Museums Remixed

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Inception of the Concept for this Session

During the summer of 2006 both Matthew MacArthur and I were separately developing ideas for sessions that dealt with the idea of "open sourcing" the museum via visitor-authored experiences. We wished to open a conversation with professionals from inside and outside the museum industry to discuss what is possible when the consumers of museum collections and exhibitions become willing and active participants in the collection, curation, and exhibition of content.

The advent of techniques currently found on the Internet, such as blogs, wikis, mashups, folksonomies, , open sourcing, open content, user generated content, bottom-up design, to name a few, are ushering in a new era of collaborative content creation. See the Glossary at the end of this article for definitions of many of these terms. These new formats are conditioning more and more visitors to expect and require a much higher degree of participation in creating their own experiences within and between museums.

While working with our mutual standing professional committees, N.A.M.E. and M&T, Matthew and I were introduced and we subsequently elected to combine our proposals into a two-part Session, "Museums Remixed Part I and Part II." We both wanted to explore the benefits of extending the visitor experience into pre, post and inter-museum visits and to investigate how they may affect the level of visitor engagement, learning, and meaning making.

Visitor-Authored Experiences in the Museum Setting by John Chiodo

My focus over the last twenty years has been the creation of visitor experiences for all types of centers of informal education. Most recently, while Director of Design for Academy Studios, I have been leading a team working on a center for unity and diversity in Sacramento that explores the application of visitor-authored experiences. We are looking at this capability to help us better include visitors in the interpretive process with the hope that this will create a more accessible, personalized, and engaging experience for them that supports social interaction on many levels. As a designer I am excited by the potential of making the user a participant in planning experiences as well as giving the user greater control over the experience itself.

As an independent designer I want to engage in a conversation regarding the effectiveness of visitor-authored experiences in the museum setting. The question is, can we open the way to more effective design processes and more engaging visitor experiences by making the user a participant, by both open sourcing the design as well as the experience itself. Specifically, there seems to be great potential for this at the intersection of three ongoing goals in the interpretive design field:

• Creativity in the Design Process — how

the user can be a wildcard creative force during the design process,

- Depth of user interaction—how the user's presence and interaction complete the mechanism of interactivity and focus the experience on the user's personal characteristics,
- Adaptability of visitor experiences—how an exhibition can continue to evolve once it is in place, offering new perspectives each time a visitor returns to use it.

Creating Engagement

Related to these goals is the ongoing desire to have a higher level of engagement with our visitors. Does the visitor-authored approach point to ways in which the user or visitor could be more engaged in the museum setting? The expectation is that the three goals above can be better fulfilled by empowering users to do the following:

- engage in the problem solving process regarding the design of an exhibition,
- contribute content and/or organizing frameworks for interpreting content,
- participate in a real time, two way conversation with the institution and other users.

These three forms of empowerment are all intrinsic characteristics of visitor-authored experiences. How can we stage these forms of visitor engagement? What positive outcomes could we expect? Are there any good examples out there and what can we learn from them?

Possibilities

Over the years one sees the same challenges rearing up from project to project. It's a perennial experience for anyone working in the interpretive world. How can we better address varied learning styles? How can a museum visit be more effectively adapted to a visitors existing knowledge base? How can we make the experience more interactive in a minds-on fashion? How can we accommodate socially interactive experiences? How can we gather more information about our visitors and how they use the museum? How can we keep the experience fresh? Can you feel the headache coming on?

I have been working on teams where we have sought to address some of the above questions by giving visitors greater control over their museum experience. In the process we have identified some promising potential.
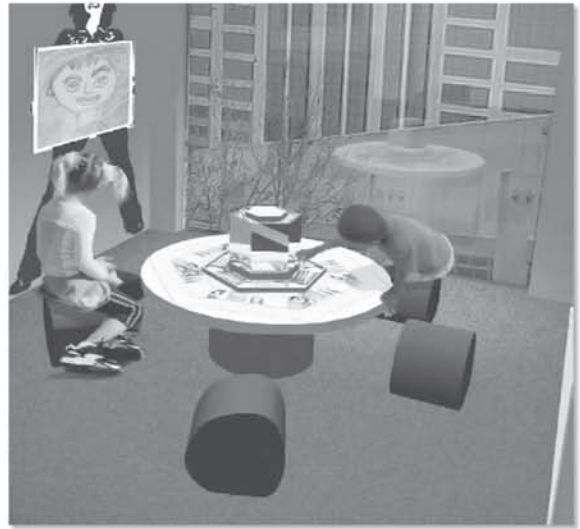
From the institution's view point, the techniques utilized in implementing visitor authored experiences can also be programmed for gathering data on how visitors are using the museum. This can provide an institution with valuable information on its visitors' characteristics, behaviors, and even the context of their visit. Decisions regarding improvements to a museum's overall visitor experience can then be adjusted based on more accurate information. These techniques can also serve the museum's interests by creating linkages between the museum experience and the home; and, by tapping the community participation in the learning process.

Create a self-portrait interactive where visitors can combine elements to express their cultural and racial identity. Exhibition Design by Academy Studios, illustration by Jennifer Sparrow.

From the visitor's view point, we may be able to better accommodate multiple intelligences, learning styles, and even value systems. We can allow for a higher degree of personalization and fit to the visitor's interests and knowledge structures. This can be achieved by allowing visitors to have more choice over the modality of information display and interaction. In this way an analytical person can opt to interact with information one way, a visual person another. Additionally we could allow the visitor to select or even create the thematic filter that determines what associative content is linked to the main messages. Musically oriented visitors can see the effects of a topic on their interest area while someone concerned about the environment can opt for linkages relevant to say, conservation.

There is greater opportunity for visitor manipulation of data (as in content and/or collections), which should facilitate learning. By permitting visitors to take a crack at interpreting a group of objects or manipulating imagery we are engaging them in a creative process that is both analytical and synthetic. By its nature it will engage their minds and their imaginations, and invite them into making new connections. This form of collaborative authorship between the visitor and the

Screen shots of computer based program where visitors can submit their own stories and link other stories together thematically on a narrative based map. Jake Barton of Local Projects.

museum provides increased opportunities for visitors to vary their experience of an exhibition each time they return to the museum. This is because different choices will result in different outcomes, which helps keep the experience fresh each time visitors return. In this way, the unique characteristics, behaviors, and social context that visitors bring with them can have a more meaningful effect on specific elements of their experience.

The New Real Thing—A Collection of Perspectives

By permitting visitors to share their interpretation of a museum's content with other visitors, both in real time and by contributing to an archive, we are opening up new channels of communication. Whether sharing within one's group or with friendly strangers there is a value added to the experience by virtue of the other visitors at the museum. This is the My Space/Blog factor that if properly managed could yield a whole new type of collection —a collection of perspectives. That is, ways of seeing the world that visitors could share and from which they could enlarge their own awareness. This may be the new "Real Thing" that visitors go to see in museum. But in this case the Real Thing is not just something cool to see but to also something cool to do. Imagine the diversity of interpretive horsepower that could be tapped in one year of museum visits?

It's difficult to judge just how far it could be taken. It seems it might lead to a new kind of curator, one who can see and interpret the patterns emerging from an ever-growing collection of "this is how I see the world." This also seems to be a key way museums can continue to be the best place to go to learn about ourselves and see our place in the world.

Additional Qualities of Visitor-Authored Experiences

In the process of researching examples of visitor-authored experiences I have noticed some interesting characteristics. At their best, the user's presence and interaction complete the mechanism of interactivity. In examples that use digital technologies, the system that manages the user interaction can be programmed to learn from the interaction and evolve in the way it responds to visitor inputs. In other words these systems can be intelligent enough to learn from the way visitors use them. Finally, the technologies used to register visitor input and display output lend themselves to creating an augmented reality experience – that is, real things and real places can be augmented with digitally accessed sensory information. A skilled designer can integrate such sensory augmentation into an interpretive environment so that it responds meaningfully to the visitor's presence and actions.

Breakthrough Technologies

This seems to be an opportune time to experiment with these techniques since there are many more tools available to stage visitor-authored experiences. For instance, the recent advent of cost effective digital media response systems (an "intelligent" system using some combination of sensor/actuator systems, biometrics, microprocessors, massive storage systems, wireless communication, RFID tags, LED lighting) has provided an unprecedented opportunity to create phenomenologically interactive experiences–that is, experiences where our actions trigger phenomena that are directly perceived in a multisensory fashion. This means that our bodies and our actions become the input device and the environments we are acting within become the output device where the technology is invisible and cause and effect seamless. Applications of these technologies can be found in the book *Responsive Environments, Architecture, Art and Design* by Lucy Bullivant (2006).

Clearly none of this will come automatically, without hitches or glitches. As always it will be in the addressing of all the Who's, How's, When's, Where's and Why's, that the positive outcomes can be captured and negative effects avoided. In any event, the genie seems to be out of the bottle as far as much of our youth is concerned as they forge ahead authoring experiences on their own with existing tools on the internet.

The Exhibit Commons: Liberty Science Center Remixing the Museum by Wayne Labar

In his book *Free Culture,* Lawrence Lessig, the father of the Creative Commons, made this prophetic statement: "Digital technologies tied to the Internet could include a much wider and more diverse range of creators; those creators could produce and distribute a much more vibrant range of creativity…." (2004).

Increasingly this appears to be coming true in the 21st century. But how this revolution of the digital realm applies to our museums is a process that is still evolving. In particular for an institution like a science center or science museum it is actually an essential question since the very technology and science involved are part of the content that these institutions should address.

From one perspective museums are not digital media; they are a combination of rock, mortar, artifact and location. The way in which we at science and technology centers and science museums in particular engage the public with our content has remained unchanged for at least a century. Exhibitions are the principal medium through which museums engage the public with science. These are created by museum staff, advisors, and contractors working together to tell a story and convey some understanding of the world. This is a very top down approach from the public's standpoint, as the scientists and researchers know the subject matter and in fact have the artifacts and research data. Today not much has changed, except that we have advanced the media with interactive exhibits that allow visitors to push, pull, crank, or touch. I personally have spent 20 years of my professional life working within this model.

We can look at museums and in particular exhibitions from a completely different perspective related to the digital realm. Exhibitions are certainly "experiences." They are experiences that are only complete with people. And as discussed in numerous studies, papers, and articles these people come with their own backgrounds and interests, resulting in different experiences for every person. In fact there is much discussion about the meaning making that happens at exhibits and how it is different for each person. In the end you can count on the fact that whatever the exhibition, visitors will also interact by creating their own stories. Whether it be dioramas or even modern interactive science exhibitions, we as museum staff must always remind ourselves that the story we wish to tell may not be the only story possible; at times the visitors' stories may be as engaging and relevant as ours.

As members of the public are creating their own experiences and stories within our exhibitions, they find this mirrored in the larger world, where people are empowered to tell their own stories. In today's world, visitors are surrounded, but more importantly, are participating in a world of experiences and content that THEY are creating, discussing, learning, or mastering. In programs or forums such as Firefox, Wikipedia, Linux, BoingBoing. net, iHacked.com, or YouTube, we are in a world with a "More diverse range of creators," who are telling their own stories (Lessig ,2004). This can only have an impact on our stories.

It was in light of this shifting landscape of engagement that we launched the Exhibit Commons project. Located at the address www.exhibitcommons.org, it is meant to be a shared single website where the public can find new ways of interacting with museum exhibits or exhibitions that reflect the changing nature of the of the museum visit in terms of creation and authorship. While Liberty Science Center will post the first link to exhibits that are part of the commons, it is hoped that other museums will try this and request their own links from this site. Fundamentally its goal is to turn on its head the old museum and exhibition

> ...the world may come to "view culture less as something to consume and more as something to interact with." (Besser, 1997)

paradigm that started so long ago. It is meant to be a place where visitors can find museums that have created opportunities to actually participate in the creation, modification or "hacking" of exhibits that are on the exhibition floor. Links to the institutions will allow visitors to find such things as exhibit details, formats, codes, and software tools that enable this to occur.

For Liberty Science Center, the idea of "open sourcing" our exhibitions is allowing us to encourage the public to become involved directly in the science and technology content being represented in the museum. Perhaps more importantly, this is helping us to support and encourage the public to become even more engaged with the science and technology that make the exhibitions possible and the technology that is changing our digital world. It allows us to facilitate learning about science and technology by exposing visitors to the "tools of the trade." Meanwhile we hope that it will begin a new form of dialogue between the visitors and ourselves and perhaps even among visitors. Certainly we believe it opens new audiences to becoming engaged with exhibitions. Finally we hope it inspires innovation for all ages.

As a start there will be upwards of 10 exhibits at Liberty Science Center where we will be posting web drawings, descriptions and necessary software and equipment spaces that will allow visitors to do such things as:

- Submit experiments for our on-the-floor labs on river ecology, structural engineering, and microbiology,
- Write code to direct a sophisticated digital graffiti art rendering program,

- Submit video of their analysis of current sci/tech events,
- Recommend what the "Science Question of The Day" is to all visitors and cell phone subscribers,
- Create a performance with our "Times Square of Science and Technology" art piece.

This is an experiment that anticipates the changes in store for museums. Chris Anderson, editor in chief at *Wired* magazine, states "The consequence of all of this is that we are starting to shift from being passive consumers to active producers. And we're doing it for the love of it." (Anderson, 2004).

Museums need to be ready when their visitors demand to become active producers of the exhibition experience and as a result actively involved in the content displayed and the dialogue around it.

"Some Rights Reserved": Building a Layer of Reasonable Copyright by Eric Steuer

About Creative Commons
Creative Commons is a new system, built within current copyright law, that allows you to share your creations with others and use music, movies, images, and text online that have been marked with a Creative Commons license. It seeks to ease the way for copyrighted material to be more accessible to the public.

The project was founded in 2001 by Lawrence Lessig with the generous support of the Center for the Public Domain. It is led by a Board of

We use private rights to create public goods: creative works set free for certain uses.

Directors that includes Lessig as well as other cyberlaw and intellectual property experts such as James Boyle, Michael Carroll, and Molly Shaffer Van Houweling; MIT computer science professor Hal Abelson, lawyer-turned-documentary filmmaker-turned-cyberlaw expert Eric Saltzman; renowned documentary filmmaker Davis Guggenheim; noted Japanese entrepreneur Joi Ito; and public domain web publisher Eric Eldred. The Creative Commons website can be found at www.creativecommons.org.

Fellows and students at the Berkman Center for Internet & Society at Harvard Law School and Stanford Law School Center for Internet and Society helped get the project off the ground. Creative Commons is now housed at offices in San Francisco. The Board oversees a small administrative staff and technical team, and is advised by a Technical Advisory Board. Creative Commons is sustained by the contributions of a growing group of supporters.

Building a Layer of Reasonable Copyright
Too often the debate over creative control tends to the extremes. At one pole is a vision of total control—a world in which every last use of a work is regulated and in which "all rights reserved" (and then some) is the norm. At the other end is a vision of anarchy—a world in which creators enjoy a wide range of freedom but are left vulnerable to exploitation. Balance, compromise, and moderation—once the driving forces of a copyright system that valued innovation and protection equally—have become endangered species.

Creative Commons is working to revive them. We use private rights to create public goods: creative works set free for certain uses. Like the

free software and open-source movements, our ends are cooperative and community-minded, but our means are voluntary and libertarian. We work to offer creators a best-of-both-worlds way to protect their works while encouraging certain uses of them—to declare "some rights reserved."

Thus, a single goal unites Creative Commons' current and future projects: to build a layer of reasonable, flexible copyright in the face of increasingly restrictive default rules.

Creative Commons' first project, in December 2002, was the release of a set of copyright licenses free for public use. Taking inspiration in part from the Free Software Foundation's GNU General Public License (GNU GPL), Creative Commons has developed a Web application that helps people dedicate their creative works to the public domain — or retain their copyright while licensing them as free for certain uses, on certain conditions. Unlike the GNU GPL, Creative Commons licenses are not designed for software, but rather for other kinds of creative works: websites, scholarship, music, film, photography, literature, courseware, etc. We hope to build upon and complement the work of others who have created public licenses for a variety of creative works. Our aim is not only to increase the sum of raw source material online, but also to make access to that material cheaper and easier. To this end, we have also developed metadata that can be used to associate creative works with their public domain or license status in a machine-readable way. We hope this will enable people to use our search application and other online applications to find, for example, photographs that are free to use provided that the original photographer is credited; or songs

that may be copied, distributed, or sampled with no restrictions whatsoever. We hope that the ease of use fostered by machine- readable licenses will further reduce barriers to creativity.

Example—Choosing a License
Offering your work under a Creative Commons license does not mean giving up your copyright. It means offering some of your rights to any member of the public but only on certain conditions.

What conditions? You can find an overview of the Creative Commons licenses here. All of our licenses require that you give attribution in the manner specified by the author or licensor.

Attribution: You let others copy, distribute, display, and perform your copyrighted work —and derivative works based upon it—but only if they give credit the way you request.
Example: Jane publishes her photograph with an Attribution license, because she wants the world to use her pictures provided they give her credit. Bob finds her photograph online and wants to display it on the front page of his website. Bob puts Jane's picture on his site, and clearly indicates Jane's authorship. Our core licensing suite will also let you mix and match conditions from the list of options below. There are a total of six Creative Commons licenses to choose from our core licensing suite.

Noncommercial: You let others copy, distribute, display, and perform your work —and derivative works based upon it—but for noncommercial purposes only.
Examples: Gus publishes his photograph on his website with a Noncommercial license. Camille prints Gus's photograph. Camille is

not allowed to sell the print photograph without Gus's permission.

No Derivative Works: You let others copy, distribute, display, and perform only verbatim copies of your work, not derivative works based upon it.
Example: Sara licenses a recording of her song with a No Derivative Works license. Joe would like to cut Sara's track and mix it with his own to produce an entirely new song. Joe cannot do this without Sara's permission (unless his song amounts to fair use).

Share Alike: You allow others to distribute derivative works only under a license identical to the license that governs your work.
Note: A license cannot feature both the Share Alike and No Derivative Works options. The Share Alike requirement applies only to derivative works.

Example: Gus's online photo is licensed under the Noncommercial and Share Alike terms. Camille is an amateur collage artist, and she takes Gus's photo and puts it into one of her collages. This Share Alike language requires Camille to make her collage available on a Noncommercial plus Share Alike license. It makes her offer her work back to the world on the same terms Gus gave her. More examples are available on our examples page. Also note that every license carries with it a full set of other rights in addition to the allowances specifically made here.

Taking a License
When you've made your choices, you'll get the appropriate license expressed in three ways:

"Build It and They Will Come?" or
"Let them Come and They Will Build It?" (Mackenzie, 2005).

Commons Deed: A simple, plain-language summary of the license, complete with the relevant icons.

Legal Code: The fine print that you need to be sure the license will stand up in court.

Digital Code: A machine-readable translation of the license that helps search engines and other applications identify your work by its terms of use.

Using a License

You should then include a Creative Commons "Some Rights Reserved" button on your site, near your work. Help and tips on doing this are covered on our website. This button will link back to the Commons Deed, so that the world can be notified of the license terms. If you find that your license is being violated, you may have grounds to sue under copyright infringement.

Exhibit Remixing
by Matthew Fisher

As president of Philadelphia-based interactive design company Night Kitchen Interactive, I have recently been involved in a number of collaborative projects, inspiring me to explore the concept of "Exhibit Remixing." I define these remixes as visitor-created, online narratives inspired by museum exhibitions. Asking "Why should we remix?" we can find inspiration in Marcel Duchamp's quote: "The creative act is not performed by the artist

alone… the onlookers make the picture" (Judovitz, 1995).

In keeping with this ideal, one can look to Hilde Hein's new book, *Public Art: Thinking Museums Differently* (2006), in which she argues effectively that museums of all kinds should act as a forum for public art. Hein defines public art in the museum context as the creation of new cultural objects and knowledge through a transformative process involving public engagement with museum collections and exhibitions. In her public art model, museums curate experiences that inspire and engage the public as active participants in the storytelling. By encouraging visitor-constructed narratives, we allow them to relate to collections in ways that are individually meaningful. These intimate
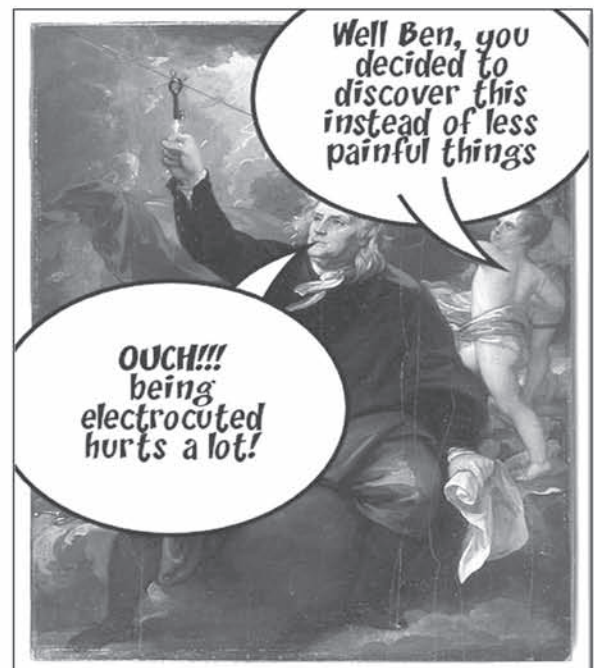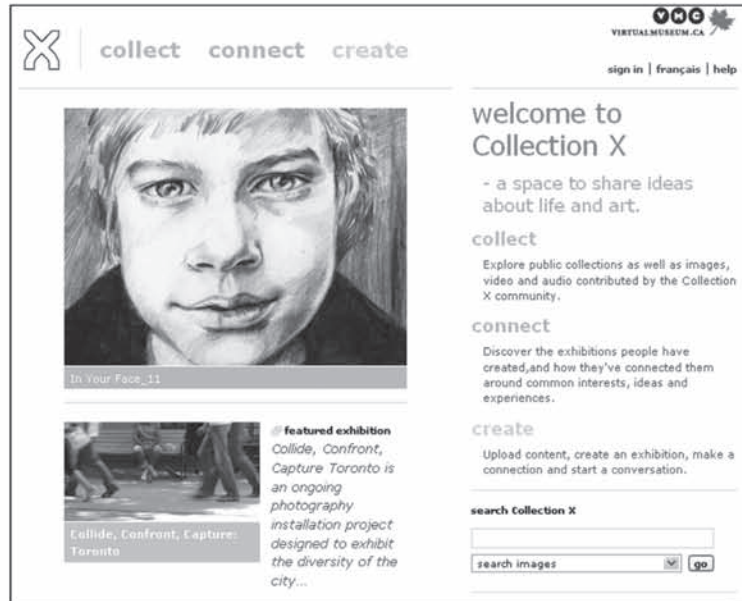

A playful yet somewhat irreverent cartoon created by a middle school student in the Franklin Remixed project, http://www.franklinremixed.com. The Philadelphia School, Philadelphia, PA, March, 2006.

Screenshot from the Art Gallery of Ontario's Collection X Web site, http://www.collectionx.museum.

narratives inspire what Hein refers to as the museal gaze—a unique, powerful and highly personal connection between visitors and museum objects.

I would argue that the exhibit remix is an effective, affordable, and repeatable approach to facilitating visitor storytelling. The availability of Web 2.0 services such as wikis, blogs, and podcasting now allow the public the constructivist means to contribute, reorganize, and remix information and culture. These inexpensive tools and services are not only increasingly familiar to the public, but they allow museums to maintain a high level of control over web content without taxing internal resources. I would argue that the future relevance of museums is threatened if we do not meet the public's rising demand for a higher level of popular participation, and encourage the opening up of our exhibits and collections to these new modes of personal engagement and public knowledge construction.

Web 2.0 at the Art Gallery of Ontario by Colin Wiginton

The Art Gallery of Ontario in Toronto is currently undergoing a major renovation that will result in the creation of a newly expanded Frank Gehry designed building scheduled to open in 2008. As part of the process of re-imagining itself the Gallery has taken advantage of the "Transformation AGO" project to challenge some of its fundamental practices under the banner of "new art, new building, new ideas, new future." Within this context the AGO recently launched an online initiative known as Collection X (www.collectionx.museum) that

offers a new and novel way to re-think how museums amass, exhibit, and interpret their collections.

Collection X represents a major leap forward for the AGO on two fronts. On one hand it makes a selection of works from the permanent collection available online for the first time while, on the other hand, it makes it possible for members of the public to upload their own collections and create virtual exhibitions using the same application. In this way Collection X functions as an "open-source museum" that enables users to emulate museum practices while, at the same time, drawing upon a mix of content taken from public collections as well as from collections created by the public.

In order to generate interest and model the kind of content that can be created using Collection X, the AGO is working with project partners to seed content that includes images, video and audio to create collections, exhibitions and connections that incorporate this content. To ensure that this work happens Collection X has evolved alongside another initiative spear-headed by the AGO called the ArtsAccess Project, a multi-year inter-regional program designed to bring together artists, community members and cultural organizations through art, art making, and arts education. Together,

Current developments on the internet may foreshadow a
new set of expectations for future museum audiences.

ArtsAccess and Collection X are meant to encourage participation, foster creativity and build relationships through a combination of community-based and online experiences.

Although still quite new Collection X provides an interesting case study that highlights the issues that arise when a museum takes up the challenge of developing web-based projects that invite broader participation. On a practical level Collection X has forced the AGO to deal with familiar issues such as copyright, censorship, liability, accessibility, bilingualism, and institutional buy-in, but within the less familiar and still contested context of the Internet. On a conceptual level Collection X has called into question some of the fundamental assumptions that inform the work of museums and galleries, including the definition of the "public trust"; the implications of ceding authority and control over content; and the effect of opening up and democratizing interpretive processes.

While it is obvious that the rules of the game are changing as a result of an increased interest in participatory culture, what is exciting is the fact that projects like Collection X position the work that museums and galleries pursue within a broader continuum of activity. In this scenario everyone has the potential to engage in the process of collection building and meaning making. With regard to the relationship between institutional authority and personal experience it is no longer a case of "either/or" but "both/and" as so-called "experts" and "novices" share the responsibility as stewards of a collective cultural heritage.

Folksemantic: Embracing the Human Messiness of the Web
by Shelley Henson

The Web is bursting at the seams with user-generated content that lives side-by-side with content uploaded by museums, universities, and other prestigious institutions. Along with all of these resources come a number of challenges for the typical user. These include difficulty in filtering, making sense of, and finding ways to reuse and remix openly available resources. At the Center for Open and Sustainable Learning at Utah State University, we build open source applications to support users as they tag, filter, remix, reuse, and generate Web resources.

After developing a number of Web 2.0 applications, we've learned some valuable lessons. First, with the right mechanisms in place, communities can manage themselves. Reputation indicators, opportunities to voice opinion, and easy ways to engage with the content and with other users are all crucial to the success of an online collaborative environment. Second, user generated content is rich. It is not, however, perfect. This is why those mechanisms listed above are important if other users are to determine the quality of resources. Next, more voices mean more interaction, so if the system doesn't reach enough of the right audience, there is a chance that critical mass will never occur and the system will languish.

Additionally, before your organization spends valuable resources building new tools, consider existing tools. There is an abundance of freely available tools online. Many of these tools

provide open APIs, or pipelines, into and out of their systems. Many can be easily placed directly into your organization's website and are free to use. Some of these tools can be found at http://folksemantic.org. Others such as flickr (http://flickr.com) and del.icio.us (http://del.icio.us) are approaching ubiquitous use online and can be leveraged in a number of ways for your organizations. The Web 2.0 space is filled with humans, meaning it's messy. But it's the messiness that allows for rich, legitimate human connection.

Can Museums Allow Users to Become Participants? by Matthew MacArthur

Museums, along with other cultural institutions and content providers, are struggling to understand the implications of concepts like open content, rip/mix/burn, social tagging, and Web 2.0. New developments on the Internet, both technological and social, have the potential to revolutionize the relationship between content experts, collections, and constituents. Beyond simply understanding the nature of these developments, it is important to examine how they affect the traditional roles of museums as stewards of cultural heritage, informal educators, and trusted sources of information.

The "Museums Remixed" panelists presented a variety of perspectives on creating participatory experiences, citing case studies both in and out of museums, exploring legal issues, and demonstrating cutting-edge interactive tools. What these efforts have in common is a desire to increase engagement, encourage interaction, and give users a greater measure of control over their experience. Intelligently adopting these methods may not only satisfy changing user expectations, but could enhance museums' ability to educate and connect with constituents. However, ceding power over our content to users raises questions about authority, credibility, and ownership.

Wikipedia defines Web 2.0 as a "social phenomenon embracing an approach to generating and distributing Web content itself, characterized by open communication, decentralization of authority, freedom to share and re-use." Attitudes toward this phenomenon vary widely within the museum world and in the wider culture. Some have hailed it as a revolution, and others as only a passing fad. Most museums are at least trying to understand the implications of the new freewheeling online culture, and how it might apply to them. Those who have experimented with the tools and methods of Web 2.0 often find that it seems at direct odds with the authoritative, conservative culture of traditional museums.

The heart of the matter—as once posed to me by a colleague—is: "Why should we do this?" I interpret his question as, why we would want to dilute the museum's offerings with user-supplied content? Why would we invite amateurs to collaborate when we are the subject experts? And do our users even want this anyway? These are all valid questions that must be approached with some sensitivity. We have an interest in protecting museums' reputation as trusted sources of information, and in fact we do know that some users just want information and not a participatory or collaborative experience. Further experimentation and evaluation is needed before we can confidently begin to answer those questions.

"The consequence of all of this is that we are starting to shift from being passive consumers to active producers. And we're doing it for the love of it." (Anderson 2004).

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Additional information and resources may be found at the Museums Remixed Blogsite http://museumsremixed.blogspot.com/

My experience thus far in this arena has led me to a couple of preliminary conclusions. First, it is important to recognize that true dialogue between museums and audiences requires sincere engagement by both parties. We should not think that increasing user involvement necessarily decreases or devalues the role of museum experts in some kind of zero-sum calculation. On the contrary, healthy dialogue almost always leads to better results than a one-sided conversation.

Second, there is evidence to suggest that increased participation and engagement broadens users' access to and understanding of the collections and content of museums. There is a concern often expressed that we may turn museums into digital libraries, where, in effect, users are encouraged to "check in" and "check out" bits of material to suit their own purposes. But experience shows that many visitors, whether online or in person, are already using our museums and Web sites that way—less for an immersive "learning experience" than looking for facts or materials to appropriate for their own uses whether it be teaching a lesson, researching a school assignment, pursuing a hobby, or simply reinforcing a sense of identity. By offering true, participatory, collaborative "minds-on" experiences we may be much more effective at promoting the quality and quantity of learning that we aim for.

The "Museums Remixed" sessions were intended to stimulate a conversation about what it means for museums to invite users (or visitors) to be genuine participants—and to raise, if not fully answer, the pertinent questions in a public forum. We hope to see the conversation continue, supported by further experimentation as museums creatively adapt a new generation of interactive techniques and study potential outcomes on visitor learning and engagement.