Establishing and Maintaining Cultural e-Communities

DR ANGELINA RUSSO AND MR JERRY WATKINS

Australian Research Council Centre of Excellence in Creative Industries and Innovation Queensland University of Technology Musk Avenue, Kelvin Grove, Queensland AUSTRALIA

http://www.ici.qut.edu.au/

Abstract: - Issues of spatial distribution, allocation and access to resources prevail when establishing a long-term and viable e-community within the cultural sector. While e-communities have multiplied in commercial environments, cultural institutions are still challenged by appropriate ways to support collaboration, the nature of institutional messages and the technical infrastructure required. As a guide for institutions in the formation and maintenance of cultural e-communities, this paper introduces the field of Digital Cultural Communication, a new field which examines co-creative relationships between cultural institutions, communities and audiences. By focusing on institutional strategies, community programs and distribution strategies, Digital Cultural Communication can be used by institutions to structure the development of cultural e-communities by providing methods and tools for curators and designers to structure communication and build creative interactive artifacts. This research draws on two existing successful e-communities to illustrate the potential for cultural institutions to develop e-communities where co-created community content can be published in order to extend audience access and interaction.

Key-Words: - cultural institutions, e-communities, interaction design, community co-creation

1 Introduction

Major cultural institutions around the world have collected such a quantity of cultural content over the past 150 years that many museums and libraries can now only display a fraction of their collections while the majority remains unseen by the cultural audience. To some extent this imbalance between collection and communication of content can be explained by the traditionally 'one-way' messages with which institutions underpin cultural exhibition. In the twentieth century, cultural institutions acted either an organ of state or a platform from which could ask questions curators pronouncements with little or no attention paid to community engagement or audience experience.

Although some institutions have started to explore the distribution of curatorial messages via the internet, the shift from physical to virtual has so far focused on the establishment of protocols for information distribution, rather than new forms of interactive cultural experience [1]. This is not surprising given the considerable strategic effort required to shift the institutional focus beyond restricted, in situ collections to distributed, publicly accessible cultural experiences. Yet this focus on information distribution does not take into account the fact that institutions are substantial repositories of cultural content and could play more of a leading role in the development of cultural e-communities by providing structures and resources.

This paper argues that through the strategic application of new media the post-modern cultural institutions can build upon existing outreach or public programs to become a hub for the establishment and maintenance of cultural ecommunities. This mission will not only permit rural and remote audiences to better access collection, but it can also empower e-communities to work with the institution in order to co-create new cultural forms and strengthen cultural interaction and engagement.

2 Background

2.1 Institutional communication

From the 15th century onwards, cultural content has been acquired and arranged by European and Asian museums, libraries and galleries to promote social and political position. Over the last one hundred and fifty years, collections have been considered important tools in the education of the general public. The curator has acted as a state-appointed custodian of this knowledge, tasked with scholarly research, preservation and presentation of information associated with collections [2].

In the contemporary environment, the curatorial role has been extended to the promotion of collections through 'marketable' exhibitions. Curators often plan and oversee the communication of content to the public via a range of collaborative educational and outreach programs. Historically, curators tended to work single-handedly as they

were considered the expert in the particular collection field and therefore most able to determine how best to display information. Today state-supported institutions are urged to consider themselves increasingly as part of the leisure and tourism industry and the importance of rising audience numbers. This means that it is more common to find curators working within multidisciplinary teams of educators, technicians, fabricators, marketers, information technologists and designers.

However, the internal processes of the institution have evolved to create efficient communication within the organization but not necessarily to deliver new cultural experiences which suit changing audience expectations. Druin and Fast describe how audiences are asked to contribute to the design of aspects of exhibitions as users, testers or informants but rarely as design partners [3]. O'Neil reminds us that while cultural institutions have the potential to be brokers or mediators of cultural change, authenticity in representation must include social relations as well as artifacts; neither should be obscured by institutional culture [4].

An example of O'Neil's concerns can be found in the field of Virtual Heritage, which promotes the utilization of technology for the education, interpretation, conservation and preservation of natural, cultural and world heritage [5]. For the most part, this mission tends to focus on tools and methods for representing inaccessible historic sites and whilst Virtual Heritage has broadened access to such sites, the field has often transferred the linear curatorial communication model of the modern cultural institution into the online environment. As a result, Virtual Heritage has not enjoyed widespread success with respect to the creation of cultural e-communities.

2.2 Commercial lessons

In contrast, the commercial environment continues to spawn a myriad of sprawling e-communities. A particularly successful example is South Korea's "Cyworld", a personal diary-style website which features commentary, pictures and links to other sites [6]. Cyworld is an advanced blogging site which interconnects personal homepages, encouraging users to form a network with friends or colleagues. This network is now an e-society with 13 million residents and visitors - more than a quarter of South Korea's population.

Cyworld provides a number of lessons from the commercial sector which may be of use to the

cultural e-community. Firstly, the site targets a *specific audience segment* – the information literate twenty-something market. Cyworld has been enormously successful at drawing together a huge proportion of the South Korean youth market towards the creation, support and maintenance of a viable and highly creative e-community.

Secondly, Cyworld provides an appropriate technical infrastructure for the audience segment. Its developers have constructed an online space where audiences can create their own content. browse other user's blogs and link to relevant external pages. Cyworld is extending its services into Taiwan, Hong Kong and Singapore and in order to accomplish greater interaction and wider distribution, the developers are currently assessing how local relevance can be realized in each country. By providing an infrastructure specific to the needs of a particular community, Cyworld will graft diverse cultural identities to their sites to produce a localized product for each new country of distribution. This strategic approach demonstrates the proactive role that an organization can take in the development and representation of cultural identity. Importantly, it demonstrates how cultural institutions could reconsider their resources to support diverse cultural e-communities.

The third lesson from Cyworld is the use of interaction design which encourages the ecommunity to co-create personal content. Cyworld features its own currency, slang and particular social pressures. Cyworld community members inhabit an address or a "minihompy" (or mini-homepage). The minihompy is represented by an empty virtual room which the inhabitant then "decorates" to construct a distinctive online personality [7]. Unlike ecommunities which use blogs to further political, social or historic causes, Cyworld audiences use this site to publish their own creative efforts and to explore the possibilities of community co-creation. In so doing, Cyworld as a whole creates new media artifacts and new types of interaction which in turn strengthen the organizational impetus to support and maintain the community.

3 Digital Cultural Communication

By addressing a specific audience segment and providing appropriate technical infrastructure to support community co-created content, Cyworld demonstrates how information literate, active e-communities can proliferate. These commercial lessons inform Digital Cultural Communication (DCC), a new field of research and design which

seeks to strengthen the relationship between institution and community by using new media to produce co-creative audience-focused cultural projects[8]. By situating the development of cultural e-communities within DCC, the institution adopts a more representative curatorial practice and benefits through the creation of original community-derived content which can form new digital collections. The community benefits through improved 'information literacy' – the skills required to use digital technologies to engage in both cultural consumption and production [9].

3.1 A model for cultural e-community

DCC examines relationships between cultural institutions, communities and audiences in order to create innovative cultural content by providing tools and methods for the design of compelling cultural interactive experiences across multiple platforms (physical, web, broadcast). The field successfully informed the authors' recent design consultancies for a number of multi-platform cultural projects in Australia, including an end-tocommunity co-creation and cultural eend community program for the State Library of Queensland [10], and the online expansion of a physical exhibition by the Museum of Brisbane and Brisbane Institute to connect with e-communities [11].

The relationship between institution, community and audience can be illustrated by borrowing from Peirce's language of semiotics [12]. The community becomes the 'sign', the institution is the 'object of representation' and the audience becomes the 'interpretant'. Cultural 'experience' is a relative construct of the triadic relationship between these entities, represented in figure 1. By using the semiotic structure, we can re-appraise the role of the community in cultural communication. community can go beyond being a stakeholder of an institutional exhibition: new media and information literacy allows the community to both produce and consume its own original cultural content, in the form of narratives, wikis, blogs, vlogs or any other medium which is supported by the institution and connects to the audience. The institution ceases to be the sole custodian of cultural experience; instead it co-creative infrastructure provides community and distributes original cultural content to the audience via multiple platforms - physical, online and broadcast.



Figure 1: semiotic representation of cultural experience as a construct of the triadic relationship between community, institution and audience.

This semiotic model of the institution / community / audience relationship is a virtuous one to the extent that all parties benefit. The institution achieves community engagement as well as original cultural content to offer to a more distributed audience across multiple platforms. The community benefits from information literacy training by the institution, as well as a platform and audience for co-creative production. The audience has access to new and innovative cultural experiences co-created by the institution and community.

3.2 Design and the cultural e-community

For those attempting to establish a long-term and viable cultural e-community, there are a number of issues which prevail including the problems of spatial distribution, allocation and access to resources and importantly, the mechanisms by which information is communicated.

Institutions are well placed to promote new partnerships by providing cultural e-communities with the tools and methods for digital co-creation. Their leadership role in this partnership extends to the ways in which community created content can be distributed across the multiple platforms which the convergent new media environment allows. In doing so, institutions shift from brokers of information to mediators of cultural e-communities.

In relation to communication, Tyler's summary of the types of mediated interactions which are prevalent in our society has proven valuable [13]. Tyler describes four ways in which communication can shape audience responses to information:

 Designers create messages which act as formal expressions – presented in isolation from audiences.

- Designers create iconic or symbolic messages which are decoded and interpreted by audiences.
- Designers create iconic or symbolic messages which are decoded by audiences who share specific and similar beliefs.
- Designers create arguments which persuade an audience by referencing key values and connecting with social attitudes.

This last form is a 'rhetorical' view of communication which ensures that designers and audiences can co-construct meaning through visual messages [14]. This is not without its problems social creativity is relevant to design because collaboration plays an increasing role in design projects that require expertise in a wide range of domains [15]. Complexity in these projects is the product of multiple perspectives, large amounts of information and the understanding of the long-term evolution of the designed artifact. In the development of a cultural e-community, bringing together spatially distributed people through webbased communication is particularly complex as communities fall into a number of categories. For instance, Wenger describes Communities of Practice as those which consist of practitioners who work as a community in a certain domain undertaking similar work [16]. Clearly, cultural institution professionals could be described in these terms. proposes that the limitations Communities of Practice can be characterized as 'learning when the answer is known' [17].

Instead he proposes Communities of Interest which bring together stakeholders from different Communities of Practice to solve a particular problem or common concern. The key difference is that Communities of Interest have multiple centers of knowledge ensuring that the roles of 'expert' and 'novice' shift from person to person depending on content focus. Fischer suggests that Communities of Practice are biased towards communicating with the same people and taking advantage of a shared background while Communities of Interest are defined by their shared interest in framing and resolving a design problem.

While the two fields are presented as characteristically different, they can be considered to work to similar ends if the outcome is to produce cultural interactive experiences which focus on audience interaction. This is in keeping with Tyler's view of rhetorical communication as it allows teams to create arguments which persuade audiences by referencing key values and connecting with social attitudes. The success of this communication rests in the ways in which audiences interact with and 'make

meaning' of institutional content. This perspective creates a fertile ground for the creation of cultural ecommunities.

4 Community co-creation in practice

Emerging new media technologies such as blogs and wikis allow non-professionals to create content and distribute it via community-oriented modes of publishing. By providing technical infrastructure and information literacy programs, cultural institutions have a solid mechanism through which to illustrate their transition from gatekeeper to mediator of cultural knowledge. Cultural institutions which position themselves as community providers are bound to benefit as they extend their audiences and opportunities for advertising and commerce.

When infrastructure extends to information literacy training, cultural institutions find themselves in the position of both owning the content and managing the method of distribution. By innovatively combining community creativity with customized services, they can extend their programs to meet the needs of individuals and small communities.

4.1 Regional cultural e-communities

The relationship between institution, community and audience which underpins Digital Cultural Communication can be seen in a number of examples from smaller cultural institutions around the world. For example, the Ban Jalae Hill Life Tribe and Culture Center in Thailand provides a rare case study of a privately funded, community-run multi-platform cultural portal comprising:

- A solar-powered physical Center.
- An online museum.
- An end-to-end community co-creation program.
- A community TV initiative

The Mirror Art Group runs the Cultural Center and is made up almost entirely from community members. It operates on the tenet that technology can help preserve and document a vanishing way of life, especially in communities which do not rely on written language.[18] Most hill tribes have only developed a written script within recent generations and literacy remains extremely low [19]. The Mirror Art Group captures cultural knowledge throughout the Northern Thai tribes in a number of ways: digital storytelling, folk music recordings, community interviews and documentation of traditional festivals.

For example, working with village elders, the Mirror Art Group has begun creating a video record of genealogical lines in surrounding Akha villages. By recording the elders reciting their genealogy and producing video compact discs, the Mirror Art Group are both documenting cultural heritage and attempting to revitalize traditional customs by broadcasting cultural content to the world, thus encouraging Akha youth to see themselves and their identities as valued within modern society.

The cultural portal incorporates traditional music, videos, transcripts of genealogies as well as still images, stories and general interest for the mutual benefit of community members and broader audiences. Furthermore, the Center features a community TV initiative which keeps abreast of relevant local issues and provides positive media images to the hilltribe youth community, as well as addressing a lack of knowledge in the wider community about the hilltribes of modern Thailand [20].

The cultural portal <u>www.hilltribe.org</u> is supported by the institutional funding but is created by the community and maintains a strong link to the dispersed communities throughout the region.

The Center also provides digital literacy outreach programs to community members with a diverse range of media products which are displayed at either the physical site, the online museum of the community TV broadcast. This represents an innovative approach to cultural representation in both site-specific (Center) and distributed (website) cultural content. In many ways, the Center's approach is similar to Cyworld:

- Infrastructure is provided to develop and maintain the community.
- Community co-created content is at the heart of the interaction.
- A specific audience is targeted.

Unlike a number of institutionally supported cultural portals, the online museum does not describe itself as an arts portal and is therefore not restricted to displaying higher art forms. Neither does it emulate other indigenous cultural portals which focus on institutional and governance matters [for examples, see 21, 22]. Therefore the Center presents itself as a viable and interesting case study for the ways in which cultural institutions can partner with communities and audiences to create meaningful cultural interactive experiences while broadening the distribution of cultural knowledge and utilizing media technologies to the mutual benefit of all partners.

5 Conclusions

Cultural institutions continue to struggle with the concept of 'popularizing' either their collections or their exhibitions. The need for greater popularization is clear: the institutions face increasingly fierce competition from other entertainment providers such as 'theme-parks' and other tourist attractions. At the same time, high bandwidth internet connections and multimedia compatible computers are becoming ubiquitous in Western homes and schools thus providing a readily accessible and rich source of information [23].

Foley and McPherson describe some of the seemingly opposing forces which underpin this challenge [24]. As cultural institutions become increasingly accountable, what were once curatorial tasks have transferred to museum managers while concepts of 'best value, performance management and commercialization' have become part of the role of management. As evaluation has tended towards monitoring visitor numbers, introducing performance indicators and efficiency, the focus upon trading has increased - making it difficult to reconcile the new environment with a traditional, professional view of the role of cultural institutions.

5.1 The institution and the e-community

If we follow the lead of highly successful non-institutional e-communities, the maintenance of cultural e-communities relies on promotion and continuing information literacy. Cultural institutions can take a leadership role in developing information literacy by establishing programs to reach regional, rural and remote communities. These key programs can ensure the success of community co-creation programs while including wider audiences in public programs and collections initiatives.

The field of Digital Cultural Communication does not seek to replace the institution's primary mission of cultural conservation. Rather, it provides communication design-derived knowledge for those institutions that seek to deploy new media to better engage their communities and widen their audiences. Both Cyworld and the Ban Jalae Hilltribe Life and Culture Center provide sustainable examples of institutional support and maintenance of thriving cultural e-communities.

Throughout the cultural institution sector, the idea of integrating community and audience experience throughout exhibition development is still not broadly understood or explored. As a result, there continues to be an implicit understanding of communication processes and the ways in which

audiences construct meaning from their experiences [25]. As cultural institutions are forced to reposition themselves in a media savvy and saturated environment, there are very real opportunities to reposition themselves from mediators of knowledge to three-way communicators. So how can we place institutions at the hub of a thriving cultural ecommunity?

In an increasingly complex communication environment, Digital Cultural Communication provides a model for the institution to engage the ecommunity as a simultaneous producer and reader of cultural content. Rather than trying to transmit oneway curator-derived meaning to the e-community, the model demonstrates a more vital co-creative relationship between institution, e-community and the wider audience; one which generates multifaceted cultural experiences rather than structured messages and meaning.

References

- [1] Tang, W.C, Representational practices in digital museums: A case study of the National Digital Museum Project of Taiwan, *The International Information and Library Review*, Vol. 37, Issue 1, March 2005, pp 51-60.
- [2] Weil, S,E, *Cabinet of Curiosities. Inquiries into Museums and their Prospects.* Smithsonian Institution Press, Washington, 1995, pp. 75-79.
- [3] Druin, A and Fast, C, The Child as Learner, Critic, Inventor and Technology Design Partner: An Analysis of Three Years of Swedish Student Journals. *The International Journal for Technology and Design Education*, Vol 12, Issue 3, 2002. pp. 189-213.
- [4] O'Neil, M, After the artifact: internal and external relations in museums. In Kavanagh, G.
 [ed.] The Museum Profession, Leicester University Press, Leicester UP, 1991 p.25
- [5] Virtual Heritage Network, [Online] http://www.virtualheritage.net [September 2005]
- [6] Cyworld. http://cyworld.com [September 2005]
- [7] Cameron, D, 'Koreans cybertrip to a tailor-made world', *The Age*. Available from: http://www.theage.com.au/news/Technology/Cyber worlintimateslife/2005/05/06/1115092684512.html? oneclick=true [13 September 2005].

- [8] Russo, A. and Watkins, J.: Digital Cultural Communication: Audience and Remediation. In: Cameron, F. and Kenderdine, S. [eds.]: Theorizing Digital Cultural Heritage. Cambridge, Mass., MIT Press (in press)
- [9] Russo, A. and Watkins, J.: Creative new media design: achieving representative curatorial practice using a Cultural Interactive Experience Design method. In: Edmonds, E. and Gibson, R. [eds.]: Interaction: Systems, Practice and Theory. ACM SIGCHI [2004] pp. 573-598.
- [10] Watkins, J and Russo, A. Digital Cultural Communication: Designing Co-Creative New Media Environments, in Creativity & Cognition, Proceedings L. Candy, [ed.] ACM SIGCHI, [2005] pp.
- [11] Watkins, J and Russo, A. Extending Site-Specific Audience Experience via Multi-Platform Communication Design, in *Internet and Multimedia* Systems and Applications, Proceedings, M.H. Hamza [ed.] Calgary, ACTA Press [2005]
- [12] Peirce, C. S. in Mattleart, A. and Mattleart M.: Theories of Communication. London, Sage 1998 p.24
- [13] Tyler, A. Shaping Belief: The Role of Audience in Visual Communication, in [V. Margolin and R. Buchanan. eds.] *The Idea of* Design. A Design Issues Reader. MIT Press, Cambridge, [1996]. pp 105-110.
- [14] Forlizzi, J. and Lebbon. C. From Formalism to Social Significance in Communication Design. *Design Issues*: Vol. 18, Issue 4 [2002]. pp. 3-13.
- [15] Fischer, G, Social Creativity: Turning Barriers into Opportunities for Collaborative Design. In *Proceedings from Participatory Design Conference*, Vol. I. 2004, [Online] http://trout.cpsr.org/conferences/pdc2004/proceedings/
- [16] Wenger, E, Communities of Practice: Learning, Meaning and Identity, Cambridge University Press, Cambridge, UK, [1998].
- [17] Fischer (see 15]
- [18] Ban Jalae Hilltribe Life and Culture Center http://www.hilltribe.org/museum/01-museum-banjalae.html

[19] The Virtual Hilltribe Museum. http://www.hilltribe.org/highlight/index.shtml

[20] Mirror Art Group. http://www.mirrorartgroup.org/web/projects/

[21] Avataq Cultural Institute, Canada. http://www.canadiancontent.net/en/jd/go?Url=http://www.avataq.qc.ca/

[22] American Indian Cultural Centre. http://www.nacea.com/portal/

[23] Taxen, G, Introducing Participatory Design in Museums' in *Proceedings from Participatory Design Conference*, Vol I. [Online] http://trout.cpsr.org/conferences/pdc2004/proceedings/

[24] Foley, M. and McPherson, G, Museums as Leisure. *International Journal of Heritage Studies*, Vol. 6, No. 2, [2000] pp. 161-174.

[25] Hooper Greenhill. E.: Culture and meaning in the museum. In: *Museums and the interpretation of Visual Culture*. Routledge, London, 2000, pp. 1-22.