



# CYBERMUSEOLOGY AND INTANGIBLE HERITAGE

By Dominique Langlais

## Introduction

In the globalization process many cultural traditions around the world tend to disappear under the pressure of standardisation of practice and content. Cultural diversity seems to recede more and more. In a proactive position, UNESCO made a universal declaration on cultural diversity in 2001 that it would aim at heritage preservation.

In the same effort of protection and enhancement of cultural diversity, museums are developing Internet material to preserve and disseminate cultural knowledge and heritage and to create interactive experiences between users and content. This has given birth to what some refer to as cybermuseology. But one can ask, do virtual museums present more than images of objects? Can the knowledge of localised cultural heritage and practices be transferred without losing the context it stems from, or what de B'éri (*Cinema and Social Discourse* 64) defines as “the condition under which a society produces specific meaning”? More specifically, can information and communication technologies (ICT) transfer tacit knowledge, human experience, and tangible cultural heritage, and if so, what can we learn through this new process of cultural codification?

This paper shall focus on explaining cybermuseology and then explore the process of knowledge codification and the links we can draw with heritage codification. In the last section I will discuss virtual experiences and try to determine how museums are using the virtual to protect and promote cultural diversity.

## 1. Cybermuseology: Managing knowledge, managing culture

The traditional roles of museums used to be research, preservation and exposition. But by the end of the 20th century, discourse about

art, history and knowledge at large had been democratized. Focus on interpretation of cultural knowledge is now predominant (Montpetit, 2002). Moreover, the development of ICT has had a dominant effect on the acceptance levels of this new ideology. MacDonald and Alsford (1994) argue that the role of museums was no longer to collect objects but rather to provide knowledge to the members of society.

By the end of the 90s digitalization of artefact for means of preservation as well as Internet communication possibilities, were used by more and more museums. At the beginning web sites were mostly used as brochures, to invite the public and to promote new exhibitions. Some of the most innovative museums then started to present physical exhibitions in the form of pictures of artefacts and work of art; some even gave access to archives. Nowadays most national museums design exhibitions for the web, using interactivity, hyperlinks and public participation through games, forum and self exploration.

But after ten years of developing web material, museum curators have come to understand that access to information and archives is not the equivalent to usable and valuable knowledge (regardless of computer literacy or bandwidth). Moreover some researches (Cameron, 2004; Peacock, 2004), have demonstrated that sophistication of browsing and searching mechanisms are not enough for the public to really have access to knowledge.

With the UNESCO declaration to protect intangible heritage and cultural diversity, museums are now starting to develop a more holistic approach to heritage preservation and transmission. As Cameron's (2003) analysis demonstrated, artefacts are now used as a mean to contextualise and represent cultural specificity. The communication and interaction possibilities offered by the web to layer information and to allow the exploration of multiple meanings are only starting to be exploited. In this context, cybermuseumology is known as a practice that is knowledge driven rather than object

driven and its main goal is to disseminate knowledge using the interaction possibilities of ICT.

## 2. ICTs and knowledge codification

### *a. Knowledge Codification*

Information can be compared to raw data whereas knowledge, according to Foray (*Écritures dans les cinémas d'Afrique noire* 9), is a cognitive capacity to learn, “which enables us to extrapolate and infer new knowledge.” We can see that where information is easy to reproduce and transfer, knowledge needs to be codified before it can be transferred. For example, the cultural knowledge of a cooking recipe can be codified but the art of making a French soufflé is hardly transferred through the recipe found in a book. According to Michel de Certeau, the articulation through ‘repetition’ of the same oral culinary recipe remains unaltered in an “authentic family cooking” book because it “makes up a kind of minimalist test, through their internal economy, their conciseness, and their minor degree of equivocation, aside from technical terms” (*The Practice of Everyday Life* 216). So one may ask, is it possible to codify effectively all types of knowledge?

At least two types of knowledge are generally recognized: explicit and tacit. Polanyi argues that “one knows more than one can tell” (*The Tacit Dimension* 8). He is referring to the tacit dimension of knowledge which is embedded in the individuals and thus hard to codify. In opposition, the explicit dimension of knowledge can be articulated and so it is readily codified.

Tacit knowledge is know-how, know-who, know-why and ‘*savoir-être*’. More specifically, ‘*savoir-être*’ is the process of knowing how we know that we know what we know and what if what we think that we know is something else? This process of knowing is about learning to pose questions, not only to answer them (de B’béri, 2000). According to Boily (2004) ‘*savoir-être*’ is the incorporation of knowledge and the process of know-how. By analogy to tacit knowledge, intangible heritage is the process of making sense that

is generally transmitted orally and through face-to-face experience. Intangible heritage is, therefore, hard to 'circumscribe' and hard to codify and transfer.

*b. The Effects Of Codification On Tacit Knowledge And Heritage*

There are at least two notable effects of codification on tacit knowledge: it fixes knowledge into a form that is determined by an 'expert' who is typically an outsider to the culture being represented and therefore it may change its particularities and its meanings.

A virtual museum is a construction, a code in itself, which is encoded technically by the website developer and socially by the curator. According to Stuart Hall, codes are the means used to signify power and ideology through specific discursive 'dispositives' (Hall 34). Just like in a traditional museum, curators are responsible for what is included, and what is excluded from a body of knowledge. The source of control is pyramidal and represents the dominant ideology about a certain body of knowledge. By analogy to the panoramic view on top of the city described by de Certeau (1984), knowledge that is mapped on virtual museums is a "theoretical" simulacrum, a misunderstanding of practices. According to de Certeau, the practitioners, the beholders of cultural knowledge (the walkers), make use of what cannot be seen, "Their knowledge of them is as blind as that of lovers in each other's arm." (93). So from the top down, curators are using discursive 'strategy' to extract a 'theory' of cultural practices which can be easily represented. In doing so, however, they are diminishing its complexity, the 'tactical' particularities of visitors. The curators and the practitioners are engaged in a game of '*cache-cache*'.

Once tacit knowledge is articulated in the codification process it loses its particularities or its 'aura'. Benjamin (1955) explains that beauty is no longer associated with an experience but with the explanation of it. Benjamin argued that the authenticity of a work of art was lost when mechanically reproduced. Does his argu-

ment also applies to heritage, and more specifically to an intangible heritage which will not be (re)produced but merely articulated?

Giovani Pinna (2003) argues that fixing living cultural heritage through a codification process ‘kills’ it, because the heritage then “loses any point of contact with the community in which they originated, they cease to be passed down and hence cease to be heritage” (2). I want to add that codified knowledge is hardly changing and growing because the discourse surrounding it present if as fixed. And the possibility to change and grow is one of the most important features of living heritage. On the contrary, according to Hall (1994) the process of encoding a message, through cultural discourse (which can be supported by any media) will rely on codes that are accepted and recognized in any given society. The combination of those operations leads or allow us to articulate the social and cultural map of the conditions of the process knowledge production.

But the anthropologist Jack Goody (1977) illustrated that the code used by someone outside of the studied society imposes particular cognitive and mental structures on the subject using it. Therefore the codification process is neither neutral nor objective. Raymond Montpetit (2002) underlined that the democratisation of museums as institutions has raised questions about whether only professionals should interpret heritage. The discourse produced by ‘experts’ becomes the criteria of truth and beauty and is based on disciplinary knowledge which is often an old construction. For example, the institutional discourse surrounding landscape painting has excluded this art form from museums for many years. This continues today.

### *c. Online Museums: Knowledge Transfer*

Two new possibilities are open to museums to transfer knowledge through the Internet: interaction and communication. The interactivity gives the user a chance to create more ‘freely’ his or her representation of knowledge and heritage. According to Montpetit (2002) this has been developed as a result of the increasing value

of individuality and subjectivity which steams from private choice within our post-modern society. Communication on the other hand, helps to keep the heritage alive and to pass it down even if part of it has been fixed (perhaps incorrectly) by the external codification process. The communication aspect brings the opportunity for emergent and discordant voices to be heard aside from the dominant discourse. These developments have also had an effect on how visitors are perceived. Visitors are now users or learners; they actively visit. Further more, expositions are developed with their participation in mind.

For example, in an online forum individuals may communicate with each other about the content of an online exposition, in real time or asynchronously. The participation of individuals ensures the heritage is constantly changing and therefore remains alive. Unfortunately the community's participation is somewhat hard to promote when the culture at stake is receding. Games as well as webcams also provide a great interactive experience between users and the content. But games are costly to develop and webcams requires museum staff availability. Many museums do not have the necessary resources. Furthermore, interactivity can only take place if the content has been codified and somewhat fixed. We see the dominant structures of presentation that are used in traditional museums are simply reproduced in virtual museums and do not explore the possibilities ICTs brings.

### **3. Real learning experience possible through the virtual?**

For de Certeau (1984) and Weber (1996) the virtual is a construction, and Deleuze (1999) argues that it is not a mirror of reality but merely a (re)presentation of it that is full of cliché. If virtual reality is only a crystallization of the representation of reality, then it can never represent ever changing reality and even less cultural heritage which is in constant redefinition. In spite of that, it can be argued that the virtual world without being an extension of the real world brings new possibilities. According to Foray (2000) simulation, such

as flight simulation, are real learning experience that helps to acquire know-how through sight and hearing. Since cognitive processes tend to predominate in virtual experiences, Debray (1999) concluded that images are no longer perceived as objects, upon which we have a sensible relationship, but as projects that we build. As projects, the virtual images allow a multiplicity of cognitive links to be constructed around them. This process is likely to provoke a construction of knowledge that is less linear.

But in this virtual reality an important element is missing. This is the emotional relationship to the world which is critical in learning and passing down heritage. This relationship can, partly, be regained through mediated communication but is very hard to compare to real face-to-face interaction. In this case, virtual reality can only bring the individual to explore the real experience where 'savoir-être' will then be integrated more easily.

Considering these critical perspective, can cybermuseumology provide virtual experiences that lead to the transfer of cultural heritage? The originality of cybermuseumology as a practice requires curators to understand that no reality can be reproduced, but a totally new and valuable cultural experience can be constructed around cultural knowledge using all the components of virtual reality. New technologies have the possibility to decentralize, at least partly, the control of meaning. More precisely, user's participation can be enhanced by giving them a tool to express 'freely' their knowledge, such as wikis, which allow users to edit the content as they want.<sup>7</sup>

Curators need also to develop new public participation strategies, where cultural heritage will be valued. As we can see new cultural forms are developed on the web and virtual museum can provide a space for these new art forms. Finally, in order for a cultural heritage to stay alive, the community it stems from needs to

---

7 According to Wikipedia (2005), a wiki "is a web application that allows users to add content, as on an Internet forum, but also allows anyone to edit the content. The term Wiki also refers to the collaborative software used to create such a website (see Wiki software)."

be involve actively in its codification and representation so that it is never completely fixed and still has space to change and grow.

Currently, virtual museums take many forms and use very different strategies. In general we can observe that user's participation is still rare and so are the communication possibilities. Bowen, Houghton and Bernier (2002) have demonstrated it is not common for users to participate actively in forums set up to express viewpoint. Even in the rare cases where forums do exist, knowledge is still controlled by the dominant discourse surrounding beauty and truth in museology. The construction of knowledge is still very much controlled by the curator which tends to reuse museums presentation structure which presents only one perspective on heritage. If hyperlinks are used to link knowledge in the institution's web site, links are rarely made to other institutions where different points of view on the subject could be presented .

### **Conclusion**

To conclude, as Blyth (2005) argued "museums have long been hybrids, playing a variety of significant roles as collectors and preservers of material culture, as educators, and as entertainers" (2). As they are evolving and changing, a shift from the predominant discourse and structure surrounding beauty and truth to a more open-to-interpretation view of artefact and heritage will involve new curatorial roles. More decisively, knowledge codification needs to involve the cultural community from which a cultural heritage stems from. Moreover, the self exploration and interpretation of visitors will mean that curators will have to accept a shared authorship. Their role will be to create links to sources of knowledge. Visitors/users will need to be more active in their knowledge construction. The source of power residing in knowledge will then be spread onto the web instead of being concentrated in the curator's hands.

Curators also face the problem of representing knowledge and culture in a variety of ways and perspectives. If used wisely, ICT can bring more open communication between members of commu-

nities and their heritage as well as bringing forward similarities and differences between cultures. This can only serve to broaden discourse and representation. But this plural representation can be supported through the linking of information and institutions. Virtual reality cannot replace 'real' museum experiences, but it can create a new one. Virtual museums should be developed as a complement to traditional museums. Virtual museums could then provoke experience that will help visitors/users to incorporate 'savoir-être' which in turn promotes diversity and inclusion.

### Works Cited

- B'béri, (de) Boulou E. "Introduction." *Écritures dans les cinémas d'Afrique noire*. Montréal: CINÉMAS, (2000): 7-10.
- . "Intermedial Location of Meaning in Muna Moto: A Metalanguage of Cultural Discourse." *Cinema and Social Discourse in Cameroon*. Ed. Alexie Tcheuyap. Bayreuth, Germany: African Studies Series, 2005.
- Benjamin, Walter. "Essais 1935-3940." *L'œuvre d'art à l'ère de sa reproduction technique*. Paris: Édition Denoël, 1955. 87-126.
- Blyth, Tilly. "Curating for Broadband." *Museums and the Web 2005*. 2005. Toronto: Archives & Museum Informatics. Nov. 2004 <<http://www.archimuse.com/mw2005/papers/blyth/blyth.html>>.
- Boily, Lise. "Économie du savoir, identités plurielles et nouvelles formes d'exclusion." *L'interculturel et l'économie à l'œuvre*. Paris: Les éditions David, 2004.
- Bowen, Jonathan, Mike Houghton and Roxane Bernier. "Online Museum Discussion Forums: What do we have? What do we need?" *Museums and the Web 2003*. 2003. Toronto: Archives & Museum Informatics. Dec, 2004 <<http://www.archimuse.com/mw2003/papers/bowen/bowen.html>>.
- Cameron, Fiona. "The Next Generation – 'Knowledge Environments' and Digital Collections." *Museums and the Web 2003*. 2003. Toronto: Archives & Museum Informatics. December 2004 <<http://www.archimuse.com/mw2003/papers/cameron/cameron.html>>.
- Certeau, (de) Michel. *The Practice of Everyday Life*. California: U of California P, 1984.

- Davis, Ann. "Museology and the Intangible Heritage of Learning." *Museology and Intangible Heritage II*. 2004. ICOM International Symposium. 2004.
- Debray, Régis. "Vie et mort de l'image." *L'image*. Paris: Éditions Flammarion, 1999. 202-208.
- Deleuze, Gilles. "Cinéma 2 : L'image-temps." *L'image*. Paris: Flammarion, 1999. 192-198.
- Goody, Jack. *The Domestication of Savage Mind*. Cambridge: Cambridge UP, 1977.
- Hamma, Kenneth. "The Role Of Museums In Online Teaching, Learning And Research." *First Monday* 9.5 (Nov. 2004): <[http://www.firstmonday.org/issues/issue9\\_5/hamma/index.html](http://www.firstmonday.org/issues/issue9_5/hamma/index.html)>.
- Hall, Stuart. "Codage/decodage." *Réseaux* 68 (1994): 29-39.
- Macdonald, George, and Stephen Alford. "Towards The Virtual Museum." *History News*. 49.5 (1994): 8-12.
- Montpetit, Raymond. "Les musées: générateurs d'un patrimoine pour aujourd'hui." *Patrimoine et identités*. Québec: Éditions Multimonde, 2002. 13-33.
- Peacock, Darren, Derek Ellis, and John Doolan. "Searching For Meaning: Not just Records." *Museums and the web 2004*. 2004. Toronto: Archives & Museum Informatics. Jan. 2005 <<http://www.archimuse.com/mw2004/papers/peacock/peacock.html>>.
- Pinna, Giovanni. "Intangible Heritage and Museums." *Museums and Intangible Heritage*. ICOM news 4. 2004. ICOM news. Dec. 2004 <[http://icom.museum/pdf/E\\_news2003/p3\\_2003-4.pdf](http://icom.museum/pdf/E_news2003/p3_2003-4.pdf)>.
- Polanyi, Michael. *The Tacit Dimension*. Garden City, NY: Doubleday, 1967.
- UNESCO. "Cultural Diversity." *Intangible Heritage*. 2001. UNESCO. Nov. 2004 <[http://www.unesco.org/bpi/intangible\\_heritage/indexf.htm](http://www.unesco.org/bpi/intangible_heritage/indexf.htm)>.
- Weber, Samuel. "The Unravelling Of Form." *Mass Mediauras, Form, Technics, Media*. Stanford: Stanford UP, 1996.
- . "Wiki." *Wikipedia: The Free Encyclopedia*. 17 Aug. 2005 <<http://en.wikipedia.org/wiki/Wiki>>.