Rhetorics through Images, New Strategies to Communicate, Valorise and Share the Cultural Heritage

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European Community Agenda assigns to Culture a primary role in achievement of the so defined “Knowledge Society”, as inferred by the numerous events inside the “Culture Program”, established in 2007 with the “Lisbon Agreement” (according to art. n. 167). The “Europe 2020” Program continues the policy outlined in Lisbon, pointing on Innovation, Research, Digitalization and ICT detailed implementation on Cultural Heritage. The widespread of new technologies, included those from Information and Communication (ICT), has deeply changed the way of learning transmission, increasing the possibility to create knowledge.

The aim of this paper is to illustrate examples of enhancement of cultural heritage through new communication strategies based on the use of digital technologies for the construction of images that convey cultural content, and oriented to fruition as a visual experience, which is lived, told and shared, to catch the attention, expand knowledge and create a sense of identity and belonging.

The change of the internal dynamics in the contemporary society requires the need to tell the cultural heritage according to new logics and ways. In fact, we are living in times in which a cultural good can be enjoyed in every moment, in every part of the world, with a mass of different technologies and various motivations and purposes: times in which virtual reality superimposes on material reality, and the Image converts and evolves his components. Times in which also temporal, spatial and sensorial dimension can be modified, transformed and implemented beyond every awareness.

The multiple forms of today communication lead to consider how appropriate and useful is to look at the so-called new media, capable of reaching large audiences with no limits of space and time. New technologies, enabling to communicate through the building and sharing of images, may, in fact, allow the user to increase the chances to experience the cultural heritage by providing a set of virtual tools able to change substantially the relationship between the cultural resource and who holds them.

In this perspective the results reached by Augmented Reality (AR) – that actually experiences his own new language, able to model original stories that develop our experience, supplying to our senses a large spectrum of information otherwise unapproachable - are really significant. But is the sharing of this Visual Heritage on digital platforms that contributes most to the construction of a “Collective Identity”.

A recent international research lead between Italy, France, USA and Japan has revealed the incredible spread of a new social avant-garde: the “Cultural Creatives”. This is a social miscellaneous group, bounded by the common will to pursue the positive values of ecological sustainability, the recovery of own history and tradition and human ethics: they have a perspective on quality of life based on “unique experiences” of personal growth, on critical and conscious access to knowledge and the consumption of more cultural than material products. “Creatives” because of the fact that – acting in a discerning way regarding informations, operating in a selective manner and elaborating their own awareness form – they act on culture, producing culture on their turn.

The observation of the emergence of this social phenomenon suggests that communication projects for the cultural heritage, that are ready to follow the evolution of these processes, can really change the relationship that the citizen has towards ‘own’ territory and can have a great impact on the perception of his property, on the sense of mutual belonging and identification, on the construction of a cultural identity to live, share and respect. A so determined approach, which aims to build a direct relationship with the good through the experience that the user makes of it, can help to create new culture and to form a society oriented to the production of knowledge. The theoretical scenario outlined in this way will be investigated through the experience of some case study applied to the Italian cultural heritage.
The discourse on the image and the archive is critical in these times of higher capacity storage, bigger bandwidth, and larger than ever digital projections and display applications. As we move from giga to terabytes, machines are now equipped to handle and manage thousands of images, opening up possibilities of increasing the numbers in photographic documentation of culture and heritage. Data or photographic capture of a chosen subject has never been as liberated with this phenomena, thus the availability of DSLRs with more than 30MP picture taking capacity. The capture process has become almost a luxury item in terms of high-resolution capture and sheer quantity of images. Even if more megapixels do not necessarily make a good photograph, it however determines how big you can print or in an increasingly common digital display, high quality images with tremendous clarity and detail.

The format of the digital documentary capture is also a factor that influences focal lengths and compositions that will collectively form the overall narrative and character of the subject’s story. Full-frame format with its large sensor have the advantage of noise reduction, use of fast wide-angle lenses, less depth of field in any given angle of view, and high number of pixels that allow heavy cropping when necessary. This paper describes the technical and theoretical elements, as well as the output of images, of a digital documentary photography of the Pua Kumbu textile making of Sarawak, on the island of Borneo. Pua Kumbu, which literally means ‘covering blanket’ is a traditional weaving craft that goes back around 300 years into the past. The weaving and the prior processes of spinning, tying and dyeing the yarn are done through tacit knowledge passed down from one generation to another. The design and patterns are nature-centric and almost all of them are interpretations of dreams of the weavers; with over 200 different types.

The location of this documentary is the Garie Longhouse, situated on the bank of Kain River, a tributary to the Rajang River, in the district of Kapit, Sarawak. Three fieldwork of a week each were conducted over a period of one year, to document the processes, weavers, environment, tools, and the produced textiles. With electricity supply available only at night and without any Internet or phone connections, the working process was in itself a unique one. Isolated in the interior of Borneo, access to the longhouse is only via the river, which means 8 hours of boat ride on 2 types of boats from the International Airport of Sibu, Sarawak.

The Pua Kumbu is a traditional socio-cultural activity as well as a commercial occupation of the Iban, the majority indigenous group of Sarawak. Predominantly a female enterprise, it is however supported by the men in the construction of looms, tools, and dye preparations. As a common issue in documentary photography, which is; what is more important, the subject or the photograph, this paper will elaborate on the experiences and decision making when capturing the scenes and objects. Issues of between being interpretative and representative, with the challenge of creating good photographic images will also be discussed. Emphasis on the reason why and what is to be communicated becomes primary objectives of every scene as they are translated into images by the algorithms of the camera.

Unique perspectives and viewpoints are explored and achieved through usage of wide-angle lens, where certain elements come dominantly across in a composition, emphasizing its importance and sense of place. Fast and slow shutter speeds are used to stop down and suggest motion respectively, whilst shallow depth of field and isolated angle of view are created using telephoto and wide apertures. Other factors such as camera settings that involves ISO, white balance, exposure compensation, file size (and quality), file transfer, and work-flow will be discussed in this paper. The editing and minor enhancement processes leading to a digital asset management and storage of the images form the final part of this documentary work.

The whole collection of images, with a pixel dimension of 4912 × 7360, averaging 15Mb (pre-processed), at 300dpi are intended for an interactive projected display in a full scale mobile exhibition, with selected images for large digital prints and a book publication.
Virtual Heritage Interpretation Through Animated Panoramic Illustration Of Kota Kuala Kedah

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Author Keywords: Preserving Heritage, Panorama, Interpretative Illustration, Kota Kuala Kedah.

This paper is a study on the workflow of interpreting Malaysia’s renowned historical heritage site through the use of animated panoramic image presented in a virtual environment. While most historical exhibits presented in a static visual manner, this research could enhance the way an interpretation of an historical site is perceived by adding ‘life’ suggesting the essence of lost culture within a 360 virtual environment.

The square shaped Kota Kuala Kedah is located about 10 kilometers from Alor Setar, the state ok Kedah capital city. The city was constructed in the early 1600s during the ruler of Sultan Sulaiman Shah with the help of the Portuguese colonizers, at first as a factory and trade center. The city sits at the confluence of the Kedah River north of Alor Setar with a swampy area at one of the side and a wide canal dug between the walls on the land side. In middle of 1600, the city was transformed into a fort with the acquisition of 30 Portuguese cannons as a measure to protect Kedah from various attacks, including the seizure of power from the local rule. New strengthen walls and a defense system had actually been constructed by Sultan Abdullah Mukarram Shah in mid 1700. Since then, the city has been witness to many bloody battles due to the expansion of power such as the attack from the Acheh people from Sumatera to the Minangkabau, Bugis, Riau and the Siamese.

A hundred years later, there were almost 300 cannons in different sizes that were placed within the fort. The beating from many battles had severely damaged the fort several times. The longest battles between the Malays of Kedah and Siamese with the help of British army lasted about 21 years and took thousands of lives. Kedah’s existence today is the result of the efforts and courage of the Kedah Malays. The only records existing of the events and their battles are bits and pieces mostly in the form of illustration and artefacts.

Currently, the location comprises historical structures and old cannons that has been reconciled as a tourist destination and recreational area especially amongst locals and youngsters who constantly visit the site every evening and weekends. Although many of the walls had been reconstructed and the site is presently being maintained by state authority, not many people are really aware and know the events happened and life within the walls. Thus, an interpretative illustration of this fort in its glorious days will be presented in an animated virtual tour that enables users to engage in an immersive experience thus reflecting the culture that existed more than 200 years ago.

This paper will discuss the visual interpretative process and technical legibility in creating such an artwork. The motivation of the paper is not just to preserve culture heritage, but to innovate some of the oldest visual interpretation methods presented through the latest trends of visual experience and technical capabilities. Through the animated panoramic illustration presented in an interactive way, viewers are able to immerse into the heritage events, breaking the boundary of any photography based virtual representation.

Situated & Sensory Media between Centre & Periphery in Museum Mediation

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Author Keywords: Digital Heritage, Mobile Augmented Reality, Centre–Periphery Problem, Museology, Museum Mediation, Situated simulation.

The centre–periphery problem is typically acknowledged from the many international cases of cultural plunder and consequent retention. The most apparent among them are the so–called Elgin Marbles – representing more than half of the remaining sculptural decorations of the Parthenon – which still are to be found in the British Museum in London while the New Acropolis Museum in Athens continue to anticipate their return to Greece. Ill–gotten gains of cultural property is well known from imperialism and war throughout history: More than two thousand years ago Cicero prosecuted Verres, the former provincial governor of Sicily, for extensive looting of the most valuable public and private art on the island, which the latter so brutally had acquired for the benefit of his own personal collection in Rome. And inside the Arch of Titus on the Forum one can still see the relief depicting the seven-branched golden candelabrum taken from
the Temple in Jerusalem to Rome more than a century later and carried by soldiers in the victory celebration during the Titus’ triumph after the Jewish war. Such acquisitions has been going on ever since. More recently we have seen an increase in repatriation and restitution of cultural treasures, but too many cases still remain unresolved (Hitchens 1997; Greenfield 2007).

However, independent of robbery and military conflict, the removal of relics from their original environment with subsequent storage and display in central institutions is happening continually whenever there is an archaeological excavation and wherever there is an active museum collection. Display of cultural artefacts in situ are rare and primarily limited to larger standing structures. Even in Athens where the Parthenon still stands out in all its impressive splendour the remaining sculptures and reliefs from the pediment, metopes and the frieze have been replaced by modern copies while the remaining originals have been removed to the New Acropolis Museum.

Deployment of situated and sensory media in cultural heritage mediation, such as mobile and indirect augmented reality, on the other hand, makes it possible to diminish the negative consequences caused by the old tradition of depriving the periphery of their cultural resources for the sake of collection and conservation in central museums and institutions. Augmented reality solutions – like the situated simulations (sitsims) discussed in this paper – reduce the detriment of these centralizations by bringing digital reconstructions of cultural heritage objects and environments back to their original locations so that visitors can experience the simulations and interpretations of the bygone on location (Liestøl 2012). The mobile device and its screen then serves as a ‘window’ to the past (digitally reconstructed) version of the original site.

In most central museums there is no significant connection between the place of the museum and the original place of the artefacts: The Museums have the objects but lack the context, whilst the original site has the context but lacks the objects. In our experimentation and designs we have so far primarily brought the digital reconstruction of the replaced real object back to its original habitat. Could we exploit the relationship between centre and periphery beyond this repatriation of the digital copy? Could we use the same technological solution to also do the opposite: Bring the simulated context back to the original object in the museum in cases where it would be relevant?

In the paper presentation we explore these possibilities in more detail by investigating the various (potential) exchanges and stages in the relationship.

1. Deprivation and Centralization – from Primary to Secondary Location:
The old tradition of depriving the local sites of their cultural and historical artefacts leaving a place of absence where the real object originally resided. The removed real object is given a new context in the museum collection. Example: The Oseberg Viking Ship was excavated in 1903 and moved 100 km to The Viking Ship Museum where it is now on display.

2. Simulation in situ – from Secondary Location back to Primary Location:
A response to the traditional displacement of objects from original context to museum context is to use situated and sensory media solutions to return the removed object in the shape of a digital and reconstructed copy, which can then be observed inside a simulated environment via a mobile device on location. Example: The Oseberg sitsim first implemented and tested in 2008, now under revision and update.

3. Shared Simulation between Primary Location and Secondary Location:
Applying the situated simulation in both primary and secondary location by bringing the reconstructed artefact back to the original environment as well as bringing the reconstructed environment to the secondary location in the museum, thus creating a new enriched relationship between primary and secondary location by means of the situated simulation. Example: The new Oseberg sitsim will also be used inside the Viking Ship Museum using an Indoor Positioning System (IPS).

For each mode of the relationship we will present and discuss existing experiments and experiences as well as the technical and rhetorical challenges involved. Central research questions include: How does the aura of the original place relate to the simulated environment and object, and: how does the aura of the real object (the ship) relate to the inclusion of the simulated environment in the museum context (Bolter et al. 2006)? How can we understand the now—then relationship between real and virtual as an oscillation between a set of
double descriptions and how does it affect the way we design the system, its interface, narrative structure etc.

References