerships. This requires both the investment of time and a set of skills different from those used to develop earlier user-focused concepts. At the time of writing, the design team plan to hold public meetings, and to create an online research wiki website to house their own research into stories of the precinct, and to create a platform suitable for other interested parties to contribute to and learn from.
- The process of gaining support for public art and design projects from local relevant communities: creative, technical, financial and social is a second identified problem. Along with public meetings and a public research repository, the team hope to initiate the design process, through the creation of an initial, self-funded project. This project is likely to be a smaller, scaled back project, drawing on initial ideas from the project's tender document but leaving much more room for other design teams to contribute through new projects and in new ways. In this way we hope to provide a brief, and share our processes for developing interactive storytelling designs for public spaces. Our project will have a different purpose, and will start to demarcate the precinct and to provide a model for future projects. Less of a signage or wayfinding system, the project will identify and respond to a new collection of problems, and in a way that leaves room for further creative opportunities. By developing a project of our own, the precinct discussions become tangible. The original role of social objects proposed by the design team remains important, but the context has changed. Rather than emphasizing the stories of the past, the project performs a vision for the city, and in doing so provides the opportunity for a city full of potential, during economic times that perhaps suggest otherwise.

Here we must look towards different kinds of models for public art and design and their ability to generate more wide-spread social and behavioural change, not only through the design of social objects that trigger conversations, although this is likely to be an important first step, but to also propose more radical and transformative aims.

One such project that similarly uses creative tactics to incite broader social change is the *Curating Cities* project based in Sydney Australia, a 5-year curatorial research project that "examines how the arts can generate environmentally beneficial behaviour change and influence the development of green infrastructure in urban environments." (http://curatingcities.org)

The project group, headed by researcher practitioners Professors Jill Bennett and Richard Goodwin, with Curator Felicity Fenner of the National Institute for Experimental Arts (NIEA)², create strategic networks and partnerships to place creative processes and disciplines at the centre of the eco-sustainability agenda.

Through adopting the principle of using art and design to curate–literally, to care for–public space they propose 'curating' as a method for working through practical concerns of ecosustainable development in the city of Sydney. The project provides a rubric for public art and design in relation to civic domains not normally considered the role or function of

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² the National Institute for Experimental Arts (NIEA) is a research institute based at the University of New South Wales, College of Fine Arts.

creative practitioners. The *Curating Cities* programme encompasses a range of events from meetings and fora to exhibitions, labs, workshops and conferences.

Taking the lead from projects such as *Curating Cities*, we may see a new role emerging for such creative urban projects proposing artists and designers as change-makers for the development of urban spaces and communities, as well as brokers for new collaborative partnerships. And while the focus of our designs were not eco-sustainability, the model remains vital and relevant. While our experiences with the Harbourside project could be considered an indication that design and public art is losing favour in tough economic times, I would like to propose that the opposite is true. We are witnessing changing roles for polytechnics, councils and museums, but among this change emerges particular new roles and responsibilities for designers. In the example discussed in this paper, designers are taking the role of change-makers for the development of urban spaces and communities. But they are also able to take stock and become responsive to change, keeping people as a focus and co-ordinating opportunities for people to speak and to listen, and become involved and respond in creative ways. Designers are able to engage in meaningful local research as well as create relevant experiences for the location of that research, through the design of relevant and open-ended experiences. The project and process described in this paper makes clear connections with contemporary design and museological writers, Shedroff and Wallace: the project at each stage has considered the role of designed experiences, and meaningful engagement with communities. And future plans involve both face-to-face negotiation and the design and placement of social and relational objects (new and temporary public exhibits) to facilitate that engagement. The initial project designed by the Otago Polytechnic team proposed participative urban experiences through the use of storytelling and the design of characters AS signs. The revised situation will continue to place story-telling at the centre of the process, and facilitate a broader team of creative neighbours as potential producers of story-objects with a common vision and as a community.

The project team has a lot of new work to consider. Plans to formalize the design team within a centre of research expertise within the Polytechnic may help to attract some seed funding for new community development projects. With a focus on urban interactive storytelling, several other projects are already underway in the city with several local communities identified as potential collaborators with the design team. From an initial response to a tender for a signage system, the project has grown into the design of something much larger: the development of creative communities who are able to respond to their social and built environments, with a new awareness.

References

Bechmann, S. (2010). Servicedesign. Arhus: Academica.

Holmlid, S., & Evenson, S. (2007). Prototyping and enacting services: Lessons learned from human-centered methods. *Proceedings from the 10th Quality in Services conference, QUIS 10.* Orlando, Florida.

Howard, J. (2008, 03 19). *Service Recovery.* Retrieved 03 22, 2010, from Design for Service: http://designforservice.wordpress.com/2008/03/19/service-recovery/

Participle. (2008). Beveridge 4.0. London: Participle Limited.

- Allen, S. and J. Gutwill (2004). Designing with multiple interactives: Five common pitfalls. Curator: The Museum Journal Vol 47(2): 199- 212. Alta Mira Press, California Academy of Sciences.
- Bauchop, Heather, (2008, 25 March), New Zealand Historic Places Trust, retrieved 16.02.2012 from http://www.historic.org.nz/TheRegister/RegisterSearch/RegisterResults.aspx?RID=776 7
- Brown, Tim and Wyatt, Jocelyn (2010) *Design Thinking for Social Innovation*, Stanford Social Innovation Review, Winter 2010, issue 25, retrieved 20 Feb 2012, from http://www.ssireview.org/articles/entry/design_thinking_for_social_innovation
- Curating Cities, an Australian Research Council ARC funded Linkage project led by Professors Jill Bennett and Richard Goodwin, and Chief Curator Felicity Fenner of the National Institute for Experimental Arts (NIEA) at the University of New South Wales' College of Fine Arts. http://curatingcities.org/accessed 20 February 2012
- Constantime Ellie, (2011, 15 June) 'Urban designers to develop vision for the city', Otago Daily Times, retrieved February 20, 2012 from http://www.odt.co.nz/news/dunedin/
- Dunedin City Council Tender 3421, (no date, 2011) http://www.dunedin.govt.nz/council-online-tenders
- Fowler, Nina, (2010, 20 October) Govt reveals partners in \$20 million R&D voucher scheme National Business Review, retrieved from http://www.nbr.co.nz/
- Hein, G.E. (1998) *Learning in the Museum*. New York: Routledge.
- Hein, G. and M. Alexander (1998) *Museums: Places of Learning*. Washington, DC: American Association of Museums.
- McCorkindale, Wilma (2011, 8 June) 'Public Workshop: Dunedin City Central' D- Scene Morris, Chris (20 Jan 2012) 'Councillors at odds over spending cuts', Otago Daily Times
- Otago Chamber of Commerce website, (19 September 2011) retrieved 17 February 2012 from http://www.otagochamber.co.nz/chamber-news/harbourside-announcement/
- Otago Polytechnic Tender document 2011
- Pine and Gilmore, (1999) *The Experience Economy*, Harvard Business School Press, Boston.
- Sametz, R. and Maydoney, A. (2003), *Storytelling through design*. Design Management Journal (Former Series), 14: 18–34. doi: 10.1111/j.1948-7169.2003.tb00347.x
- Schneider, B. and N. Cheslock. (2003) *Measuring Results: Gaining insight on behavior change strategies and evaluation methods from environmental education, museum, health and social marketing programs*. Coevolution Institute, USA: San Francisco
- Shedroff, Diller and Rhea, (2006) *Making Meaning: How Successful Businesses Deliver Meaningful Customer Experiences*, San Francisco: New Riders Press

- Simon, Nina (2010). *The Participatory Museum*. Santa Cruz: Museum 2.0, Chapter 4 retrieved 1 Nov 2011 at http://www.participatorymuseum.org/Chapter4
- Wallace, M. (1999) 'Changing Media, Changing Messages' in Hooper-Greenhill, E. (ed) *Museum, Media, Message,* London/New York Routledge, p123
- Whitbread, David, (2009) *The Design Manual*, Sydney: University of New South Wales Press, 6th edition
- Zengestrom, J. (April 13, 2005) Why some social network services work and others don't Or: the case for object-centered sociality, retrieved 1 November 2011, from
- http://www.zengestrom.com/blog/2005/04/why-some-social-network-services-work-and-others-dont-or-the-case-for-object-centered-sociality.html

Illustrations:

- Figure 1: Mark Rogers. 2005, Mallaig: harbour sculpture image retrieved 19 Feb 2012 from http://www.geolocation.ws/v/W/File:Mallaig,harboursculpture-geograph.org.uk-20916298.jpg/-/en (Creative Commons license)
- Figures 2 & 3: Greg James with Jon Tarry, 2004, 'The Fishermen' Fishing Boat Harbour, Fremantle, Western Australia, Bronze sculpture, Commissioned by Fremantle Fishermen's Monument Trust (image copyright Greg James)

images retrieved 19 Feb 2012 from

http://www.gregjamessculpture.com/publicArt.php#theFishermen