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Cloth and Clay: Communicating Culture

Testing of Preliminary Content and Design

Web image courtesy of Textile Museum of Canada & Gardiner Museum of Ceramic Art
(http://www.textilemuseum.ca/cloth_clay/home.html)

The on-line exhibition, *Cloth and Clay: Communicating Culture*, was a collaborative project involving the Textile Museum of Canada and Gardiner Museum of Ceramic Art.

The two museums with very distinct collections jointly developed the content for this Web site. The development team wanted to create opportunities to: re-unite material from common cultural origins; put objects into their context; find common themes; and, discover new relationships between the collections. They also wanted to reconnect indigenous peoples whose cultures and objects are represented with this material by having them act as advisors. This Web site was launched on the Virtual Museum of Canada (September 2002, http://www.virtualmuseum.ca) and the Web site development also provided content and design for a physical exhibition at the Textile Museum of Canada (on display from August 2002 to February 2003). Conducting audience evaluations throughout the Web development process was a very important aspect of this project (see also, Shaughnessy, Dalrymple, & Soren, 2004, http://www.archimuse.com/mw2004/abstracts/prg_250000759.html).

During 2001-2002, I was exploring approaches for evolving museum Web sites that attempt to offer quality experiences to their on-line users for a research project funded by University of Toronto (Soren & Lemelin, 2003, 2004). In this *Audience Research and Virtual Museum/Exhibition Sites* research we were looking at how Web teams were developing 'exchange' experiences with on-line discussion and sharing by creating links among users, or between museum staff and users (Brochu, *et al.*, 1999). During interviews with Web developers across six museums in the U.S. and Canada, we questioned how they involved users in the development of their sites.

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Two experienced museum Web teams in our research sample were working with 'user or usability testing' extensively to collect qualitative information about users who were experiencing their Web site. For example, Dowden, Sayre, and Wetterlund (2000) reported on user testing of *ArtsConnectEd*, a collaborative collections/resource database developed for teachers and students by the Walker Art Center and The Minneapolis Institute of Arts.
(http://www.archimuse.com/mw2000/abstracts/prg_75000189.html)

Front-End Evaluation

Also, Sayre, *et al.* (2000) described an on-line/on-site project at The Minneapolis Institute of Arts in which visitors were allowed to observe the process of restoring a 300 year-old painting over a six-week exhibit. (http://www.archimuse.com/mw2000/abstracts/prg_75000188.html)

The *Cloth and Clay* Web project became one of the case studies in my research project. I helped to evolve an evaluation strategy using front-end, formative, and summative evaluation with the development team. User testing became the evaluation methodology we worked with in developing the new *Cloth and Clay* Web site, and our results also impacted on the development of the physical exhibition. The evaluative methods allowed the Web development team to involve potential users of the Web site throughout the development process.

The two museums with very distinct collections jointly developed the content for this Web site. The development team anticipated that the on-line exhibition would create opportunities to:

*   Re-unite material from common cultural origins, put objects into their context, find common themes, and discover new relationships between the collections.
*   Access these two specialized and important Toronto-based museums for on-line visitors who live in other areas across Canada, particularly in rural communities and worldwide.
*   Reconnect indigenous peoples whose cultures and objects are represented with this material by having them act as advisors.
*   Connect the issues of contemporary indigenous peoples in Canada and all parts of the Americas with their cultural past.
*   Offer indigenous peoples the opportunity to 'speak' to other indigenous peoples through their input on the site.
*   Showcase world-class Canadian collections of international significance.
*   Access well-researched, reliable materials important for school curricula but hard to find on the Internet.
*   Engage in activities that enable on-line visitors to be creative and to use their own investigative skills on hands-on pages.

Target audiences for the Web site included:

*   Engaging youth in learning (students at all levels, teachers, and educational leaders)
*   Engaging youth in developing skills (hiring of a highly skilled youth to develop the VMC exhibition, and maintain and develop programs)
*   Life-long learners (volunteers from both institutions in the development, realization, and marketing of the project)
*   Indigenous peoples in Canada and the rest of the Americas (an opportunity for their voices to be heard and to communicate with each other)
*   Specialists or 'the culturally curious' (to acquire quality information and discuss common interests)
*   The French-speaking world, particularly populations in Canada (for whom these collections are part of their cultural heritage but whom museums typically do not reach).

Front-End Evaluation

The team's goal was to test ideas for the Web site with user groups, staff from the Textile and Gardiner Museums, and the advisory board for the project on separate occasions. Issues the development team were interested in testing were:

* How can our on-line exhibition be inclusive in its portrayal of gender, voice, authority, and the diversity of cultural communities?
* How can we ensure accurate, relevant, and up-to-date content is always maintained on the site?
* How can we use the cyber medium to its best advantage to do what the physical museum sites cannot?
* What are keen areas of interest and what approaches to learning are most comfortable, provocative, or enduring for on-line visitors?
* How can we use the Web site as a gateway to the physical site – to ensure that the connection is made between the two types of visits?

Areas of focus for the initial front-end phase of user testing reported in this case study included:

* Who are the target on-line visitors demographically?
* How do different types of users navigate through a typical site?
* What kinds of visuals are most compelling or easy to read?
* What are some of the possible pathways visitors may use to progress through the site?
* How does information navigation occur given diverse options for searching?
* Does the Web site give visitors a clear orientation and continue to inform them of their place within the site at all times?

The following is a report on the preliminary concept and design testing phase of the evaluation for *Cloth and Clay: Communicating Culture*.

User Testing Process

The Project Manager for the Web site, John Dalrymple, and I conducted user tests with 23 participants. There were seven face-to-face individual user interviews, one on-line response to interview questions, and one focus group with 15 students enrolled in the University of Toronto Museum Studies Program. Conversational semi-structured interviews (e.g., Diamond, 1999) interviews lasted about one hour in length and were audiotaped with participant permission. Dalrymple prepared a PowerPoint presentation with slides of 40 potential textile objects and 40 potential ceramic objects, as well as proposed themes for the Web site.

Front-End Evaluation

Three of the areas we were most interested in having users respond to in the front-end evaluation for the site were:

*   The Mission and Objectives of the *Cloth and Clay: Communicating Culture* Web site
*   Proposed Themes and Objects
*   How the *Cloth and Clay: Communicating Culture* Web site could be inclusive?

The Front-End Evaluation Sample

During the user testing process, participants filled in a Demographic Questionnaire. Individuals represented a diverse group of potential users for the *Cloth and Clay: Communicating Culture* Web site. The Steering Committee had decided on a range of target markets for the Web site (see Table 1).

Table 1: User Target Markets

An advisor to the Web site	An archeologist (e.g., Egypt, MesoAmerica)
An artist	A Board member (Gardiner Museum)
A collector	A Board member (Textile Museum)
An ethnologist	A donor
A person with little technology expertise	A guild member
A person with technology expertise	A member of Gardiner or Textile Museum
A student in Grades 6 to 8	A person with expertise in clay
A Museum Studies student/ graduate	A person with expertise in textiles
A teacher	A volunteer
Other, please specify:	A Web Designer

Across the participants in our front-end user test sample:

*   The same number of females and males were interviewed individually.
*   Most users were local or just outside the Greater Toronto Area.
*   Most (74%) were under 35 years, which is younger than traditional museum visitors but typical of the youth market target for VMC products (Soren, in preparation). However, all age ranges were represented except 46-55 years in the user sample.
*   Just over half (56%) identified themselves as Canadian, and there was a mix of other ethnic and cultural groups represented in the sample of users (e.g., Chinese, East Indian, French Canadian, German, Native American, Portuguese, and Spanish)

All of the users expressed an interest in being involved in more user-testing throughout the development process of *Cloth and Clay: Communicating Culture*.

Mission and Objectives of the Cloth and Clay: Communicating Culture Web site

Our first task during the user test was to have individuals respond to the proposed Mission and Objectives for the Web site.

Reactions to Mission

What do you think about the following Mission Statement for the Web site? (e.g., what jumps out at you?)

> *Themes common to collections from the Textile Museum of Canada and the Gardiner Museum of Ceramic Art together in virtual space offer the unique potential to discover new connections and consequently open up new understanding of the objects and their cultures.*

Users questioned:
* What kind of "connections?" Who is going to be making the connections? "Understanding" is better; building and generating new knowledge about objects and history (are the connections out there, like lines between the dots?)
* Will people have "wiggle room" for their own inquiry (i.e., the approach in the Mission may not be the best avenue to follow)? People could feel ownership as a user contributing insight, like a member of the museum staff.
* As a Grades 6 to 8 user, or an adult user, a community of learners develops and actually has a sense of the objects in time and space, as well as a connectivity to other space, place, and time. Trying to pull things together is not the issue, but you want the user experience at the centre of knowledge-building.
* How are you going to "open up new understanding of the objects and their cultures?" The user <u>will</u> advance knowledge (or there lies the potential), and participants will advance <u>our</u> knowledge of the virtual and real.
* Are people going to engage in how to be good historians (i.e., acculturation)? Are they going to build something, assemble a small collection?
* Artists have an historical interest about <u>why</u> people do things. They ask <u>why</u> more then <u>how</u> (e.g., someone in the crafts community is interested in "how the pottery got a sheen on it").

Reactions to Objectives

What do you think about the following Objectives for the Web site?

> *The concept for the virtual museum opens wide the doors of the museums' storerooms and galleries, discovers objects vibrating with information, lifts them off the shelves and places them in their context. Using an active exploration of connected paths the user discovers the critical value of objects often the only remaining physical evidence available to us.*

Front-End Evaluation

There were things that users did, and did not, like about these Objectives. But, generally, as one user commented, the Objectives indicated that the on-line exhibition would be an opportunity to experience the curatorial area, and be privy to collections that are not out in the museum. A person does not "have time to delve into the cultural context" during a visit to the physical museum.

This discussion about Mission and Objectives for the Web site helped the *Cloth and Clay* development team think about the type of connections and understandings they would try to promote on the Web site.

Proposed Objects and Themes

We then asked users to select objects that they thought were really interesting from rows with 40 textile objects and 40 ceramic objects on the screen in front of them. When they selected individual objects we asked:

*   Why have you chosen the object?
*   What would you want to know about the object?
*   How would you like the objects displayed on the Web site?

There seemed to be a specific pattern to each user's selection process depending on background, past experiences, and preferences for constructing or making meaning about specific objects (e.g., Hooper-Greenhill, 1999; Hein, 1998; Falk & Dierking, 2000).

User Selection Process:

Individual user responses related most to:

User #1: Daily life, what it represents, and patterns.
User #2: Colour and facial expressions.
User #3: "Why" (e.g., shape, particular features, colours, glazing, edges).
User #4: "Tell me about it," what is the story, what is unusual about the object?
User #5: Designs, details, patterns, colours, and ceramics with figures wearing textiles.
User #6: Colour, texture, detail, the object's story, and that "things exist that can be so old."
User #7: Confirming his extensive knowledge about Maya culture, and wanting to know:
              Where were objects from? How were they made?
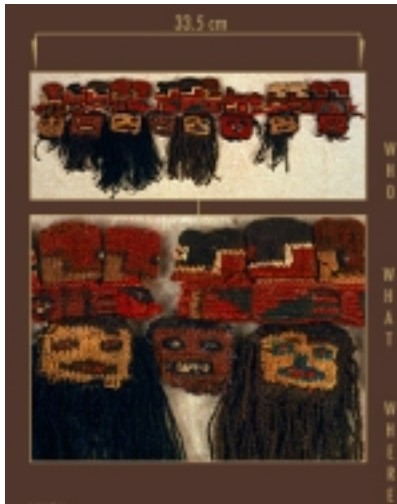   What does the object represent?
User #8: Who made this, how was it made, how was it used, what was it made for,
              what is its story?
Focus Group Museum Studies students: The stories objects could tell and personal connections
              people could make with them.

Front-End Evaluation

Responses to Proposed Textile Objects

Web image courtesy of Textile Museum of Canada
Severed head textile from Nasca
(http://www.textilemuseum.ca/cloth_clay/obj_nasca.html)

All users chose a piece of tapestry depicting 'severed heads of human figures' (a metaphor for death and growth/rebirth), and thought kids would love their long thick beards. People found the iconography like that on one of the ceramics piece, yet with a totally different expression – the textile piece is jolly while the ceramics piece is eerie. Will you be combining the presentation of textiles and ceramics together? People loved the details in the faces, frayed and scary heads and wanted to know the story of this object. How did they find it? Why is it broken? Were beards rare? One suggestion was that on-line users could reconstruct it in different ways and compare it to something contemporary.

The following were some general comments and suggestions related to the textile objects:

*   The texture, material, and finish do not jump out; it may help if the textile is shown on contemporary people (i.e., the digitized ceramics objects came across better on-line than the digitized textile objects).
*   The larger image is more appealing - once you see the image, you can see the texture in the detail.
*   How big are these? Will you explain their age, materials they were made from, the particular culture they came from, their context or use in ritual and everyday life, and the patterns?
*   I am interested in knowing what the piece is for – 'why's' are what I want to know. What was it used for? What scale are you using (e.g., based on a loom or the size of a body)?
*   Are the textiles from Peru? They are all beautiful; Peruvians were the best weavers in the world. But it is peculiar why this Web site is concentrating on one part of the world.
*   The fact that the objects have been found and preserved is astounding.
*   How is the object displayed in the museum? On-line you could have: a virtual gallery for more 3-dimensionality; computer animation of a virtual environment in ancient times; pictures of Peru, thousands of years removed but the same methods of weaving.
*   There should be information about other museums with related collections (e.g., the Met has a much larger collection and the Southeast Asian collection at the Royal Ontario Museum is equally interesting).

Front-End Evaluation

The feeling was that there would be three groups of people:

* People who don't know textiles and want to know how they are made, patterns, and designs.
* People who will be reminded that they saw that object some place.
* Spanish on-line visitors who would be interested in the quality of the piece and how it was done.

Responses to proposed Ceramic Objects

Web image courtesy of Gardiner Museum of Ceramic Art
*Chimú ceramic: A manta ray effigy with 10 ducks and
a monkey adorning the stirrup spout.*
(http://www.textilemuseum.ca/cloth_clay/research_chimu4.html)

Participants in the front-end study were interested in a variety of the ceramic objects. Most popular (6 responses) were the forms of three 'stirrup vessels of animals' depicting felines, a crablike creature with human legs, and monkeys with a stylized representation of clashing warriors.

Three 'vessels with human figures' were the next most selected objects (4 responses). One was a polychrome vessel in the shape of a human head, geometric designs on a headdress, split-eyes, a nose and earrings, and a lip plug. A second was a portrait head with geometric designs on headgear and a third had painted depictions of running men. People were intrigued with facial expressions, crossed eyes, designs and patterns, and the detail.

Some general comments and questions about the ceramics, which also helped in the development of the Web site were:

* Animals are important.
* Anything with mixed colour right away jumps out at me, and kids would leap to something with colour.
* Let people see the ceramic objects from every side.
* When the image opened to be bigger, you can see something different; have the larger image as the first image.
* Scale would be important – to visualize it (e.g., compare the actual size of objects with the size on the screen).
* These are Gardiner pieces I am familiar with; it is nice to re-visit these. We are starting off with Maya objects? Does the Gardiner's on-line collection cover any areas such as Panama or Costa Rica?

Front-End Evaluation

* If the people still make objects in the countries today, do they still have symbolic value? There should be input from people today whether they are just stories or are still used.
* Are links to other sites possible?

The Best Way to Present Information about Ceramics and Textile Objects

We asked each participant in the user testing about the best way to present the object-related information. The following were some suggestions:

* Give the context around the piece, the environment it was crafted in. Are there photographs from the time the objects were actually made? Are there images of specific regions (e.g., coastal tribes)? It is helpful to imagine the whole scenario and give an idea of who the people were, where they lived, and what they looked out at.
* Too many pieces together are not a good thing for the eye; it is overwhelming and hard to pick out.
* Overall, the combined collection is great tactually (in museums there are too many small places with the same pieces I don't want to stop at). It is hard for the eye not to be drawn because there is a lot of colour, detail, and styles.
* I like the simplicity of the background – it takes your eye. You move your eyes around.
* It is extremely important to keep written information on the site, and to put the objects in a context of a story. But it is a difficult balance to keep people from being easily distracted by information.

Some of the users' questions and comments were:

Object-related comments:
* How have you narrowed the objects down culturally? By year range?
* Are you planning to use links between past and present, and how the museum obtained the object?
* How were the objects selected? Were they personal favourites? highest quality? academic choices?
* How will you provide a context for the objects, such as whether they were legitimate or looted (i.e., provenance issues) and if they should they be given back if they were from indigenous peoples?
* How were the objects used (e.g., for drinking or fertility) and where are they from?

Approach to interpretation:
* Will you use an interdisciplinary approach (e.g., art historical, anthropological, and/or sociological)?
* The strongest connections between the clay and textiles will be interesting stories people can relate to – the object itself may not entice people to click on it but a story may turn them on. These connections will be a way of grouping the objects.
* You need to provide information, such as: the object came from this site, was excavated here, and found by this person; the history of the object after it was found or looted and how the museum obtained the object.

Front-End Evaluation

    *   Will you compare contemporary groups with ancient times in terms of:
- Environment
- Economics (e.g., tribute, taxes, tourists)
- Reflection of different functions
- Contemporary issues (e.g., the influence of globalization on Mexican culture and women's feeling of independence and electing to no longer be weavers)?

On-line/on-site connections:
    *   Why are objects only from the South American collection? Why not European, too? The Gardiner collection has three parts: pre-Columbian, European, and contemporary and the Web site should emphasize that all three collections are at the museum.
    *   On specific days there could be get-togethers and discussion groups on-line and/or at the physical sites, which will raise the profile of the museums and enable people to interact with staff and contribute, for example:
- An on-line visitor posts a story about how objects go together.
- Museum staff plans a special day at one of the physical museums for the *Cloth and Clay* collection with consent that the story is public property.
- Times are posted on the Web site when the stories are being told (e.g., Children's Stories of *Cloth and Clay* Artifacts), with an invitation to bring parents and grandparents, too.

Viewing the objects:
    *   Will you show close-ups with details of objects?
    *   Download time is important, and it is difficult to read too small a font on small screens at home.
    *   Will there be other visual elements (e.g., photos, video) and sound as well?
    *   Ceramic figures jump out more than the vases, but vases can be interesting, too. Can you turn the ceramic objects?
    *   The Web site should give people a reason to come back because it rolls over. Repeat visitors come originally to play and have fun, but get interested in textiles and ceramics and want to contribute to understanding.

Following this first phase of front-end user testing, the development team incorporated many of the participants' suggestions. Content for the Web site was gathered and advisors were consulted with expertise related to the ceramics and textile collections and the regions from which objects originally came. Objects that front-end users were most interested in became central to the design of the Web site and physical exhibition, as did their suggestions for information they wanted to know about each of these objects.

Front-End Evaluation

Ideas for Inclusiveness

One important question for the Web site developers was, "How can the *Cloth and Clay: Communicating Culture* Web site offer an inclusive experience for on-line visitors?" The following are comments people made related to how the Web site could be inclusive. In some cases one person had several different responses that fit into different themes. To our surprise, responses to this question were often not about cultural inclusiveness.

General Access
* Enable all ages, all audiences, anyone who stumbles on the site to get something out of their Web site visit.
* Have a contemporary angle so people don't feel deep in history and it is more meaningful. People who created objects would be proud to have them discussed.
* Be inclusive of boys and girls, racial groups, and socio-economic groups.
* Try to address as many of people's needs as you can. You can have a very snazzy site but if people do not "connect" with it because there is nothing there to correspond to their needs (research, entertainment, education, lesson plans, etc.) they will go elsewhere because chances are, they will find it elsewhere.
* Make philosophies behind pots and textiles available.

Indigenous Peoples
* What about contemporary indigenous people from South America being involved?
* If opinions of indigenous peoples are included on-line visitors will gain insight into their world.
* How will you get the Toronto indigenous community involved?

Socio-Political Issues
* Link to humanitarian efforts.
* Include legitimization, honesty, colonialism, sacred burial grounds, provenance, and history of the object as important issues.
* Show how people are making a living now (e.g., exploited, intermediary in charge, or communes to sell stuff)
* Indicate how people from their communities feel towards the value and worth of these objects.
* Ensure racially that there is a nice span across continents.

Technology Issues
* If people have older computers or slow connections, lots of bells and whistles will be frustrating.
* It should be accessible to people in South America.
* There should be portions in Spanish and French.
* It needs to be very technologically accessible (movies and 'flash' crash computers).
* People need a computer and an Internet connection. You cannot do too much about the disparity between those who do and those who do not have computers, but you could go out to lower socio-economic groups.

Age/Stage-Related Issues

*   Girls will enjoy the story element more readily; boys will like warring elements.
*   For students, there should be more information than they are able to see in other places.
*   University students have different takes on meshing more applications and more scholarly material.

These comments helped the Web development team consider how to make *Cloth and Clay* an inclusive Web site that was accessible in content and technologically to different cultural, socio-economic, age, and gender groups.

Next Steps – Formative and Summative User Testing

The second phase of user testing, a formative stage to test the Teacher's Resources section of the Web site was undertaken in the late spring of 2002, six months after we completed the front-end user testing. There was also a final summative user testing when the Web site was launched on the Virtual Museum of Canada in the Fall of 2003, which coincided with the physical exhibition of *Cloth and Clay: Communicating Culture* at the Textile Museum of Canada.

This collaborative project between the Gardiner and the Textile Museums provided a model for developing on-line experiences from preliminary front-end concept testing during the construction of a Web site and formative testing of a prototype, to summative evaluation after the launching of the Web site. Hopefully this will be a model other museum Web developers will want to follow when developing on-line visitor experiences for their own Web sites. Through front-end and formative user testing Web developers can construct their own frameworks for what constitutes meaningful on-line experiences by consulting users about interests, needs, and learning preferences. The systematic user evaluation process that was used in the development of *Cloth and Clay: Communicating Culture* may, in fact, have contributed to several awards the Web site and a related CD-ROM have now received. The 2003 winners of the Best of the Web competition based on Museum Web sites from around the world included *Cloth and Clay* in the list of five finalists (http://www.archimuse.com/mw2003/best/final_virtual.html). The CD-ROM version of *Cloth & Clay* won the 2003 AAM Museum Publications Design Competition for CD-ROMs / Budget above $500,000.

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