



PRESENTATION OF THE VIRTUAL ROCK ART MUSEUM PROTOTYPE (RAMP) VIDEO, MUSIC, FILM & SECOND LIFE CONNECTION VIA INTERNET

LYNN CULLENS* & LYSA HOCHROTH**

ABSTRACT

The development of an original prototype for a rock art museum was built through a partnership between the International Council of Museums (ICOM) and The Tech Museum of Innovations ("The Tech") of Silicon Valley, California. Benefiting from a grant from the Betty Moore Foundation, "The Tech" began to utilize the 3D platform called Second Life on the internet, building a virtual replica of itself to conduct experimental low-cost museum exhibition development, increase access to the California museum and stimulate creative energies with non-science and technology people.

The main purpose of the build was to produce a visual and interactive forum for the development of a portal to link rock art sites, including World Heritage Sites, to museums and research institutions with collections, documentation, and research information to allow for comparative research and communicating the value of rock art heritage to new audiences in the future. Phase 2 of the Virtual RAMP is to utilize the time at the Valcamonica Symposium to determine needs and participants to carry this work on through museums and rock art networks in a sustainable way and determine which links are priority for the next phase of development.

RIASSUNTO

Lo sviluppo di un prototipo originale per un museo d'arte rupestre è stato realizzato grazie ad un accordo tra l'International Council of Museums (ICOM) e il The Tech Museum of Innovations ("The Tech"), della Silicon Valley, California. Beneficiando di una borsa dalla Betty Moore Foundation, "The Tech" ha iniziato a usare la piattaforma 3D internet chiamata "Second Life", costruendo una replica virtuale di se stesso per condurre lo sviluppo di una esposizione museale a basso prezzo, per aumentare gli accessi al museo californiano e per stimolare energie creative con persone che non si occupano di scienza e tecnologia.

L'obiettivo principale del lavoro era quello di produrre un forum visivo e interattivo per sviluppare un portale che collegasse i siti dell'arte rupestre, inclusi i siti del Patrimonio Mondiale, ai musei e agli istituti di ricerca con collezioni, documentazione e informazioni utili alla ricerca comparativa e comunicare il valore del patrimonio dell'arte rupestre ad un nuovo pubblico in futuro. La fase 2 del RAMP virtuale consiste nello sfruttare l'occasione del Simposio in Valcamonica per determinare i bisogni, invitare i partecipanti a portare avanti questo lavoro nei musei e nei network sull'arte rupestre in un modo sostenibile e per stabilire quali collegamenti saranno priorità per la prossima fase.

RESUME

Le développement d'un prototype originel pour un musée d'art rupestre a été réalisé grâce à un accord entre l'International Council of Museums (ICOM) et le The Tech Museum of Innovations (« The Tech »), de la Silicon Valley, en Californie. En bénéficiant d'une bourse de la Betty Moore Foundation, « The Tech » a commencé à utiliser la plate-forme 3D internet appelée « Second Life », en réalisant une réplique virtuelle du musée même pour conduire le développement d'une exposition muséale à bas coût, pour augmenter les accès au musée californien et pour stimuler les énergies créatives avec des gens qui ne s'occupent pas de science ou technologie.

Le but principal du travail consistait en produire un forum visuel et interactif au fin de développer un portail qui relie les sites de l'art rupestre, inclus les sites du Patrimoine Mondial, aux musées et aux institutes de recherche dotés de collections, documentation et informations utiles à la recherche comparative et communiquer la valeur du patrimoine de l'art rupestre à un nouveau public à l'avenir. La phase-deux du RAMP consiste en le profiter de l'occasion du Symposium en Valcamonica pour déterminer les besoins, inviter les participants à faire avancer ce projet dans les musées et dans les network de l'art rupestre d'une façon soutenable et pour établir les liaisons qui seront priorité dans la prochaine phase.

* Lynn Cullens, Virtual Rock Art Museum Prototype (RAMP), USA

** Lysa Hochroth, Ph.D., Formerly Publications Editor, International Council of Museums, Member ICOM-ICME (International Committee on Museums of Ethnology)(USA/France)



PRESENTATION: SIGNATURE ADVANTAGES OF VIRTUAL WORLDS

While virtual worlds offer the opportunity for museums to prototype structures, exhibits and displays for eventual physical construction, there is also great value in permanently establishing and maintaining educational exhibits within a virtual world. In 2008, Robert Bloomfield (Cornell University) and I elaborated on three signature advantages of virtual worlds which distinguish virtual world efforts from other digital strategies and from their physical world alternatives. These advantages are termed presence in place, constructive cacophony, and creative collaboration. Each of these advantages has great potential for improving research and understanding of rock art.

PRESENCE IN PLACE

The interactive and malleable three-dimensional environment distinguishes virtual worlds from other online technologies. Unlike web browsing, conference calls, webinars or net-meetings, virtual worlds allow us to create a surprisingly vital mutual presence in surprisingly life-like places.

In Second Life you have the feeling of truly being with other people in a place full of sights and sounds, an intense shared experience that has been demonstrated to further social and educational goals. Presence as an avatar allows for nonverbal expression through choices of appearance, body language, movement and personal space.

The replication of familiar environments allows people to adapt naturally to the demands of new technology, as in walking along a path to the next exhibit rather than navigating via computer commands to the next web page, and thereby helps them to feel more socially comfortable and willing to engage. But beyond this simple mirroring of the physical world, virtual worlds allow us to transcend space, time and physics, and therefore to easily move together to explore other places on earth, as well as “places” we can only imagine.

It is a truly social space. As one visitor to the Rock Art Museum Prototype said, “I could spend time here with my grandchildren, even though they live thousands of miles away and in a different time zone.”

What does this mean for rock art? The three-dimensional physicality of rock art sites is essential to understanding them. Photographs cannot fully convey the significance of the placement of the images on the rock, nor the relationship of one site or rock or image to another. Replicating sites in three dimensions is valuable as both an educational and research tool.

For example, reading that a large pictograph panel is painted on a hillside just above a hidden rock shelter which is the start of a long narrow painted tunnel once used for rebirthing ceremonies is very different from climbing the vertical cliff to stand and view the panel, and then crawling down through the tunnel and out to view another set of pictographs.

Virtual worlds can also offer temporal replication. For example, a pictograph which has been repeatedly painted over can be shown in stages within an experienced virtual timeline of creation, including changes to related rock art, relevant changes to the surrounding natural and cultural environment and the evolution of related archaeological and historical artifacts.

Virtual worlds also allow the public to experience fragile ancient places without compromising their security and integrity. A public group can visit a replication of a rock art site without knowing its precise location on a map. In a virtual world, you leave behind not even a footprint or a camera flash.

Overlays of signage and other educational materials can be included in a virtual exhibit which would be intrusive and culturally inappropriate at the physical site. Moreover, such overlays can be optional, variable, and targeted. For example, an exhibit can be designed to allow people to choose to experience the virtual world location at one visit as an ancient replication without embellishment, at the next visit with an exhibit emphasis on historical and cultural change, and at another time with a focus on art or archaeology, or even as a short stop on a larger tour of many site installations.

Constructive Cacophony

Virtual worlds offer many channels of simultaneous communication. When these options are combined with a purpose, virtual worlds offer certain advantages over other online digital media and also over physical world exhibit installations.

Virtual world communication channels include 2D and 3D experiential graphics, world animation, avatar animation, text, voice, group instant message, personal and private instant message, public text chat, live or recorded video and audio transmission, sound and visual effects, web sharing, email interfaces, and automated transmission to other digital media.

This cacophony can be overwhelming, but it also provides the user with choices that make the content more immediately and personally accessible. Individuals can choose to embrace certain communication

options and ignore others, the equivalent of me being able to privately whisper or point out the feature of a photograph to someone right now at this meeting, but from across the room, or around the world.

Imagine for a moment how this particular meeting might be created in a virtual world. We could hold the meeting within a successive virtual series of the rock art sites we are discussing, teleporting the entire group from place to place in order to illustrate each point. Presenters might speak individually through voice technology, or discuss simultaneously as a panel or group. The slide presentation could move with us, placed temporarily beside any rock art feature of interest, and moved at will. We could make the charts and graphs appear as a 3D hologram. Interactive maps could accompany each participant through a “heads up display” HUD.

As in a physical site visit, a group member could choose to break away and look behind a rock out of curiosity, or take their camera down a hidden path. As a group, we might look down at each site from a bird’s eye view, and then zoom in to examine the detail of an ancient carving.

A three-dimensional replication of the ceremonial structure for a puberty ceremony related to a cupule rock could be temporarily created. An avatar could demonstrate the ceremony dressed in prehistoric garments and using replicated artifacts. Photographs of the artifacts as they were excavated, and again as they might have originally looked, could be displayed and distributed to each participant without interrupting the demonstration.

A presenter could change the 3D surroundings successively to demonstrate how the rock art on site appeared over a period of 500 years, or alternatively, highlight only the pictographs containing white pigment, or only the petroglyphs containing spirals. Nearby locations for pigment minerals could be highlighted on the individually interactive map.

As the discussion developed through a voice interface, presenters could paste relevant journal references and web links into local text chat, and participants could click those links to bring up the results in their individual web browsers, or not.

Links could also be provided in the 3D environment, allowing individual participants to click a particular image on a rock and learn, for example, related information such as the age of the work, the type of rock, or to receive copies of historic documents and photographs. Video or audio could present traditional dance or music related to ancient images, and text commentary and discussion could continue while all watched and listened without interruption.

Participants could type questions and comments into either public text so that the entire group could see, or to a facilitator so that they might be queued, or via private message to a specific participant, all while the discussion proceeds apace. Text could be translated simultaneously to multiple languages visible only to those individuals requiring that language, and their questions or comments translated back to the public chat. Small groups for specific interests could break out, meet, and return to the larger assembly without ever leaving their chairs.

I could pass you all my business card or CV or the text of my presentation with a single click.

People from all over the world could attend virtually without requiring travel. The onsite meeting experience could be made accessible to people with disabilities, including those in wheelchairs, the blind and hearing impaired. Video, audio and text records could be readily created and maintained, even to the extent of virtually recreating the entire experience for someone who was unable to attend.

This is just one example of the communicative power and “constructive cacophony” of virtual worlds. There are many others: dialogue, tours, self-guided tutorials, multimedia experiences, demonstrations, recreations, training, classes, entertainment, social gatherings, games, and more. Each can be structured for individuals, couples, small or large groups.

The communication value of virtual worlds relates to the multitude of choices and the level of control for both the creators of the content and also for each participant or user of the content. To me it seems clear that the dimensional nature and the world-wide extent of rock art research are such that virtual worlds may be a particularly useful communication tool for this community of interest.

Creative Collaboration:

The geographic and temporal flattening of the 3D online social medium benefits everyone. One need not travel to meet, and time zones can be readily accommodated.

Serious researchers and conservationists, as well as people of indigenous cultures, will benefit from being able to collaborate about rock art within a more realistic digital space containing an effective suite of communication tools. But perhaps the most significant potential for collaboration in virtual worlds will be to expand the demographics and disciplines which are interested in the study, conservation and appreciation of rock art.



In my work managing a rock art site in Central California over a decade, including limited public access, and as I led rock art tours throughout the American Southwest, I came to realize that these ancient works of art stimulate people to think about art, culture, ceremony, history and prehistory in profoundly different ways than are commonly taught in a classroom or learned from books or television. Many visitors experience an “aha” moment, when the difference between the painting that hangs on a museum wall and the pictograph painted high on a hidden ledge of a remote canyon become vividly clear.

Some of the most significant aspects of rock art are very difficult to convey: that it is not always representational; that it was often not intended to be easily seen; that the very act of viewing was sometimes intended to entail profound consequences; that the act of creation was often more culturally significant than the resulting image; that impermanence can be valued; that essentially human elements of the art may transcend culture, geography and historic period; that our modern-day technological, cultural, spiritual and environmental experience differs so dramatically that meanings are often obscured; and so on.

The Rock Art Museum Prototype is just beginning to scratch the surface of how virtual exhibits can help people comprehend rock art more contextually, and with greater depth.

To help people understand at this level, the experience of rock art must be contextual, because so often the intention, the meaning, and the value of the art is inextricably entwined with the physical and natural environment and the traditional culture. The best place to experience rock art is at its physical location, perhaps the second best place will be in virtual worlds.

If more people can begin to understand the value of rock art, creative collaboration related to the art may transcend the traditional spheres of interest. Artists may more appropriately incorporate traditional imagery and methods in contemporary work. Educators may more effectively elaborate ancient experiences to students of prehistoric life. Advocates may bring graffiti artists and taggers to understand the similarities and differences between ancient art and their own, and thus to value and protect historic places and the artists that created them. Site managers may learn from one another, using prototype sites to test public visitation strategies and share results. Scientists can model and prototype natural weathering, erosion and patination processes. Destroyed or damaged sites can be recreated and studied virtually using historical documentation. All with access to a computer may visit virtual sites that are not physically cost-accessible, and do so without endangering the original site.

As the advantages of virtual worlds make the realm of rock art more accessible, cross-disciplinary interest will increase such creative collaboration. Such collaboration will benefit the rock art itself, through conservation, the research community, by providing them with new and effective tools, and the visitors who learn about rock art and the cultures that created it. I hope that we have given you some great ideas, and that you will visit us in virtual worlds. I look forward to meeting you there.