Part III

Co-creation and Living Heritage for Social Cohesion

Change of Museums by Change of Perspective: Reflecting Experiences of Museum Development in the Context of "EuroVision—Museums Exhibiting Europe" (EU Culture Programme)

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Abstract

Europe is growing closer and closer together, society is getting more and more diverse and characterized by migration. Museums need to adapt themselves to this process and to become places where all members of society feel represented and are stakeholders in their cultural heritage. But what about local and regional museums which are preserving cultural heritage? Are these museums ready for this type of Europe? For a society that is getting more varied, with more frequent migration, and resulting in more mixed audiences and modern viewing habits and learning habits, how can museums prepare themselves for this challenge?

The museum development project "EuroVision—Museums Exhibiting Europe" (EMEE), funded by the Culture Programme of the European Union, sees these as fundamental questions. The core element of the project is the idea of Change of Perspective (COP), a three-layered concept which encourages multi-layered meanings in museum objects to become more visible, aiming to renegotiate the roles of museum experts and visitors and to strengthen international networking between heritage institutions in order to broaden national perspectives on heritage and overcome Eurocentric views.

The EMEE project develops theoretical input on Change of Perspective but also puts into practice the ideas and reflects the experiences of international and interdisciplinary cooperation. The concepts developed by EMEE project are put to the test and conveyed to visitors and museums experts not only through the contest for young designers and scenographers, but also through the EuroVision Lab., an experimental series of exhibitions and actions. Ideas as well as statements of the executive museum partners provide an insight on how the Change of Perspective can be implemented in the museum work and contribute to presenting cultural heritage in a contemporary European way. The

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experiences of EMEE are conducive to the discourse and dialogue on cultural heritage in a changing world.

1 Societal Changes and Challenges for Museums

Societies are never a static and unchanging construct, this is also true for the European society, which is constantly transforming itself. As museums are closely connected with the society in which they are situated, societal developments bring with them the need to react and adapt. Museums are supposed to keep and display cultural heritage, to make it accessible and to transmit its meaning. This can only be done successfully when museums closely observe societal changes, identify the challenges, and change their way of interpreting, exhibiting, and mediating cultural heritage. The twenty-first century brings many challenges for museums, four of which will mainly be tackled by the museum development project "EuroVision—Museums Exhibting Europe" (EMEE).

Firstly, there are demographic changes that call for museums to react. The European society is getting older with the population pyramid loosing its shape as more and more elderly people are replacing a diminishing group of younger people (Gans and Schmitz-Veltin 2010). This brings numerous challenges mostly discussed with relation to the economy and to pension schemes, but also relevant for museums as young people are the visitors of the future. Migration has also changed and continues to change the society. People with different migration histories and with different backgrounds with regard to culture, identity, values, and experiences do not only form the European society, but also the one in which the respective museum is directly located. So for museums the task is to represent different communities instead of concentrating only on the majority society (Kaiser et al. 2012).

Secondly, a shrinkage of public space is noticable, public in the sense of being open to all individuals unconditionally (Leggewie 2015). This development can be counteracted by museums by opening their premises not only for exhibitions but by turning them into social arenas where everybody is welcome and respected and allowed to speak and be heared.

Thirdly, the developments in the sector of new media have led to a lower rate of face-to-face communication since many communication processes are now run digitally (Keller 2013). With the opening of museums as public spaces they can also become places of direct communication and exchange of knowledge and opinions. Finally, tendencies of indivualization and privatizing can be seen in the European society which seem to endanger democratic participation (Beck 1986; Giesen 2007). By offering meaningful and engaging social experiences, museums can become places of close communication and bring people together.

These challenges museums face in the twenty-first century are a starting point for the museum development project "EuroVision—Museums Exhibiting Europe".

The project develops strategies on how to react to contemporary changes and attempts to offer museum tools for their daily work.

2 Role of Museums in Societies and the European Union's Ideas for Museum Development

The vital and important role of museums in the process of transmitting cultural heritage and with it cultural values is generally accepted. Because of the importance of museums in this process their role has been under review, especially when it comes to questions of whose culture is transmitted by whom and who belongs to the desired public (Ambrose and Paine 2012, 25). Two fields of debate are opened by these questions. First, museums need to define which story they want to tell and in doing so, whose cultural heritage and values they want to transmit. Those of the majority society or those of a society characterized by diversity, those of a nation and its rise or trans-regional ones showing connections beyond borders? Second, museums are facing the challenge of determining who is going to tell the story. Researchers and academics as experts on certain topics or museum users and members of the community whose story is on display? Museums cannot ignore the increasing demand for representation within a museum context voiced by different groups. Groups who have been underrepresented, be it subjectively or objectively, e.g. women, minority ethnic groups or people with special needs, are more actively claiming their representation in heritage institutions such as musuems (Ambrose and Paine 2012, 25).

Museums arose in the time of nation building and helped in forming the national identity: something that is nowadays deeply contested. Museums gathered and displayed what was and still is regarded as cultural heritage, as well as expressed national identity by exhibiting that which was declared a common and shared culture of a nation. Establishing social cohesion amongst individuals usually works through social relationships. As this is not a working concept in larger groups, a common shared culture served as a foundation and further on, as legitimisation of being a nation (Macdonald and Sharon 2003). Of course museums did not only display and transmit what was and still may be regarded as national culture, but also objects from other cultures and nations were collected in order to show the power of the exhibiting nation. The singularity was frequently made perceptible by strict spatial segregation dividing 'home' and 'foreign' into their own special room or section of the museum (Macdonald 2003). The concept of national identities has been called into question and substituted by some with identical concepts of "post-national" character (Macdonald 2003, 123). When regarding national identities as non-sustainable, the question is raised as to which identical concepts could be fostered instead. Identity is more and more regarded as being shapable by each individual in a process of individualization. Museums as places where identity can be transmitted and articulated therefore they need to change along with the identities of its visitors.

Museums play a crucial role as "keepers of the collective memory", in the best case they reflect change and continuity in cultural values (Ambrose and Paine 2012, 7). Museums are not only delegated to present and reflect on bygone history but also make a connection to the present. Another task that needs to be fulfilled by museums is to connect citizens with their region or community, to represent all groups forming this community, and this includes vulnerable, underprivileged, or underrepresented groups.

The European Union perceives museums as being of great importance for societies and understands museums as keepers of the European cultural heritage in an integrated Europe. Museums shall interpret and present their collections in European contexts and thereby help to develop a collective identity in multicultural societies, following the EU motto "United in diversity" meaning, cultural diversity shall not be negated but preserved (European Union 2007, Lisbon Treaty, Article 167). Strong national narratives are not supposed to be the basis of the European identity but cultural diversity and its acceptance and appreciation. Also the EU sees participation and activation of the visitor together with social integration of disparate lifeworlds as an important tool for present and future museum work (Kaiser et al. 2012). This means much more than implementing a so-called welcome culture, but perceiving visitors as co-constructors of topics and meanings and in mutual negotiations.

3 EuroVision—Museums Exhibiting Europe (EMEE)

The EU recommendations on how museums should perform in order to strengthen the European identity does not answer the question of how a museum not explicitly engaged with European history can succeed in this the EMEE project. Geared to local and regional museums that tries to preserve the cultural heritage on site, the EMEE project tries to find an answer by developing and making applicable the concept of Change of Perspective (COP) which offers ways to broaden the meaning of museum objects by integrating trans-regional, trans-national and cross-cultural European layers. Additionally the COP concept proposes a modification in roles that characterise those between museum users and museums experts and fosters closer networking between cultural institutions.

The starting point of the project EuroVision—Museums Exhibiting Europe—which is located at the intersection of science, practice, tradition and innovation—is the principle of multiperspectivity. It is one of the postulates of the academic discipline of history didactics. One of the premises of this rather young discipline, emerging in the second half of the twentieth century, is the understanding that historic cognition and exposition is always perspectively situated. As historic events have been experienced differently by various social groups it is necessary to perceive and depict those different perspectives. The postulate of mulitperspectivty should not be confused with tolerating different personal points of view, but is always connected to social stands such as religious, political, ethnic or sociological stands (Pandel 2013). On this theoretical groundwork the project consortium of the museum development project EMEE, supported by the European Union Culture Programme, started to think about how museums can be encouraged to Europeanize themselves on multiple layers.

The project consortium combines the theoretical and practical competences of museum professionals from three national museums, with internationally renowned scholar practitioners of scenography/exhibition design and media technology, and academic disciplines in the field of Humanities and Social Sciences:

- National Museum of Archaeology, Portugal
- National Museum of Contemporary History, Slovenia
- National Museum of History, Sofia, Bulgaria
- Atelier Brückner GmbH, Stuttgart, Germany
- Monochrom Kunstverein, Vienna, Austria
- University Roma Tre, Rome, Italy
- University Paris-Est Créteil—ESPE, Paris, France
- Augsburg University, Augsburg, Germany

The project has an ambitious aim: to make museums more accessible in many ways. With the innovative concept of Change of Perspective the project wants to re-interpret museum objects and put them into a broader context of national and trans-national history. Visitors should view objects not only on a regional and national level, but also discover trans-national and European perspectives by means of new ways of presentation, performances and possibilities for participation. At the same time, the project develops creative concepts for audience development and visitor participation. Particularly by involving and activating the visitor, the project aimed to attract a rather large number of previous 'non-visitors' to the museums. The EMEE project aims at the europeanization of museums, whereby the term europeanization is to be understood in the first instance as "[e]uropeanization of objects and museum presentations" (Fuhrmann et al. 2014, 35) by making visible the European dimensions of museum objects and presenting their multi-layered meanings from regional via national to European and finally globally. Secondly, europeanization is understood as an "implementation of the EU guiding principles for the development of museums in Europe" (ibid.) by activating visitors and modifying the roles between museum users and experts. Thus turning museums into social arenas and fostering their internationalization.

The project is structured in four phases:

The first phase, 'Planning the Change of Perspective', lays the theoretical basis and provides the framework. In this stage a base line study was implemented, called 'mapping process', which collected and reviewed good practices from different country and allowed the formulation of some basic trends in the modern development of exhibition practices in Europe. This mapping allowed the approximation of the main concerns for: re-interpreting concepts, re-interpretation of examples, social integration, learning and information, public opinion studies, participation, activation, language of design. Running parallel to this was an intensive cooperation with non-visitor groups that laid the groundwork for the later 'bridging-the-gap' activities. The project created five Toolkits, intended as manuals which provide practical help and ideas for how the museum might re-interpret its objects within a European focus. These Toolkits include looking at: museums as social arena; bridging-the-gap to (non-)visitors; scenographic translation of multiperspectivtiy; as well as the usage of a social web which helped set the theoretical framework and define the main directions for further project research. A workshop accompanies every manual.

The second project phase, 'Creating the Change of Perspective', opened up several opportunities for applying the outcomes of the first phase. In so called 'Exemplary Change of Perspective Units' the five toolkits will evolve to explore specific museum objects, giving ideas on how to re-interpret objects in a European way, staging them according to their multiple layers of meaning, letting visitors participate in the creation of meaning, engaging non-visitors and using social media for interaction. In addition, an international contest for young scenographers has been launched that invited students and young professionals to stage re-interpreted objects and to make Europe visible within museums via scenographic tools. Phase three, 'Performing the Change of Perspective' is dedicated to the EMEE EuroVision Lab., an experimental series of exhibitions and events taking place at seven EMEE partner institutions. The EMEE EuroVision Lab. also works in part as a travelling exhibition where outstanding contributions to the EMEE Young Scenographers Contest are shown in four venues. To complete the project, phase four, 'Sustainability of the Change of Perspective' will sum up all the outcomes and conclusions in a final publication and conference.

The leading principle through all project phases is the Change of Perspective (COP). The concept is based on a discipline specializing in the area of historical culture, historical consciousness and historical identity: Didactics of History. Having its roots in the didactics of history, the concept of Change of Perspective (COP) proceeds from the assumption that the construction of 'European identity' is not something that is static. It is also not intending to replace national, regional and local identity references. Rather, this approach highlights the complexity of identity and the diversity of historical experiences and perspectives in a European context. In this method, European identity is understood as a willingness and ability to acknowledge and embrace diversity and to deal with it in a way that is aligned with the principles of mutual understanding, reciprocal recognition and tolerance (Rüsen 2002).

The second basis for the COP approach is the understanding that the meaning of museum objects is not inherent, but a result of deconstruction and construction. The message of museum objects is mainly generated by its recipients and depends on the context in which the objects are embedded (Thiemeyer 2011, 11). This understanding of the meaning of museum objects can also be found in Krzysztof Pomian's *Semiophorentheorie* [Theory of Semiophors] where an object is considered to be a carrier of a sign, a *semiophor* (Pomian 1998). Only when thinking of the meaning and message of museum objects as something emerging from interpretation processes, can the COP approach can be applied because it is mainly based on multiperspectivity. Visitors will be able to discover changes in meanings of one and the same object depending on whether it is situated in a local, regional, national, European or even global contexts. Taking different perspectives and exploring a variety of possible meanings helps to raise the visitors' awareness of his or her own identity and illustrates to the visitor, whilst perceiving the European in the local and vice versa, that the 'European is not the 'other' when compared to the national, but the 'self'. Thus visitors are able to realise that various perspectives and identities pervade each other and can yield an expanded or deepened understanding of the cultural heritage within contemporary Europe.

Applying the COP concept to museum exhibitions in Europe implies reviewing and renegotiating existing and passed-on narratives. Multi-layered meanings, different perspectives on objects from other nations, cultures and social experiences need to be revealed and made perceivible for visitors (Schumann and Popp 2011; Macdonald 2003). Furthermore, emphasis should be placed on European links represented by objects. Trans-regional, trans-national and cross-cultural aspects should be highlighted and made more accessible and visible. Thereby the European dimension in objects is not meant to extinguish other, more regional, national or culture-specific ones, but to extend and complement them (Fuhrmann et al. 2014, 38).

The EMEE project has developed these three layers of COP in order to facilitate its practical application. The first layer of COP focuses on re-interpreting objects or object groups not in a one-dimensional, mostly regional or national way, but as multi-faceted objects with the potential also to present trans-regional, European contexts. The results of this re-interpretation are not intended to destroy previous interpretations but exist alongside and with them. The particular challenge is to communicate these multiple layers of meaning to the visitors by means of spatial and scenographic tools. The second layer of COP aims at activating visitors. Museums are asked to share their prerogative for interpreting cultural heritage and invite and acknowledge museum users as co-interpreters. Not only will this change of roles help to engage visitors and users more strongly with their museum, it will also help to turn museums into social arenas where people "continuously and routinely interact to produce, exchange, and consume messages" (Handler 1997, 9) and a voice is given to underrepresented groups who want and need to be heard. The third layer of COP calls for stronger international networking of museums and cultural heritage institutions. In order to re-interpret objects in a trans-regional, trans-national and cross-cultural context an international exchange is not only desirable but is in fact necessary in order to look at objects and collections from different points of view and to reveal their multi-layered meanings.

The COP concept is meant to be implemented in the everyday practical work of museums and heritage institutions. In order to make the theoretical concept applicable, five manuals known as Toolkits, as discussed earlier have been developed under the scope of the EMEE project. They shall function as the conveyance from theory to practice. Besides the EMEE ideas, they also transfer applicable ready-made concepts on how to implement the COP. Each toolkit thematically focuses on one EMEE topic. The first Toolkit '*Making Europe visible*. Re-Interpretation of museum objects and topics. A manual' introduces an analysis tool that helps to re-interpret museum objects in a trans-regional, trans-national and/or cross-cultural way. The analyzing tool thus opens eight categories[1] in which the object might reveal its European dimensions and gives examples of how objects can be questioned. Toolkit two '*Integrating multicultural Europe*. Museums as social arenas' takes the concept of museums as social arenas as its starting point and develops ideas on how to open museums as public spaces to underrepresented and minority groups. The third Toolkit '*Bridging the gap*. Activation, participation and role modification' analyses obstacles hindering people from becoming active museum users and proposes strategies to bridge the gap between museums and non-visitors. Toolkit four '*Synaesthetic translation of perspectives*. Sketchbook Scenography' compiles tools and ideas on how to convey the multi-layered meanings of re-interpreted objects spatially and by means of scenography and taking into account visitor activation. The fifth and last Toolkit '*Social Web and Interaction*. Social media technologies for European national and regional museums' provides ideas on how to use social media for museums and heritage institutions not only as an advertising tool but as platforms to enable real communication and involvement by visitors and users. All five toolkits will not linger on a theoretic level only, but present best practice examples and actual implementation recommendations thus making them manuals to consult in everyday museum life.

As noted earlier, the EMEE Young Scenographers Contest was an EMEE project which implemented an international contest for young designers and scenographers through a public invitation to young people for their ideas of how to make Europe visible in objects of multi-layered meaning with the help of spatial design. Called 'One Object—Many Visions—EuroVisions' the central idea of the contest was to highlight the COP concept that museum objects should reveal their complex diversity of meaning. A trans-national or trans-regional object has various meanings spanning from national or local significance to the broader European dimension—and thus demands a multiperspective scenographic approach. Young designers were asked create ideas and develop design concepts for a multiperspective, scenographic presentation of museum objects. In this way the simultaneous appreciation of objects as elements of the local, regional, national or European collective memory were be offered to the visitor. At the same time, the goal was to find new trans-cultural approaches in order to stage national objects in a European context via scenography as a contemporary design language and new

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[1] The eight categories are:

1. The object as migrant
2. The background circumstances of the making of the object
3. Cultural transfer by means of trans-regional networks
4. Culture-spanning contexts
5. Cultural encounters as theme of the object
6. Aspects of the perception of the self and the other
7. The object as icon
8. 'Object-narraction'

For details see Fuhrmann et al. (2014).

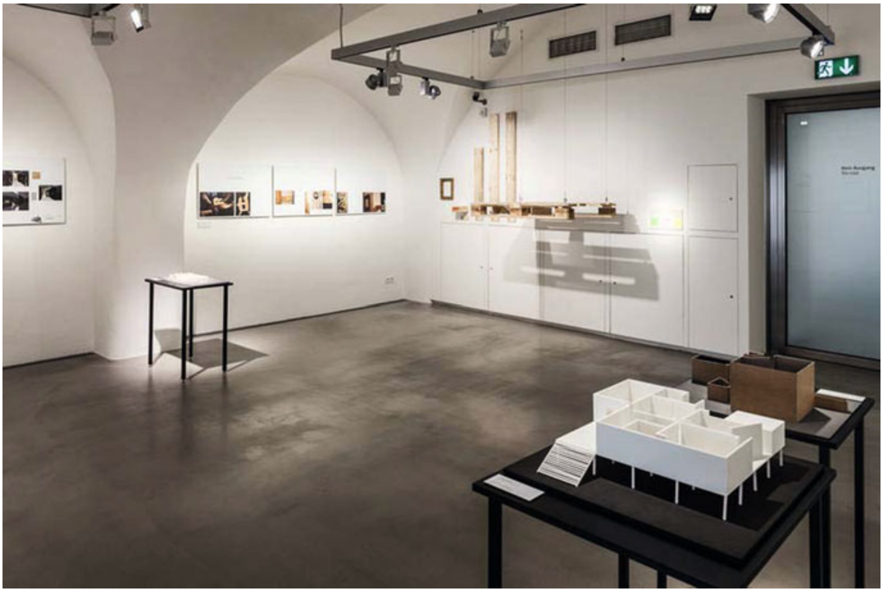

Fig. 1 View into the travelling exhibition of the EMEE Young Scenographers Contest, here at the Museum im Palais in Graz, Austria, photo: Janine Pichler

formats of presentation to help initiate a European perspective for future generations of visitors.

The participants were free to choose between museum objects already re-interpreted as provided by the analyzing tool in Toolkit 1 or freely chosen objects. The assignment of task clearly defined that submissions were to make visible:

> Change of Perspective from a local/regional museum object to a European/trans-regional object showing the European dimension" and "to provide a scenographic translation of perspectives that gives a multiple and synaesthetic approach to objects with a local, trans-regional or cross-cultural meaning" at the same time enabling visitors to "discover that one and the same object can be perceived in various ways and thereby can change its meanings (EMEE Young Scenographers Contest 2014).

From 60 entries coming from 7 European countries, 29 made it to the shortlist. The four winners (see Figs. 1 and 2) were chosen by a jury comprising of EMEE partners and international experts. The best submissions were put together for display in a travelling exhibition that will be shown in seven European countries.

The submissions reached very high standards in respect of their conceptual and plastic features. Nonetheless, many of them were superficial and worked with the obvious: stories of migration concerning people and objects. Expressing interdependent influences and connections, making different layers of meanings in objects perceivable and offering a possibility of injecting oneself in the process of the construction of meaning were unfortunately not realised by most of the participants. Ruedi Baur, EMEE jury chairman and communication designer states:

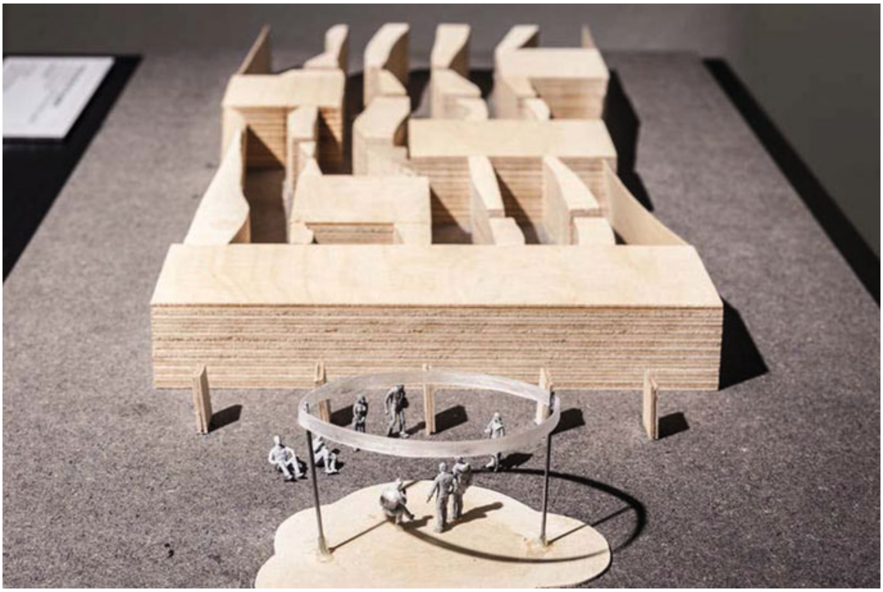

Fig. 2 First prize of the EMEE Young Scenographers Contest: “Did you hit the jackpot?” by Mirjam Scheerer, photo: Janine Pichler

> [. . .] I am not quite certain whether the competition’s deeper meaning has been entirely decoded. The offered exercise was downright a revolution in the face of the current perception of history. The point was not only to make museums accessible to everyone by cultivating multilingualism and offering explanations incorporating knowledge gaps of visitors coming from afar [. . .]. (Baur 2015, 19).

This assessment aligns with the EMEE consortium view. Bringing out different, sometimes even contradictory layers of meaning in cultural heritage with respect to museum objects requires curatorial and scientific research. The process of staging objects in a way that makes multiperspectivity visible requires not only the creative work of the designer, but also constant input by the curator who has internalized the concept of Change of Perspective and is able to impart it to the designer. Staging objects in a way that will allow access to different layers seems to be a challenge which is not easy to solve. The visibility of different interpretations in one object and engaging the beholder to explore them is a feature rarely realized in the submissions. “The proposals we came to judge were rather mutual, which didn’t bother, but—I have to repeat—of real conceptual and plastic quality. But is this enough to change our view of Europe?” (Baur 2015, 23)

The final step in the EMEE project is an experimental series of exhibitions and activities called EuroVision Lab., running under the headline ‘One Object—Many Visions—EuroVisions’. COP is put into practice in various museums through a

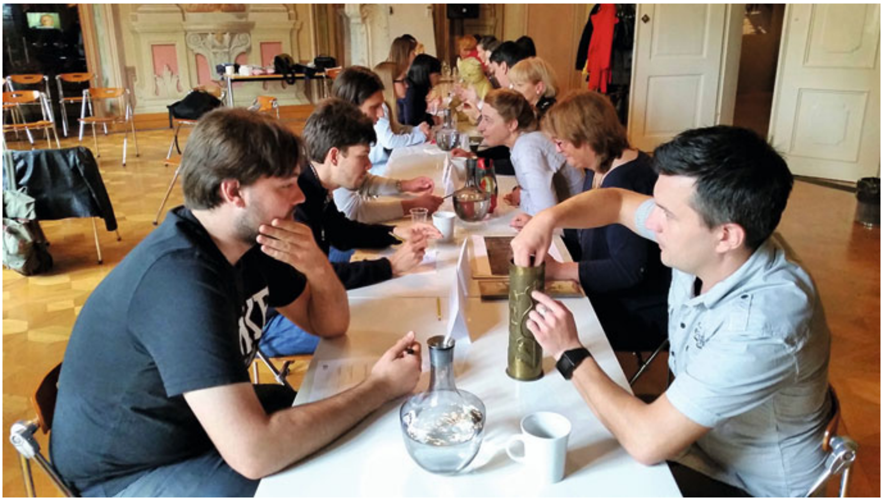

Fig. 3 Museum speed dating in the MNZS, photo: Urška Purg, National Museum of Contemporary History Slovenia

variety of activities with public appeal and also in different exhibitions. This implementation in all consortium members' institutions and further associated institutions can be regarded as a field test of the theoretical framework developed in the initial project phases. By applying the Toolkits the participating museums take a step towards further europeanization and also gather valuable experience on the practicabilty of the EMEE ideas and concepts. At this juncture the EMEE EuroVision Lab. is still in the start-up phase. Two musuems have opened their EuroVision Lab.s: the *Muzej Novejše Zgodovine Slovenije* [National Museum of Contemporary History Slovenia, MNZS], which is an EMEE consortium member, and the *Museum für Kunst und Kulturgeschichte Dortmund* [Museum of Art and Cultural History Dortmund, MKK] in Germany, which is a museum associated with EMEE. Both museums prepared an exhibition using participatory technologies.

The MNZS started an intensive collaboration with a group of young people who formerly belonged to the 'non-visitors' groups. Fifteen young people and fifteen museum experts from Slovenia and other countries were invited to take part in the project. From the beginning roles were switched: the group of young people were given the role of museum curators in charge of conceptualizing and realizing an exhibition. In a new format, called 'museum speed dating' (see Fig. 3), the museum experts presented their favorite objects of national cultural heritage with European references. The experts had three minutes to introduce their object to each of the young people who then as a group chose five objects based on their knowledge acquired in EMEE workshops on re-interpretation beforehand. With those five objects as a core, the group then created an exhibition that worked as a time capsule, bringing the visitors back to a living room in 1990 (see Fig. 4). The chosen objects were presented in the room and were accessible i.e. touchable and usable for all

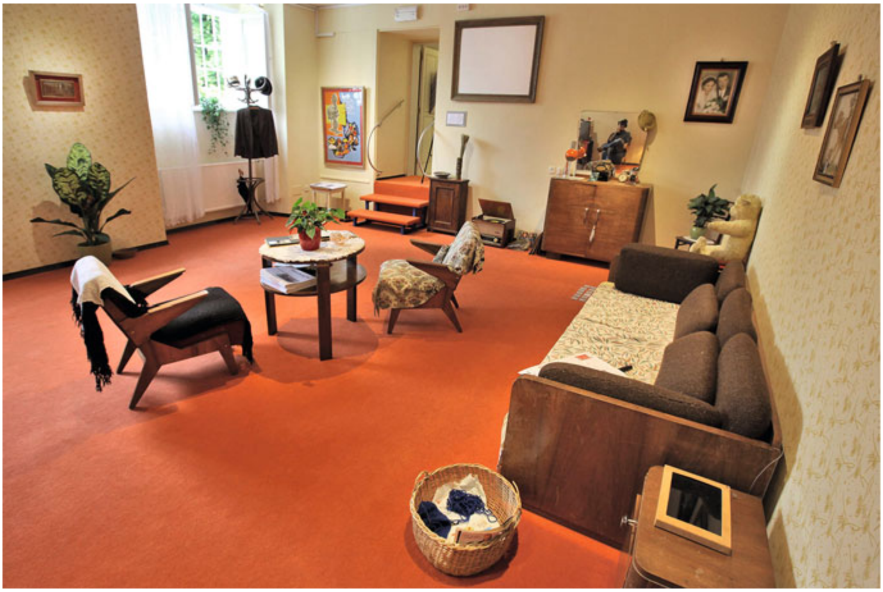

Fig. 4 View into the EuroVision Lab., co-curated by visitors, of the MNZS, photo: Sašo Kovačič, National Museum of Contemporary History Slovenia

visitors who were ready to explore them and to discover their trans-regional, trans-national, cross-cultural and European layers. The exhibition was enriched by an accompanying programme, which for example, offered guided tours in sign language.

The MKK also developed an exhibition (see Fig. 5) using participatory technologies, but from a different starting point: migration in a specific area of Dortmund. From the beginning, it planned to give current and former residents of the street Münsterstrasse, often perceived as problematic district, a voice in the exhibition. The exhibition was not to be supported by items from its own or other museum collections but be put together through this form of co-curating. The curators fieldwork then began by interviewing residents of Münsterstrasse. In dialogues with the community, the exhibition grew; objects and topics found their way into the concept. People were encouraged to tell their stories and also stories of their ancestors who lived or worked in Münsterstrasse. Individual sections of the exhibition were developed by including topics and objects proposed by the residents. The MKK also created an accompanying programme, offering walks through the area depicted in the exhibition and initiating panel discussions and open forums on the topic of migration.

Both museums documented and reviewed the process of the exhibition development by using participatory techniques carefully and critically. It seems rather obvious that the traditional role of the curator had to be adapted in both projects. The question of how curators can and should fulfill their role in the curatorial process when using inclusionary practices and participative techniques has been

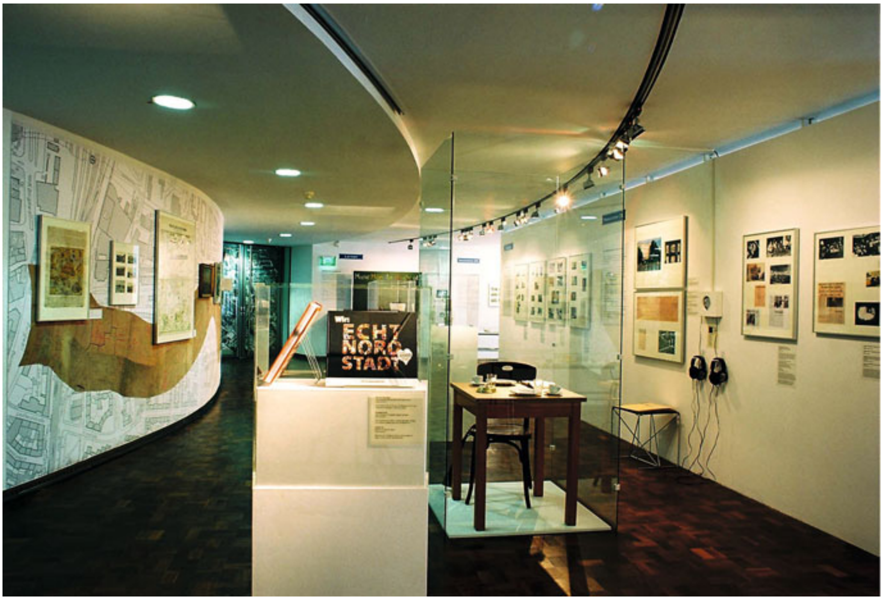

Fig. 5 View into the EuroVision Lab., co-curated by citizens of Dortmund, of the MKK, photo: Museum für Kunst und Kulturgeschichte Dortmund, Madeleine-Annette Albrecht

raised for decades. The imbalance of power between visitors and museum experts is a vivid field for discussion and representatives of new museology have spoken out in favour of including museum communities and audience participation which allows a critical debate on mono-perspectivism along with elitism and exclusionary practices since the 1980s (Carpentier 2014). Finding a new professional identity as museum expert is a process that is not without pressure and assessing the audiences in respect of co-curators needs is not easy: "Those arguing for constructing the visitor as relatively ignorant were accused of being 'patronizing' and of 'dumbing down', those who constructed the visitor as more educated faced charges of 'elitism' and of being potentially 'exclusionary'" (Macdonald 2001, 133). Balancing the relationship between audiences and museum experts therefore depends on knowing the audiences and on building long-term relationships. Carpentier describes a participatory fantasy:

> as a respectful and balanced negotiation in cultural production processes, where all become authors [. . .] in interpretation and production, where difference is acknowldedged, and where all voices can be heard and used to structurally (and not occasionally) feed the decision-making processes (Carpentier 2014, 126).

The museum experts working in the EuroVision Lab. so far, have based their relationship with the co-curating audiences on dialogue and acknowledgment of their expertise. Concerning the development of the visitors' engagement with their museum, the MNZS states:

> The biggest treasure we gained from this process, besides connecting with other museums and helping the young to test themselves in the unknown situations, is the knowledge on how the young wish that history would be presented in museums, such that it would raise interest among their peers (N.N. 2015).

Also the curator of the MKK says that the participatory techniques applied eventuate in getting people in contact with the museum who have not been there before and to strengthen and intensify relationships.

On the downside, the establishment and continuation of those relationships requires more personnel than most museums can invest. Kaja Širok, director of MNZS, sees her museum turned into a place she always wanted it to be: “It’s a place of sharing, it’s a place for accepting diversity [. . .]” (Mayer-Salvi 2015, 00’25”). She also states that museum experts can learn from their audiences while co-curating. Nonetheless she admits that there were some doubts about the enduring commitment of the group they worked with. In the course of the participatory project a high drop-out rate was noticeable, the initial group size was nearly halved at the end (Širok 2015). The MNZS attributes this high drop-out rate mainly to two reasons: first, the participants, as non-visitors, could not estimate whether their personal interest suited the project’s content enough as the field of museum work was new to them. Second, some participants underestimated the expenditure of time the project would demand. The high drop-out quote influenced the project progression as it forced museum staff to play a more active role at the beginning than first intended which in turn had an impact on the participartory character of the project and the switch of roles between museum users and experts. Moreover, criticism from the museum staff was voiced concerning the scientific quality of the exhibition curated by the non-visitor group. Isolde Parussel, curator for the MKK, noticed a change within the museum’s audiences through the participatory project, they became more diverse and co-curators felt a strong connection to the museum. The awareness of and interest in the museum rose noticeably also among group alliances and clubs active in the fields of migration and urban development, the anchorage within the urban society became stronger (Parussel 2015). Both museums noticed that participartory offers cannot be and are not used by museum visitors without constant encouragement and support and demand an enormous amount of commitment from the museum staff.

When reflecting their own role as curators in the whole process, Isolde Parussel notes that the thematical depth and richness of details would not have been possible without the co-curating, saying: “Without including the citizens, deep drilling to this extent would not have been possible. [. . .] The participatory approach also allowed a significantly more detailed presentation of the Münsterstrasse within the exhibition.” (Parussel 2015) On the other hand, an enormous amount of time has to be expended to successfully implement participatory approaches and she always felt a risk of not being able to cover important topics due to the lack of objects or contemporary witnesses. The process of planning and shaping the exhibition gets more dynamic when using participatory techniques (Parussel 2015). Kaja Širok sees the necessary adoption as a fundamental change of how visitors are perceived and calls for history museums to accept the need for "active people and not static visitors" (Širok 2015). Also she states that participatory techniques, once applied, need to be taken serious and used in a responsible way with the aim to connect visitors and curators. Transferring power to the co-curators requires a new way of curating: curators can no longer be only the interpreters of cultural heritage, but become active workers in public relations by building strong relationships with the audiences and not only seeing them as tools for realizing a project, but as partners with acknowledged expertise. In this sense, curators and cultural professionals in the EMEE project are facilitators between audiences and heritage institutions, they encourage museum users to become active and enter the process of interpreting cultural heritage and ensure multivocality: "EMEE works in giving different voices to objects which were interpreted unanimously only by curators [...]" (Širok 2015, 2).

4 Conclusion

The EMEE project as a museum development project offers museums help and ideas for europeanization which is understood as making visible trans-regional, trans-national, cross-cultural and European dimensions in objects. It also strives for making museums more accessible, including museum users more effectively in the interpretation of cultural heritage. As a key concept for implementing this project, the Change of Perspective has been developed. This is a three level concept that calls first for re-interpretation of museum objects in a trans-national, cross-cultural way; secondly, for turning museums into open spaces closely following the concept of museums as social arenas; and thirdly, for stronger networking of museums from different countries and subject fields. The project started off by laying the theoretical groundwork and progressed into manuals, workshops and exemplary units to help to put the COP into practice. In order to test the ideas and to spread the COP concept further, the EMEE EuroVision Lab. was initiated, which included a series of experimental exhibitions and activities that tested the EMEE concept and give feedback. The first two EuroVision Lab.s—one by a consortium member museum, one by an associated museum—give an insight in how the three elements of COP can be connected and disclose both obstacles and challenges, but also the benefits and rewards of europeanization in museums. Crucial for successful implementation is the adaptation of the role of the curator in a sense that makes visitors active and serious partners in the process of re-interpreting cultural heritage in a trans-regional, trans-national, cross-cultural and European way and in order to show multi-layered meanings in objects.

Making and conveying history in a diverse Europe is one of the current topics in museology, the project *European national museums: Identity politics, the uses of the past and the European citizen* (Eunamus)[2] has created an overview of Europe's museumscape and examined museum practices connected to European identities in order to give suggestion on how to determine their future roles, focusing on national museums. Following up on this, the EMEE project broadens the addressed audiences by reaching out mainly to smaller regional museums and offers concrete tools for implementing concepts of multi-perspectivity. Enabling museums to help building an inclusive, democratic European citizenship and developing new museum practices that help museums in mastering challenges that arise from processes of globalization, migration and mobility was the main objective of the project *European Museums in an age of migrations* (MeLa).[3] The EMEE project partially seizes on MeLa's ideas and expands the theoretic approach by putting to the test implementation concepts in museums, both of consortium members and partner museums of different size and alignment.

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[2] Eunamus was a project funded by the European Commission under the Seventh Framework Programme from 2010 until 2013. Find more information on the website: URL: http://www.ep.liu.se/eunamus/index.html

Anchoring multi-vocal dialogue and the tolerance of different perspectives within museums is a process that needs constant and structured work and is time consuming. Museums willing to shoulder this responsibility have the opportunity to get closely connected to their audiences, to turn their institution into an open space where everyone's voice can be heard and to contribute to the emergence of a European identity in the EU motto "United in diversity".

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References

Ambrose, T., & Paine, C. (2012). *Museum basics*. London: Routledge.

Baur, R. (2015). Our ancestors the Europeans. In F. Günther, P. Susanne, & S. Susanne (Eds.), *EMEE Young Scenographers Contest. Catalogue of the travelling exhibition* (pp. 19–23). Vienna, Austria: Edition Mono/Monochrom.

Beck, U. (1986). *Risikogesellschaft. Auf dem Weg in eine andere Moderne*. Frankfurt am Main, German: Suhrkamp.

Carpentier, N. (2014). Facing the death of the author. Cultural professional's identity work and the fantasies of control. In P. Runnel & P. Pruulmann-Vengerfeldt (Eds.), *Democratising the museum: Reflections on participatory technologies* (pp. 111–130). Frankfurt am Main, German: Peter Lang GmbH.

EMEE Young Scenographers Contest. (2014). *Assignment of task*. Retrieved 12 August, 2015, from www.emee-young-scenographers-contest.eu/index.php?id=12.

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[3] MeLa was a project funded by the European Commission under the Seventh Framework Programme from 2011 until 2015. Find more information here: URL: http://www.mela-project.eu/

European Union. (2007, December 13). *Treaty of Lisbon amending the Treaty on European Union and the Treaty Establishing the European Community*, 2007/C 306/01. Retrieved 26 August, 2015, from http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=OJ:C:2007:306:FULL&from=EN.

Fuhrmann, A.-L., Schumann, J., Popp, S., Schilling, S., & Mayer-Simmet, O. (2014). *Making Europe visible: Re-interpretation of museum objects and topics A manual*. Accessed 19 August, 2015, from www.museums-exhibiting-europe.de/wp-content/uploads/2015/06/EMEE-Toolkit-1_Making-Europe-visible_english.pdf.

Gans, P., & Schmitz-Veltin, A. (2010). Demografischer Wandel in Europa. bpb Bundeszentrale für politische Bildung. Retrieved 19 August, 2015, from www.bpb.de/internationales/europa/europa-kontrovers/38206/standpunkt-paul-gans-ansgar-schmitz-veltin.

Giesen, B. (2007). Entgrenzung und Beschleunigung—Einige Bemerkungen über die kulturelle Vielfalt der Moderne. In T. Bonacker & A. Reckwitz (Eds.), *Kulturen der Moderne. Soziologische Perspektiven der Gegenwart* (pp. 173–182). Frankfurt am Main, German: Campus Verlag.

Handler, R., & Gable, E. (1997). *The new history in an old museums. CREATING the past at Colonial Williamsburg*. Durham, NC: Duke University Press.

Kaiser, W., Krankenhagen, S., & Poehls, K. (2012). *Europa ausstellen: Das Museum als Praxisfeld der Europäisierung*. Wien, Austria: Böhlau.

Keller, M. (2013, May/June). Social media and interpersonal communication. *Social Work Today*. Retrieved 20 August, 2015, from http://www.socialworktoday.com/archive/051313p10.shtml.

Leggewie, C. (2015). Bürgerbeteiligung braucht öffentliche (Frei-) Räume. Interview. Retrieved 17 August, 2015, from www.fortschritt-gestalten.nrw.de/meldungen/interview-mit-prof-leggewie-%C3%BCber-%C3%B6ffentliche-frei-r%C3%A4ume.

Macdonald, S. J. (2001). Behind the Scenes at the Science Museum London. Knowing, Making and Using. In M. Bouquet (Ed.), *Academic Anthropology and the Museum: Back to the Future* (pp. 117–140). New York: Berghahn Books.

Macdonald, S. J. (2003). Nationale, postnationale, transkulturelle Identitäten und das Museum. In R. Beier (Ed.), *Geschichtskultur in der Zweiten Moderne* (pp. 123–148). Frankfurt am Main, German: Campus Verlag.

Mayer-Salvi, A. (2015). *Opening of the first EuroVision Lab* [online]. Vienna, Austria: Redaktionsbuero Ost. Retrieved 20 August, 2015, from https://www.youtube.com/watch?v=KgDK5EtwVm8.

N.N. (2015). *First EuroVision Lab. opened its doors! The National Museum of Contemporary History, Ljublijana, Slovenia, invites you to the first out of total seven EuroVision Labs*. Project report. EU Culture Project EuroVision—Museums Exhibiting Europe. Augsburg/Ljubljana. Retrieved 15 August, 2015, from http://www.museums-exhibiting-europe.de/labslov1/

Pandel, H.-J. (2013). *Geschichtsdidaktik. Eine Theorie für die Praxis*. Schwalbach am Taunus, Germany: Wochenschau Verlag.

Parussel, I. (2015). *Implementation of participatory concepts in the exhibition "Die Münsterstraße. Dortmunds buntes Pflaster" (The Münsterstrasse. Dortmunds's colorfoul pavement) in the Museuem of Art and Cultural History Dortmund*. Unpublished internal project report. EU Culture Project EuroVision—Museums Exhibiting Europe. Augsburg/Dortmund.

Pomian, K. (1998). *Der Ursprung des Museums. Vom Sammeln*. Berlin, Germany: Verlag Klaus Wagenbach.

Rüsen, J. (2002). Europäisches Geschichtsbewusstsein als Herausforderung an die Geschichtsdidaktik. In M. Demantowsky & B. Schönemann (Eds.), *Neue geschichtsdidaktische Positionen* (pp. 57–64). Bochum, Germany: Projektverlag.

Schumann, J., & Popp, S. (2011). Reflections and suggestions for the 'europeanization' of national and regional history museums. In International Society of History Didactics (Ed.), *Jahrbuch—Yearbook* (Annales 32, pp. 203–216). Schwalbach am Taunus, Germany: Wochenschau Verlag.

Širok, K. (2015). *Implementation of participatory concepts in the EMEE EuroVision Lab. at the Muzej novejše zgodovine Slovenije*. Unpublished internal project report. EU Culture Project EuroVision—Museums Exhibiting Europe. Augsburg/Ljubljana.

Thiemeyer, T. (2011). Die Sprache der Dinge. Museumsobjekte zwischen Zeichen und Erscheinung. In Online-Publikation der Beiträge des Symposiums "Geschichtsbilder im Museum" im Deutschen Historischen Museum Berlin (Eds.) Museen für Geschichte. Retrieved 17 August, 2015, from www.museenfuergeschichte.de/downloads/news/Thomas_Thiemeyer-Die_Sprache_der_Dinge.pdf.

Technologies Lead to Adaptability and Lifelong Engagement with Culture Throughout the Cloud

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Abstract

Cultural heritage represents one of the most important drivers for personal development, social cohesion and economic growth in Europe. Although the general population is aware of this fact, cultural heritage is still underexplored and cultural activities are not incorporated into citizens' lifestyle. Technology offers a potential to increase awareness about cultural offerings and create a public engagement with Culture. The current digital solutions adopted by cultural heritage institutions fail to achieve a lifelong engagement, and thus do not support institutions in increasing the number of visitors and retaining them. This chapter illustrates how cloud-based technologies can be exploited to increase a cultural lifelong engagement. We use the cloud to support technologies that enable adaptive and personalised cultural experiences according to individuals' interests, co-creation of cultural heritage experiences, and active user contribution to social storytelling. The work presented here is a result of the European co-funded project TAG CLOUD.

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1 Cultural Heritage and Digital Technology: Paradigm or Reality?

Cultural heritage is an important asset and a strategic resource for social, economic and environmental development in Europe (European Commission—Press Release 2014). As stated by Jose Manuel Barroso, president of the European Commission between 2004 and 2014, it is one of the most important drivers for personal development, social cohesion and economic growth (European Commission—Press Release 2007). However, cultural heritage is still underexplored. The general public usually incorporates few cultural activities in their life style. According to the data from the Special Eurobarometer 399 on 'Cultural access and participation' (2013) the engagement with cultural heritage became depressed after the beginning of the financial and economic crisis in 2007. Figures suggest that: about half of the European population does not visit any historical monument or site; only 37 % of the population has visited a museum or gallery; and involvement in other cultural activities such as attending a concert or visiting a public library is less than 35 %.

Currently, museums and cultural heritage institutions have invested and are investing significant resources to introduce cultural heritage in the digital era. Curators and professionals in the heritage sector strive to attract, engage and retain visitors to heritage institutions (i.e. libraries, museums, archives and historical societies) using a range of digital technologies from relatively cheap interactive websites to expensive on-site 3D visualisations. Despite the usage of these technologies, no significant increase in the number of visitors has been reached. Few cultural institutions have incorporated innovative personalised digital approaches as part of their solutions, and few take into account cultural trends to engage visitors. Having said this, some cultural institutions have already integrate web 2.0 tools to enable users to share their experiences and create user generated material, in order to enhance their web presence and establish long term relationships with people (Ardissono et al. 2012). However, a wide part of European institutions do not yet incorporate technology for more than basic purposes, mainly focused in promotion (Saldaña et al. 2013), and this represents a major drawback where digital content about cultural objects is still 'centrally' produced by experts (e.g. curators, historians and archaeologists) rather than being co-created together with visitors. When personalisation is supported, it is also centrally defined and based on general views about the background and preferences of the general population. This means that experiences are adapted to common interests of clusters of similar users or stereotypes, but not to individuals with particular interests and preferences. Digital technologies support the creation of new ways of interaction between cultural heritage institutions and their visitors. They facilitate the move from consumer to active creator of personal cultural experiences. This chapter shows how the European co-funded project TAG CLOUD has confronted these challenges. With a multidisciplinary consortium formed by partners from five different European countries TAG CLOUD proposes to create lifelong cultural experiences by using cloud-based solutions that support adaptive and personalised cultural experiences according to individuals' interests, co-creation of cultural heritage experiences, and active user contribution to social storytelling.

The increase of the available information about cultural heritage on digital media, such as the web and social media, offers a potential to promote cultural heritage and develop new ways to participate in culture. The number of digital objects available in open data platforms has increased significantly. For instance, Europeana (2015), the European database for cultural heritage, currently provides access to over 33 million digitised objects, having reached 30 million objects in November 2013 (Report on the Implementation of Commission Recommendation 2011/711/EU). This means that, although around 82 % of Europe's cultural collections (on average) are still not digitised, the trend is to increase these numbers (Borowiecki and Navarrete 2015). Critically this amount of information may cause a loss of perspective about what is important or interesting for each user and/or may overwhelm them. While metadata structures such as those implemented by OGD (Open Government Data), and Europeana, that model cultural data through the EDM (Europeana Data Model) are helping to standardise the process of digital collection, a big amount of the available cultural digital content is still represented in non-standardised manners, and/or lack most of the fields of the corresponding metadata schema. This represents a big barrier to the access, use and re-use the content. The information should therefore be firstly curated and stored in a standardised way that will enable its future manipulation, use and re-use, and identification of what is relevant for whom. In that way, it is possible to provide suitable personalised information to each user.

The public, in general, differs when enjoying a cultural experience and this experience is composed of physical, personal, social context and identity-related aspects (Falk 2009). However, some of these aspects evolve and change during the visit to the cultural institution and/or the life of the user, leading to a need for continuous adaptation. Therefore, engagement techniques are required that not solely support user-tailored and personalised interactions with digital cultural artefacts, but also can adapt to the changing needs of the visitors. We observe that curators and professionals in the heritage sector recognise that lifelong cultural experience is the best way to engage the public. In fact, personalisation and adaptation play a main role for making the current cultural heritage experience a lifelong one (Wilkening and Chung 2009). For this purpose, there exists the need to dynamically update user profiles, to analyse past experiences, to collect past and current evidences, to remove, to add and change users' preferences, to track the interest and trends of the users in order to become a life representation of themselves, and to provide dynamic personalisation of the cultural experiences according to their current interests, their past experiences and the context of the current experience.

Current digital solutions for cultural heritage initiatives do not provide adequate personalised experiences (Vassileva 2012). Digital technology offers a potential to provide a suitable one-size-fits-one personalisation, as each individual is unique and thus needs a unique solution. For example, in the last years, web applications for commercial purposes have widely adopted the social web as a source of reliable data for personalisation to increase their sales. Social media platforms offer different services, such as user models, and profiles of various entities such as people, companies and places. These social media profiles have associated information, such as name, location, and birthday that may be related to a person, company or place, as well as different relationships and interactions between people, such as: friendship, follower or followed, check-in, etc. Thus social media can provide a lot of information about the user in order to create a cultural user profile. His/her likes, interests, activities on the social web and also about his/her real life (e.g. check-ins into places, likes of music, film and place pages) are relevant. Also, information provided by his/her peers can be important for personalisation. Recently, cultural heritage institutions and curators have used different social media channels, such as Facebook and Twitter, to support the clustering of the users' community (Bernstein 2008). In addition to the acquisition of knowledge about the users, social media supports user participation and collaboration through virtual social interactions, and games. This can occur both in real time and in an asynchronous way. Social media also offers a new expression channel. The sharing of contents, such as videos, photographs and stories, can be exploited as a new source for unmediated heritage. But again, this approach, although relevant for cultural heritage sites, is still a step behind in providing a true individual experience.

In order to provide the proposed lifelong engagement and generate unique content for each user, current systems and solutions should evolve towards effective and adaptive cultural systems that aim to add value and new meaning to cultural digital artefacts and place users as active creators instead of mere consumers of cultural heritage. Cloud based systems offer a unique potential in this direction because they offer the processing of huge amounts of data that may come from different sources, and even at the same time; apply different treatments to the data in order to format it for the desired purposes; and offer a set of services suitable for each of the desired features. This is the reason that led TAG CLOUD to propose a cloud-based system to increase cultural lifelong engagement. The characteristics that this new generation of cloud-based cultural systems, such as the one developed by TAG CLOUD, offers can be summarised as follows:

- Exploration and discovery of cultural initiatives according to the users' likes, interests and preferences.
- Recommendation of experiences to new areas based on other users' cultural timelines.
- Co-creation of cultural heritage, as the process that both cultural institutions and users are involved in the generation of cultural contents and the forming of cultural experiences.
- Fusion between information from experts about artefacts and cultural heritage institutions (or mediated heritage, i.e. cultural heritage that is managed, held, curated, transmitted in or through cultural institutions) and cultural user-content from social media, also known as living media (or unmediated heritage, i.e. cultural heritage that is independently produced, transmitted, shared or exists

without the management involvement or mediation of cultural agencies or institutions).
- The possibility to manage and process large quantities and growing digital contents and objects.
- Re-use of the curated digital cultural content in other contexts.
- The enabling of real-time geographical mapping to increase user experience.
- Feedback for cultural sites' curators and managers to create/detect 'hot spots' as well as create/improve demand-oriented content.
- Compatibility with standards in order to facilitate the future management, use and re-use of cultural digital content.

This chapter presents how cloud-based technologies allow an adaptive and personalised cultural experience by seamlessly incorporating cloud-based (non--sensitive) information about the habits, preferences and motives of individuals into the digital content of a cultural object (e.g. artefacts, buildings and sites), aiming to increase users' interest in cultural heritage. In this way, users are actively invited to participate in the assignment of the importance of a cultural artefact and they become participants in the creation of their own cultural experiences through the creation and sharing of information on social media. Our assumption is that this new relationship between individuals and cultural heritage has the potential to make users adopt cultural heritage as part of their life-style and to enable lifelong cultural experiences. Our work is part of the European co-funded project TAG CLOUD, which has developed several digital solutions as outcomes and tangible results to cope with its objectives; they include the COOLTURA Platform and App, and stedr App.

The COOLTURA Platform is a cloud-based, open data-oriented platform that enables scalable services, such as harvesting of cultural content, semantic enrichment, personalisation and contextual adaptation of cultural content. In addition, the platform supports the curation processes for digital cultural content and artefacts; and offers tools to map, build and increase the metadata structure of the harvested content towards the OGD metadata scheme in order to tackle the challenge of achieving standardisation of cultural content representation to facilitate its access, use and re-use. The COOLTURA App is an application developed for mobile devices that allows visitors and users to experiment with different types of interactions with cultural objects (e.g. augmented reality, interaction with physical objects such as totems), as well as recommend new experiences based on the earlier user behaviour. Stedr[1] is a mobile application for social storytelling and for discovering, creating and sharing digital stories related to places. It provides a revisited storytelling approach that fuses traditional digital storytelling with social media as a way for the co-creation of cultural heritage.

In order to give a brief overview of how these initiatives are connected, it is worth mentioning that the COOLTURA Platform provides a set of cloud services that can be connected to different clients (i.e. different types of cultural applications). This way, as a proof of concept, the COOLTURA App is the first application that accesses, uses and re-uses the cultural content processed in the COOLTURA Platform, and thus provides an individual personalised and adapted experience to the user. Later, new applications, such as stedr, can be connected as well to benefit of the services provided by the COOLTURA Platform.

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[1] The name of the application stems from the Norwegian word sted (plural steder) for place.

Within the scope of the project, COOLTURA and stedr have been implemented, piloted and later deployed in three cultural sites located in very different environments, while managing very different forms of heritage:

- The Monumental Complex of the Alhambra and Generalife, in Granada, Spain: a monumental complex with indoor and outdoor spaces, which is situated in a medieval city on the foot of the Sierra Nevada Mountains.
- The Barber Institute of Fine Arts, in the West Midlands, United Kingdom: an indoor museum, which owns the Byzantine Coin Collection, the finest Byzantine collection worldwide housed in an Art Deco building in the heart of an international university campus and on the periphery of the land-locked cradle of Britain's industrial revolution.
- The County of South-Trøndelag (Sør-Trøndelag), in Norway: an open landscape with a rich heritage linked to seafaring, that is placed in mid-Norway and holds the third largest city in Norway, Trondheim, regional capital of Sør-Trøndelag.

2 Engaging People with Cultural Heritage Through. . .

2.1 . . .The Adaptation of Cultural Experiences

To motivate an engagement with the general public about their cultural heritage requires their interest to participate in cultural experiences. Our approach to 'engage' users with cultural heritage and the community is in close relation, and complementary activity, with the personalisation mechanisms offered through adaptive experience. Digital solutions for the presentation of cultural offerings are traditionally based on a general view about the common background and preferences of the general population, or particular group of visitors targeted by the cultural institution. They fail to adapt to the diverse preferences of a heterogeneous public. This is the main problem that the set of digital solutions developed in TAG CLOUD are addressing, through the support for the adaptation of cultural experiences to each individual user.

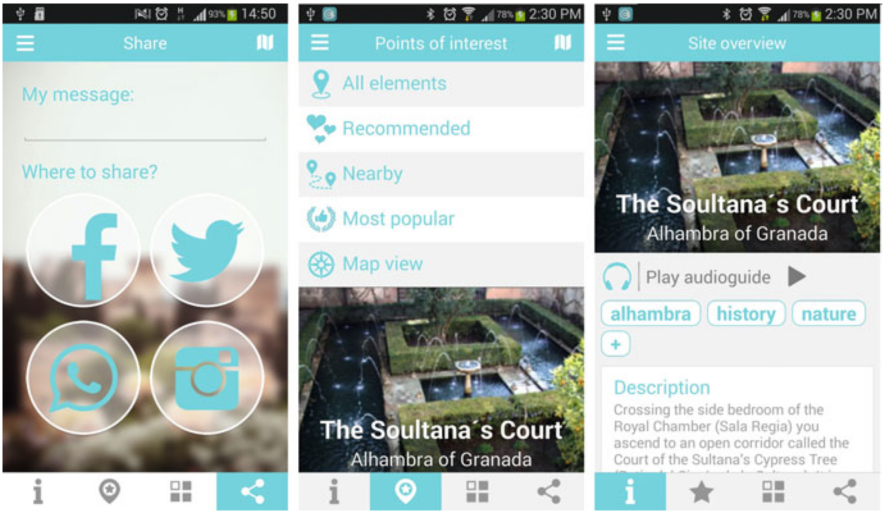
TAG CLOUD exploits social media so that it can connect with, personalise and adapt the cultural experience; and also motivate the users and their peers to engage with their cultural environment. Thus, social media is used in a two-fold approach: (1) to gather information about the profile of each individual user for personalisation purposes, and, (2) to facilitate the active participation of the users and engage them to become co-creators of cultural heritage. Social media is used by and circulates among millions of people all over the world. It is used for creating and sharing content (i.e. comments and pictures) as a new way of expression. Some content is automatically generated once the user clicks a button (such as likes in Facebook) and some is provided by users and their peers (e.g. posts, comments and tweets). The interaction on a social media is mainly done through a variety of services to acquire or generate information from/to other peers. All of the information available on social media allows gathering a collective and rich source of data about the users, and offering a personal experience.

Social media is extensively used all over the world, with millions of active users involved. Taking into account impact and the large amount of information that can be retrieved from the profile of the user and activity on social media, there is a huge potential to personalise and adapt services and produce social engagement using cloud-based technologies in combination with social media. In addition, social media can provide a large amount of information about the user, both from his/her profile and from his/her activities and social interaction. However, a key issue is the privacy of each individual's data. In TAG CLOUD a privacy policy has been created in line with the EU laws and TAG CLOUD's stance on privacy. This policy is presented to the user when starting to use the application and is followed by TAG CLOUD at each stage.

All of this information about the user coming from social media enables a dynamic update of the user profile that serves to personalise the services. We provide personalised cultural experiences according to the users' likes and interests, and recommendations evolve according to their activities. In TAG CLOUD, the mobile COOLTURA App is the main entry point for the user to a cultural discovery adapted and provided by the COOLTURA Platform. COOLTURA uses a hybrid motivation methodology, which combines gamification techniques, intrinsic motivation and reciprocity, with the objective to motivate the users to participate in social networks to create, share and disseminate their cultural heritage. In addition, in order to achieve a better personalisation of the interaction with the cultural artefacts and better adaptation of the content, the user profile is continuously updated.

Using the COOLTURA App, the user receives recommendations about cultural offerings based on his/her personal profile. A personal profile includes interests provided by the user, interests extracted from social media, previous cultural experiences, the time spent on different offerings and feedback to these previous experiences (e.g. what the user liked). The recommendation system exploits content-based filtering, i.e. filtering according to categories, and collaborative filtering, i.e. filtering according to similarities with other users. In addition to interests, the system can also exploit user location in order to select among offerings in the vicinity of the user. Recommendations can be applied at different levels:

- At the cultural site level. The user is provided with an overview of relevant cultural sites.
- At the point of interest level. The user is provided with an overview of relevant places or objects in a cultural site.


14:50
Share
My message:
Where to share?
2:30 PM
Points of interest
All elements
Recommended
Nearby
Most popular
Map view
The Soultana´s Court
Alhambra of Granada
2:30 PM
Site overview
The Soultana´s Court
Alhambra of Granada
Play audioguide
alhambra
history
nature
+
Description

Crossing the side bedroom of the Royal Chamber (Sala Regia) you ascend to an open corridor called the Court of the Sultana's Cypress Tree

Fig. 1 COOLTURA screenshots. On the *left*, the screen to share in social media, in the *middle*, the different options to sort the points of interest, on the *right*, the description of a point of interest

- At the narrative level. The user is provided with different stories related to a point of interest.
- At the digital artefacts level. The user is provided with a list of relevant digital artefacts related to a point of interest.

Besides recommendation of cultural content, the COOLTURA App also supports different digital interaction modes (called activities in the App), such as augmented reality, storytelling and games. Currently, the user can receive recommendations regarding specific interaction modes, but is free to select among a set of digital interactions or switch between interactions. The COOLTURA App could be extended with application modules that support new digital interaction modes in the future. For instance, a new game could be added (Fig. 1).

Providing an adaptive cultural experience is a way to engage users. The personalised cultural experience through the COOLTURA App is not just a set of cultural offerings 'pushed' from the cultural institutions, but instead, is the result of a co-creation process where both cultural heritage institutions and visitors have shared their needs, requirements and insights. To reach adaptive cultural experiences, the cultural institutions or sites provide an architectural baseline (i.e. contents and interaction modes), and the users can dynamically generate their own experiences, by either (1) directly selecting the interaction modes or switching between interactions (i.e. activities), or (2) indirectly by receiving cultural recommendations from the COOLTURA Platform based on their user profile. In TAG CLOUD, the user profile is dynamically updated along with the user's experiences, evolving interests and preferences. By giving feedback or by experiencing an offer, the user influences recommendations. Therefore, personalisation provides a dynamic experience that continuously transforms. In addition, social media leveraged in COOLTURA App allows users to share their comments and personal experiences, assuming more active roles for participation like ‘critics’ and ‘creators’ (Simon 2010).

2.2 ...Social Storytelling

Stories drive people to feel. They broaden our knowledge. They make us reflect and change behaviour. Stories have long been used in cultural heritage institutions. There is no more special an experience than visiting a cultural site in the company of a guide who tells fascinating stories about the exhibits. When human guides are scarce resources, digital technology offers the chance to bring these experiences to a wider audience. An initial study done by TAG CLOUD shows that, indeed, people favour traditional cultural discovery approaches, such as storytelling and itineraries (Floch and Jiang, HCITOCH 2015). Therefore it was important to support storytelling in the COOLTURA Platform.

Similar to existing digital technology approaches, the COOLTURA Platform is combined with visual and spoken communication, and exploits different types of media such as audio, pictures or videos. Beyond presenting stories authored by cultural institutions, we provide the users with tools to contribute to storytelling. A participatory approach is an opportunity to enrich the portfolio of cultural stories provided by professionals and allow the visitor to connect with culture. There are often diverse ways to look at cultural artefacts, this means that there are also diverse ways to talk about them, and thus there is a potential to retain the attention of people with different interests. Further several treasures in our cultural heritage do not exist under the responsibility of specific cultural institutions, or in some cases few resources are available to document and present them, which makes it difficult to document history related to those artefacts. However, we still know that there are many cultural enthusiasts that are eager at documenting cultural heritage around them, e.g., members of local history associations.

There are many ways to tell a story. Advanced narratives that combine text, audio, pictures and video can be used. A simple picture can also be a form of storytelling (Sarvas and Frochlich 2011). In addition, less commonly used than pictures, audio tracks carrying simple sounds are also relevant. Work in TAG CLOUD supports these different forms of stories. The creation of advanced narratives typically requires more effort than those of pictures and audio tracks. It is necessary to study sources, collect materials, e.g. pictures, and edit media, e.g. text, audio or video. Pictures and sound tracks provide a lightweight approach to storytelling. They can be used to record an event that a person is witness of, or to highlight a detail the user is fond of.

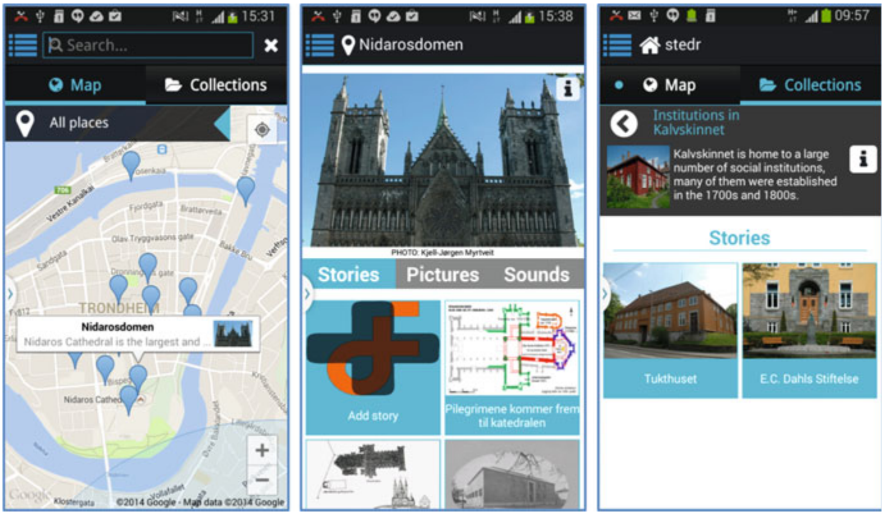
For the user, the application module stedr is the main entry point to a cultural discovery through storytelling in TAG CLOUD. Several group interviews were organised, both with potential users and experts in various fields of cultural heritage in order to discuss relevant features of the storytelling module (Floch and Jiang 2015), and their feedback influenced and guided the selection and design of stedr features. Here is a brief list of feedback received and the decisions taken to develop stedr:

- Institutions have the formal responsibility for cultural places. We therefore exploit the story baseline developed by cultural institutions.
- Technology changes more rapidly than the content. The production of content is costly. Approach followed in TAG CLOUD separates between content and interaction, and there is no need to develop new stories adapted to the special needs of stedr.
- The public, in particular young people, who are under-represented among users of traditional culture, are eager users of social media. For this reason, social media is used as a support for storytelling.
- Quality and trustworthiness are essential concerns. We provide recommendations for the creation of stories, such as highlighting the importance of intellectual property rights and references.

The implementation of stedr makes use of existing platforms for storing and creating content, including some social media platforms (Floch and Jiang, Digital Heritage 2015). For instance: the digital storytelling platform for cultural stories, called Digitalt fortalt, is used for the creation and sharing of advanced narratives using different media; the social mobile picture sharing service Instagram is used for the creation and sharing of stories expressed in the form of pictures; and the social audio sharing service SoundCloud is used for the creation and sharing of stories expressed in the form of sound tracks. As far as the participatory approach is concerned, stedr supports different user roles: ‘spectators’ discover cultural artefacts and stories; ‘critics’ submit reviews to stories; ‘creators’ produce content, either new digital representations of cultural artefacts or stories; and ‘collectors’ create collections and/or organize the content into collections.

Figure 2 presents some screenshots for the application module stedr illustrating its main features. The ‘map’ view is the main entry point for discovery. The user can easily retrieve cultural artefact in his/her surroundings. It is however not mandatory to be close to a place to access to information. The user can browse and search on the map as usual when using Google map services. The ‘story’ view provides access to different kinds of stories for a cultural artefact. The ‘collection’ view provides access to related artefacts organised in collections. User guidelines including more screenshots can be found on the stedr blog site (stedr 2015).

Opening the public to participate in the creation of cultural stories does not mean excluding cultural institutions. Cultural institutions still play an important role. They should encourage the visitor to leave the role of observer and contribute actively, and they should educate them to produce contributions of quality. It is important to create a good baseline upon which the public can work. For instance, the institution can launch cultural themes and invite the public to contribute. Additionally, in order to lower the threshold of participation, cultural institutions


Search...
Map
Collections
All places
TRONDHEIM
Nidarosdomen
Nidaros Cathedral is the largest and
©2014 Google · Map data ©2014 Google
Nidarosdomen
PHOTO: Kjell-Jørgen Myrtveit
Stories
Pictures
Sounds
Add story
Pilegrimene kommer frem til katedralen
stedr
Map
Collections
Institutions in Kalvskinnet
Stories
Tukthuset
E.C. Dahls Stiftelse

Kalvskinnet is home to a large number of social institutions, many of them were established in the 1700s and 1800s.

Fig. 2 Stedr screenshots. On the *left*, the map view, in the *middle*, the story view, on the *right*, the collection view

should make use of platforms that users are familiar with. For example, stedr exploits existing popular social media platforms like Instagram, Twitter and Flickr to ease the creation and sharing of stories (pictures), comments and collections. Using these platforms, cultural institutions can easily define hashtags when launching cultural themes. As far as quality is concerned, cultural institutions should provide guidelines to the public. This can be included as part of the digital solution done in stedr, or when more resources are available, organising workshops for the contributors.

There is great potential to utilise local citizens. Many are already actively talking about the local cultural heritage, for instance members of cultural associations. They enrich the cultural knowledge with new viewpoints, and they document parts of our culture that are yet undocumented. Many have already authored articles and books. The information is often spread verbally, not always available in a digital form, and thus difficult to retrieve. To ensure good dissemination, it is important that content is open and available through common digital infrastructures. Cultural institutions should show the way by making the content they create available through open platforms. The digital storytelling platform, Digitalt fortalt, that we exploit in stedr is such a storytelling platform managed by the Arts Council Norway. It is both open for cultural institutions and the public, thus functioning as a bridge between mediated and unmediated heritage. At the time of writing, 2400 out of more than 4000 stories currently available on Digitalt fortalt were registered by cultural institutions, indicating a fairly good portion of unmediated content.

As mentioned earlier, the quality of unmediated content requires attention. The evaluation of stedr shows that some users favour mediated content beyond unmediated content due to quality and trust concerns (Floch and Jiang 2015). At the same time, some other users argue that they would rather read stories written by amateurs, in particular those produced by peers or favoured by peers. It is therefore important to clearly differentiate the presentation of the mediated content from that of the unmediated content.

By using these interfaces to support the public or visitors' contributions, the stories unknown or forgotten by the cultural institutions can be well preserved and passed from generation to generation, forming a living heritage. This also contributes to social cohesion, as not just professionals from cultural institutions but also the peers can participate in storytelling, Moreover, the use of social platforms and storytelling help to enrich the cultural heritage institutions' collections, involving their audiences (including locals and visitors), and improving their audiences' communication and connection.

3 Making the Connection Among Cultural Heritage, Places and People

As outlined above, TAG CLOUD has explored and evaluated behavioural and social patterns in order to facilitate cultural lifelong engagement and the connection between visitors and places of cultural heritage. Overall, TAG CLOUD has worked on developing cloud-based technologies that enable cultural institutions to go beyond its spatial dimension and the one-size-fits-all approach to experience culture, moving towards the one-size-fits-one (adaptation and personalization) approach. TAG CLOUD has based its developments over the pillars of social and cultural proximity and reciprocity, and thus provides a new perspective of connecting and attracting visitors.

Overall, TAG CLOUD has been driven by the notion of cultural engagement; which is largely rooted in the recognition that lifestyles, behaviours, heritage, people and deeper knowledge of culture are all shaped by social and physical environments (people and places), and underpinned by a temporal connection. Under this rational, the TAG CLOUD project has carefully designed COOLTURA as a suite of services that allows a bidirectional and enriched relationship between people and cultural places, a better understanding of the cultural institutions and a personalized cultural experience.

Through COOLTURA, TAG CLOUD has expanded in two conceptual directions to support cultural engagement: re-escalation of the content of the cultural places and building on social connections and storytelling.

The re-escalation of the content is based in the production and consumption of the knowledge or content that is exchanged during the cultural visits. In this regard, by broadening and strengthening the cultural portfolio cultural institutions are able to create and provide a more diverse and distinctive content that is built over a wider based of knowledge, in order to better connect with the preferences of the visitor; thus more choices and alternative routes for finding out about and experiencing culture are provided. Moreover, geolocation technology allows recommendations of points of interest nearby that connect with the visitors' preferences and likes, and could even allow the recommendation of other cultural institutions in the visitors' immediate vicinity.

Following this flow, TAG CLOUD has developed a framework that foregrounds the benefits of adaptability and personalisation. Therefore, the COOLTURA Platform has been created as the main entry point for curators, managers and experts from cultural institutions to better communicate with people. The COOLTURA Platform allows the curation increasing quantity of digital cultural content (re-scaling the quantity and the quality of the content and its metadata) from different sources (institutions private sources and Open Source), grants the adaptation cultural resources to different perspectives and for different targeted visitors, enlists and manage the integration of Apps using emerging technologies (augmented reality, storytelling, etc.) as well as selects the devices (mobiles, tablets, smart watches, glasses, etc.) they would like to communicate through. In addition, the platform provides analytic capabilities that brings analysed information and feedback regarding the usage of the digital content and apps to cultural institutions' curators and managers, and a dashboard that allows them to know which content is consumed, by whom and through which App and device, and so creating/detecting "hot spots" for visitors, as well as creating/improving more demand oriented content and/or new apps. In addition, the analytic platform allows an evaluation and analysis of the likes, needs, preferences and trends of the users, and untapped visitors' participation by allowing an adaptive cultural experience.

The TAG CLOUD project also has explored how new insights and content can be created or used from published open data, derived from existing Europeana datasets and their combinations. This approach not only supports new versions of content but also permits third-party software developers to create new apps that enrich the TAG CLOUD platform. However, having standardised data in order to really exploit the data sets from both cultural institutions and open data sources is a very important challenge to overcome. For this purpose, the TAG CLOUD consortium decided to embed in the COOLTURA Platform harvesting tools to processes curated digital content coming from Europeana and cultural institutions. The tool maps, builds and increases the metadata structure towards the OGD (Open Government Data) metadata scheme (Open Knowledge Foundation 2015), which constitutes the base for eGovData. This tool allows COOLTURA to enable cultural institutions and third parties (software vendors, developers, intermediaries, etc.) and benefit from a content eco-system, as well as use and re-use the curated digital cultural content in contexts such as cultural engagement, tourism, creative industry or emerging ones like smart cities.

By adapting insightful content and information, TAG CLOUD empowers the building of a cultural, recreational, historical and personal perspective of the visited place. By allowing social connections and storytelling, TAG CLOUD is also able to put 'people' in the centre of cultural experiences. We have seen in the above sections that through the COOLTURA App and stedr, TAG CLOUD provides points of entrances for visitors; to co-create and digest digital cultural content in an easier, personalised, participatory and joyful way. Moreover, the TAG CLOUD consortium expects that the user-generated content (through social platforms and storytelling—stedr) will allow that the voice of locals and visitors to become a widely used and trusted source of information, influence the branding of the cultural institutions and making visitors active participants of the cultural experience.

Considering the road ahead and challenges in the cultural sector, COOLTURA App and Platform provide the tools and services to engage in cultural experiences; COOLTURA is underpinned by easy, fun and personalised access to the digital heritage trusted knowledge eco-system (and to the stories to be told) from the collections, monuments or areas (cities, neighbourhoods, etc.) that mark the time and place of the what, where and how we have lived our lives (culture), what has happened in the different parts of the Earth, or what, where and how other species have lived.

4 The Value of Connecting People and Places

From an empirical and qualitative evaluation performed during the late stage of TAG CLOUD project for exploitation (TAG CLOUD 2015), cultural institutions reported that the way COOLTURA App and Platform can create value is by linking the actions that result from its usage with the policies, visions and missions of the site; and thus connect with the mind and emotion of the user.

As in the case of the Alhambra, many small and large cultural institutions, organisations, monuments and cities reported that they were willing and ready to adopt emerging technologies related with personalisation and customised services, and new ways to deliver digital cultural content and resources. However, coupled with this process, the cultural institutions see the need to adopt organisational processes that link to their policies and core mission, in order to really get full alignment of curatorial, marketing and educational cultural resources and capture the attention of today's visitors.

In this regard we can see a large cultural monument such as it is the Monumental Complex of Alhambra and Generalife (Granada, Spain). The Alhambra, as a case for exploiting the aims of the TAG CLOUD project and linking COOLTURA with their policies of being a safe, clean, well maintained, serviced and restored distinctive cultural place where people not only visit as a 'cultural must' but also enjoy visiting. The Alhambra and Generalife Monumental Complex, is not only about the historical palatial cities and the Generalife, it comprises and promotes other cultural interventions such as events (e.g. concerts and exhibits from local artists), an archive, a library, nearby hostelry and food, as well as a green and sustainable areas with gardens and a developed green environment, where experts, lecturers or students give special botanical tours. Moreover, other cultural places in Granada and local green public spaces play an important part in the development and motivation to create the Alhambra and its surroundings as a pleasant environment for and by locals, businesses and visitors.

For the Alhambra, the aim of these cultural interventions, what we call cultural 'placemaking', is that people and visitors can look at the Alhambra as a cultural entity embodied in the culture of Andalusia, and not simply as set of individual cultural buildings. The use of all these as cultural interventions lets people look at the Monumental Complex of the Alhambra in a different way; one that aims at improving the connection with the diversity and quality of the cultural values of visitors, locals and businesses. On this subject, through the curation of easy digestible and personalise content, as well as initiatives such as storytelling, COOLTURA allows new cultural values to be given to the Alhambra through new narratives that make people look at the Alhambra from different perspectives. So the 'place' and its culture, can gain in value and appreciation when COOLTURA's new layout is provided to people and visitors: a place where they can write and consume stories, good recommendations and cultural content. This new layer aims at enhancing the appreciation of places and its culture by making places closer to people, people closer to places, as well as changing the way they feel about places and places connect with people. It is about creating and managing the digital cultural content to support a lively cultural place and prove enthusiasm about it that reaches multiple identities with families, visitors and communities that enjoy and share different cultures.

Contrary to large monuments such as the Monumental Complex of Alhambra, cultural institutions (e.g. museums and monuments) in small towns and villages receive often less attention than more well-known cultural institutions in large cities. Often, few resources are available to create digital content about these institutions, and to develop and maintain a digital infrastructure for storing and disseminating that content. TAG CLOUD can address these challenges. The common digital COOLTURA Platform supports the recommendation of cultural institutions. Less known sites will be recommended if they match the preferences of the users. The COOLTURA Platform harvests information from common cultural digital infrastructures, e.g. Europeana, and can be extended for harvesting information from other common or proprietary infrastructures. For instance, COOLTURA Platform harvests content from the Norwegian storytelling platform Digitalt fortalt that any cultural institution in Norway can use to create and share cultural stories. Furthermore, it supports a participatory approach and lets the public contribute with contents, both comments about sites and cultural stories. In particular, less known places can be promoted using the social media plugins of COOLTURA and the TAG CLOUD storytelling component stedr. No cultural site or institution is too small for TAG CLOUD. An example is the case of the small island Rødøya in northern Norway. Rødøya is a little gem on the coast of Helgeland close to the polar circle. The small island with 200 inhabitants receives 25,000 visitors every year, mainly in the summer time. The island has been a major church centre and trading place for several hundred years. The project "Opp i dagen" (i.e. "bringing to light") has gathered experts from different culture and nature disciplines (e.g. history, archaeology and geology) in order to document the island's cultural heritage. The result is a book and a set of information signs. They exploit stedr in order to support digital interaction with their visitors. As the content was already available in a digital form, little effort was needed to make digital stories about Rødøya available through stedr. The new cultural offer was launched in Rødøya at the end of May, 2015 (Floch, TAG CLOUD 2015) (Ranablad 2015).

By embracing these challenges, the TAG CLOUD project is deploying COOLTURA to support an invigorating transformation of cultural places (large and small), making places and cultural information accessible, adaptable and personalized to people through emerging cloud-based technologies; and thus bridging a bidirectional connection between people and places, at the heart of an pro-active public realm. Moreover, through COOLTURA, the TAG CLOUD project has tackled the idea that places are "frozen in time" by re-scaling the exchange of content and knowledge in an adaptive manner, while building and enriching places with social, cultural and personal perspectives.

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References

Ardissono, L., Kuflik, T., & Petrelli, D. (2012). Personalization in cultural heritage: The road travelled and the one ahead. *User Modeling and User-Adapted Interaction, 22*(1–2), 73–99.

Bernstein, S. (2008). Where Do We Go From Here? Continuing with Web 2.0 at the Brooklyn Museum. In J. Trant & D. Bearman (Eds.), *Museums and the Web 2008*. Proceedings, Toronto: Archives & Museum Informatics. Retrieved December 7, 2015, from http://www.archimuse.com/mw2008/papers/bernstein/bernsteinhtml.

Borowiecki, K. J., & Navarrete, T. (2015). *Digitization of heritage collections as indicator of innovation*. Retrieved December 7, 2015, from https://ideas.repec.org/p/hhs/sdueko/2015_014.html.

Borowiecki, K. J., & Navarrete, T. (2016). *Digitization of heritage collections as indicator of innovation*. Economics of Innovation and New Technology, forthcoming. Retrieved March 14, 2016, from https://ideas.repec.org/p/hhs/sdueko/2015_014.html.

European Commission. (2014). *Cultural heritage. Digitisation, online accessibility and digital preservation*. Report on the Implementation of Commission Recommendation 2011/711/EU. Progress report 2011–2013. Retrieved December 7, 2015, from ec.europa.eu/newsroom/dae/document.cfm?doc_id=9745

European Commission. (2007, May 10). *Press releases of the European Commission*. Retrieved December 7, 2015, from http://europa.eu/rapid/press-release_IP-07-646_en.htm

European Commission. (2014, May 20). *Press releases of the European Commission*. Retrieved December 7, 2015, from http://ec.europa.eu/culture/news/2014/20140602-heritage_en.htm.

"Europeana" platform. Retrieved December 7, 2015, from http://www.europeana.eu/

Falk, J. H. (2009). *Identity and the museum visitor experience*. Walnut Creek, CA: Left Coast Press.

Floch, J. (2015, June 1). *News post at TAG CLOUD website*. Retrieved December 7, 2015, from http://www.tagcloudproject.eu/?p=1520

Floch, J., & Jiang, S. (2015, September 22–24) *Digital cultural experiences: A step towards understanding the public needs*. Paper presented at the 6th International Workshop on Human-Computer Interaction, Tourism and Cultural Heritage—HCITOCH, Ravenna, Italy.

Floch, J., & Jiang, S. (2015) *One place, many stories—Digital storytelling for cultural heritage discovery in the landscape*. Paper presented at the Digital Heritage International Congress 2015, Granada, Spain, September 28–October 2, 2015.

Open Knowledge Foundation. Retrieved December 7, 2015, from https://okfn.org/

Ranablad. (2015, June 1), blog post, Skatter opp i dagen på Rødøya. Retrieved December 7, 2015, from http://www.ranablad.no/historie/rodoy/nord-norges-storste-myntfunn-fra-middelalderen-ble-gjort-pa-hamnoy-ved-rodoya-for-over-100-ar-siden/s/5-42-62144

Saldaña, I., Celaya, J., Merin, C., Gonzalez, C., Corbo, A., Portell, G., et al. (2013). *Museums in the digital age*. Retrieved 7, 2015, from http://www.dosdoce.com/upload/ficheros/noticias/201305/museums_in_the_digital_age__a_dosdoce_survey.pdf

Sarvas, R., & Frohlich, D. M. (2011). *From snapshots to social media-the changing picture of domestic photography: The changing picture of domestic photography*. London: Springer Science & Business Media.

Simon, N. (2010) *The participatory museum*. Museum 2.0.

Special Eurobarometer 399. (2013, November). Cultural access and participation. Retrieved December 7, 2015, from http://ec.europa.eu/public_opinion/archives/ebs/ebs_399_en.pdf

"stedr" blog site. Retrieved December 7, 2015, from http://stedr.blogspot.no

TAG CLOUD project, CN. 600924, 7th Framework Programme, ICT for access to cultural resources, February, 2013; in-depth interviews for COOLTURA Platform exploitation.

Vassileva, J. (2012). Motivating participation in social computing applications: a user modeling perspective. *User Modeling and User-Adapted Interaction, 22*(1–2), 177–201.

Wilkening, S., & Chung, J. (2009). *Life stages of the museum visitor: Building engagement over a lifetime*. Washington, DC: American Association of Museums Press.

The Place of Urban Cultural Heritage Festivals: The Case of London's Notting Hill Carnival

Ernest Taylor and Moya Kneafsey

Abstract

Urban cultural heritage festivals have a long tradition of contributing to the cultural and economic development of towns and cities around the world. Moreover, the increasing role of culture in city making has rendered them spaces of consumption, entertainment, pleasure, and festivity. Large European events such as London's Notting Hill Carnival, Berlin's Carnival of Cultures, and the Rotterdam Summer Carnival attract huge global audiences. Despite being mass gatherings where representations can be extreme, virtual, and somewhat fleeting, the intensity and intimacy of social interactions generated at festivals can induce a sense of belonging. Festivals are thus sites where community values, identity and cultural continuity are performed. In this sense, they are connected to cultures and to places, can help bind people to their communities, foster and reinforce group identity, and are central to the transmission of tradition. The ephemerality of festivals, as well as the inconvenience, expense, and gentrification-effects to which such large scale events can contribute, has led to questions about their ability to sustain community cohesion and socio-economic wellbeing. Drawing on the example of London's Notting Hill Carnival, this chapter explores the extent to which urban cultural heritage festivals can be regarded as catalysts in the promotion of community cohesion. Findings from this exploratory study suggest that the event promotes a sense of belonging and cohesion in an urban space, particularly amongst younger age groups in the community, as well as festivalgoers more generally.

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1 Introduction

Urban cultural heritage festivals have a long tradition of contributing to the cultural and economic development of towns and cities around the world. Large European events such as London's Notting Hill Carnival, Berlin's Carnival of Cultures, and the Rotterdam Summer Carnival have gained international recognition, attracting huge global audiences, income, and reputation. Urban cultural heritage festivals have become a major influence on city making and the globalising of economies, as "spaces of consumption", entertainment, pleasure, and festivity (Eizenberg and Cohen 2014). Despite being mass gatherings where representations can be extreme, virtual, and somewhat fleeting, the intensity and intimacy of social interactions generated at events can induce a sense of belonging. Getz (2010: 2), for example, argues that festivals are spaces where "community values, ideologies, identity and continuity" are performed. Moreover, festivals are connected to cultures and to places, can help bind people to their communities, foster and reinforce group identity, and are central to the transmission of tradition (Getz 2010). However, the ephemerality of festivals, as well as the inconvenience, expense, and gentrification-effect to which such large scale events can contribute, has led to questions about their ability to sustain community cohesion and socio-economic wellbeing. Moreover, as such events grow in size and complexity, the necessary attention to crowd safety, logistics, and health can shift the feeling away from a sense of joyful 'spontaneity' towards a sense of 'serious fun,' carefully planned and controlled by festival managers, who arrange programmes for audiences, invite performers, organise security and otherwise "act as gatekeepers" (Jeong and Santos 2004: 641).

Drawing on the example of London's Notting Hill Carnival, this chapter explores the extent to which urban cultural heritage festivals can be regarded as catalysts in the promotion of community cohesion. Despite organizational, financial, and social challenges, the Notting Hill Carnival is now in its 50th year and has grown to become Europe's largest street festival, a symbol of London's cultural heritage and diversity and a major revenue earner. Findings from this exploratory study suggest that the event promotes a sense of belonging and cohesion in an urban space, particularly amongst younger age groups in the community as well as amongst the festivalgoers. This results from the carnival's origin as a community-led celebration of togetherness and its year-round contribution to community leadership and management, events, educational activities, and economic spin offs. The chapter is based primarily on a review of secondary data, supplemented with participant observation, and interviews with key individuals involved in the festival at managerial level. These were identified using purposive sampling (Bryman 2008). In addition, a limited number of participants at the festival were interviewed using opportunity sampling (Patton 2002).

2 Community Cohesion

The word cohesion is often prefixed by terms such as community, social, and territorial. It refers to a sense of togetherness and connectedness between groups or individuals, usually in a defined geographical area, such as region, city or neighbourhood (Turok and Bailey 2004; Hamez 2005). The appeal of cohesion lies in its perceived capability of wholesomeness and it has been regarded as a solution to problems of increasing fragmentation, conflict, and inequality between different social and ethnic groups (Turok and Bailey 2004). Coherent policies and measures, it is argued, can build strong relationships among diverse individuals and groups, improve health and wellbeing and contribute to the cultural and socio-economic development of specific geographical locations (Novy et al. 2012). At a European territorial level, cohesion is seen as integral to the promotion of economic, social and cultural integration (Suto et al. 2010). An estimated 346 billion Euros—35 % of the EU budget between 2007 and 2013—was invested in cohesion initiatives such as job creation, infrastructure improvements, equal opportunities, wellbeing, and social inclusion (European Union 2013). Even though policies and measures aimed at achieving cohesion are wide-ranging and complex, at their heart, they seek to recognise and celebrate diversity and yet also create a sense of belonging to a social context, which provides meaning and identity to members.

Turok and Bailey (2004) identified five dimensions of cohesion—equality and inclusion, social connectedness, common social values, social order, and place attachment. They argue that cohesion promotes equality of status and opportunity to ensure people's circumstances do not become barriers and prevent them from realising their full potential (Turok and Bailey 2004). Inclusion encompasses social solidarity and public policies to minimise inequality of employment opportunities or access to other resources, which are critical to mitigate against social exclusion. Turok and Bailey (2004: 176) argue that inequality is a root cause of "poorer social relationships, more violence, less involvement in community life, worse health and a lower quality of life for society overall". Social connectedness is linked to strong social relationships and networks, sense of belonging and identity, and cooperation and trust among individuals and wider society. Common social values pertain to cohesive practices, which encourage shared "moral principles" and "sets of rules and codes of behavior" (Turok and Bailey 2004: 182). Moreover, the idea of cohesion suggests social order and tolerance between groups and communities. Place attachment or territorial identity is also an important feature of cohesion in that it represents a basic human need—a sense of belonging. Turok and Bailey (2004: 176) believe experiences of place resonate with ideas of cohesion in terms of shaping people's culture and identity.

Despite being quintessentially ephemeral, urban cultural heritage festivals present a microcosm of these varying themes of cohesion. As noted by Ferdinand and Williams (2012) festivals are intrinsic to all societies—celebrating and promoting cultural heritage and identity, regenerating communities, creating jobs and economic opportunities, and attracting audiences. Del Barrio et al. (2012): 243) point to a "festivalisation" of cities, where events generate intense spending, fashion new urban images, spark cultural creativity and social cohesion, provide new urban facilities, and generate political interest in enhancing locals' sense of belonging. Critically, Eizenberg and Cohen (2014: 54) believe festivals have positioned culture as a fundamental dimension in urban strategies. In this context, Attanasi et al. (2013: 228) argue that scores of local organisations are now becoming conscious that the "mutual valorization" of the intangible and tangible resources of a place can unlock the key dynamics of regional development. The fact that there are hundreds of thousands of urban cultural heritage festivals staged across Europe, means there is recognition of the contribution they make economically, socially, environmentally, culturally, and cohesively.

Urban cultural heritage festivals are a fusion of historical and contemporary cultural heritage, "which are brought together and displayed, as part of the process of re-interpreting cultural legacy" (Del Barrio et al. 2012: 236). Events provide a space in which people can "(re)present their past, celebrate their existence and reinterpret stories and myths about their culture" (Quan-Haase and Martin 2013: 524). An example of this is to "play mas", which is a main feature of the Notting Hill Carnival, which has its roots in African Caribbean migration to Britain after the Second World War (Ferris 2010: 520). The word 'mas' is a derivative of masquerade, which in European tradition implies wearing a facemask. However, the Caribbean genre emphasizes how the person playing mas animates the character they are portraying by drawing on their own internal cultural connectedness (Ferris 2010: 520). In this context, urban cultural heritage festivals synthesize an emotional interplay between performers, the inner self and the revelers, who line the streets.

Moreover, urban cultural heritage festivals offer people the opportunity to try new practices or give those who live locally a break from the everydayness of urban life. Events are also representative of cultural heritage, as a key strategy in urban development and are often named after the location where they are held (Eizenberg and Cohen 2014). Over a period of time, locals and the area can become intertwined with an event. As a product that is shaped, primarily, by experiences (Ferdinand and Williams 2012), festivals are characterised by festivalgoers and what they feel or believe they are connected to. Attracted by the perception, experience, attachment to place and sense of belonging generated by festivals, people may even relocate to an area in which an event is held, in some cases triggering local gentrification (Martin 2005), as is the case with the West London district of Notting Hill. However, festivals are multidimensional entities and can be billed around cultural heritage themes such as music, food, dress, sport, art, craft, drama, gender, spirituality, etc. While some urban events can be confined to parks or an area of open space, others occupy vast expanse of suburbs with throngs of people celebrating in the streets, dancing, eating, and drinking. In this regard, urban cultural heritage festivals can become culturally connected to the way of life, practices, and behaviors of locals.

For some revellers, urban cultural heritage festivals are a pilgrimage to where they can satisfy their desire for a congenial space to mingle carefree with a trust that belies the instantaneity of their acquaintances and the occasion. Urban cultural heritage festivals thus assume the role of a "virtual community" (Attanasi et al. 2013: 243) where festivalgoers act and behave as if they know each other, are engaged in relationships, or have shared a connection over a period of time. In highlighting the ritualistic nature of festivals, Quan-Haase and Martin (2013: 525) argue that the intrigue of events may be rooted in their role of signifying the reversal of normal power structures, a "suspension of reality and a unification of society". At some events, there is heavy use of alcohol and recreational drugs, as well as sensual dancing and general frivolity. A temporary suspension of usual behavioural inhibitions is a feature and a main attraction of many festivals (Matheson et al. 2014).

Urban cultural heritage festivals can create favourable attitudes or raise awareness about certain topics or activities (Organ et al. 2014). These can, in turn, induce behavioural change in festivalgoers depending on their level of engagement and the emotions evoked. Sampling different types of edibles at a food festival, for example, may stimulate tastes or choice for certain foodstuffs in the future. Similarly, a music festival could help foster a liking for a musical genre not previously encountered. If these tastes, choices, or encounters, experienced at festivals are triggered during routine activities away from events, they may become habitual practices. Furthermore, the consumption of festivals intertwines with emotion and hedonism, which mean the more pleasure derived from events, the more satisfied festivalgoers are and are likely to make a return visit or attend similar activities (Grappi and Montanari 2010). Correspondingly, factors at festivals that influence togetherness and unity could engender cohesion in the same way. Moreover, this is not just restricted to being physically present at events, as the prevalence of digital media has ensured that occurrences unfolding at festivals extend beyond the local. It means festivals now have wider and diverse cultural connections, influence, and participation.

3 The Origins and Development of the Notting Hill Carnival

> I could see the streets thronged with people in brightly coloured costumes, they were dancing and following bands and they were happy. Some faces I recognized, but most were crowds, men, women, children, black, white, brown, but all laughing (Laslett 1989, cited by Blagrove 2014).

The roots of London’s Notting Hill Carnival are etched in African Caribbean culture. Britain was experiencing serious labour shortages following the Second World War and began recruiting workers from former territories such as those in the Caribbean. Faced with hardships, social exclusion, and missing ‘home’, the new arrivals felt the need to band together to organise their own social events and activities (Muir 2011). In this way, they could meet and interact with each other freely thus creating a home away from home and social solidarity fostering a sense of cohesion, common identity, and satisfying a sense of belonging. The urgency of meeting this need for psychological and emotional wellbeing became even more pronounced after the race riots, which erupted in Notting Hill in 1958 (Muir 2011). The following year, Claudia Jones, a Trinidadian communist, activist and publisher, who had been barred from the United States of America, organised a carnival style event in St Pancras Town Hall, London, both as a statement to the British public and a ‘comfort’ to the dispirited migrants (Muir 2011). The actual forerunner to today’s carnival was orgainsed by Rhaune Laslett, who was born in London’s East End to a Native American mother and a Russian father. In 1964, Laslett, a social worker, had a vision of people in Notting Hill coming together and celebrating in the streets. She felt that even though there were various migrants living in the congested area, there was little communication or interaction between them. Her dream of a unifying concept was realised with marchers and steel bands taking to the streets under the banner of the Notting Hill Fayre and Pageant in joyous revelry. The essence of jollification and togetherness of Laslett’s event has remained an essential facet of today’s carnival, which is now seen as the “largest expression of multiculturalism in the UK and has done much to bring communities together” (Greater London Authority (GLA) 2004). The event annually features an estimated 10,000 participants from Britain and other parts of the world. They take part in musical forms, costume parades, arts and crafts, provide food and drink, and stage various activities and entertainment aimed at children and adults. The Federation of European Carnival Cities (FECC), a pan-European body set up to promote and preserve carnivals, lists Notting Hill as the biggest event of its type on the continent.

The Notting Hill Carnival is rooted in ideas of identity, sense of belonging, cultural connectedness, and promoting community cohesion. The event serves as a social space and forum where intangible and tangible cultural heritage is sustained, created, shared, and enjoyed by local residents as well as visitors from Europe and other parts of the world. The carnival has become synonymous with the area of the Royal Borough of Kensington and Chelsea and is now firmly arranged in the cultural mosaic of London and Europe. It annually attracts an estimated one million people. Globally, only Brazil’s Rio Carnival, in terms of urban street festivals of this type, surpasses the number of people who attend Notting Hill. Five of the eight per cent of international visitors to the carnival are from Europe (GLA 2004). The Rotterdam Caribbean Summer Carnival, which started in 1980 and Berlin Carnival of Cultures have been inspired by Notting Hill.

It is difficult to ascertain the latest economic impact of the Notting Hill Carnival, as the first and most recent study was conducted in 2002. That report, commissioned by the former London Development Agency, showed the carnival contributed in excess of £93 million to the city and supported the equivalent of 3000 full time jobs (GLA 2004). An estimated £36 million was spent on food, drink and other merchandise at the carnival's 250 licensed trading sites and a further £9 million on accommodation (GLA 2004). Other economic beneficiaries include music producers, clothing designers, merchandisers, and security firms. More than 90,000 foreign tourists, mainly from Europe, annually attend the event. However, the majority of visitors, who are mostly aged 16–34, are from London and other parts of the UK. Such numbers of people offer huge scope for commercial sponsorship, celebratory art form, job creation, skills training, marketing, and merchandising (GLA 2004). With 40 % of global tourism revenues emanating from intangible and tangible forms of cultural assets (United Nations 2012), Notting Hill Carnival has the potential to tap into the lucrative cultural tourism market across Europe and further afield. Furthermore, iconic London with its distinctive characteristics, lifestyles, heritage, cultural activities, and landscape, adds to the inherent appeal of the carnival.

4 Promoting Community Cohesion

The Notting Hill Carnival began with the objective of building and creating community cohesion. Historically, the event has been a catalyst for mobilisation against racism, poor housing conditions, extortionate rent, and overcrowding, experienced by local working class people in the Notting Hill area. It gives voice to minorities and the marginalised: "Carnival allows people to dramatise their grievances against the authorities on the street, when parliament or other spaces of influences are closed off to them" (Dabydeen 2010). As Tompsett (2005: 46) argues, "claiming public space, is at the heart of Notting Hill Carnival. In this sense, the road is seen as a commemorative space with possession of the street etched in the memory and the psyche, the right of free people to occupy the public thoroughfare." Moreover, "it connects past to present" (Tompsett 2005: 46).

The contemporary vision of the Carnival, which is now run by the London Notting Hill Carnival Trust is to "foster the creative development and enhancement of diverse artistic excellence, thus transforming perceptions of London Notting Hill carnival culture locally, nationally and internationally" (Notting Hill Carnival 2015). Its mission is to use carnival arts collaboratively and artistically as a catalyst to facilitate "artistic excellence, education, engagement, empowerment, entertainment, integration, transformation of perceptions, inspiration" (Notting Hill Carnival 2015). From these statements, it can be seen that the carnival fosters a dynamic sense of cultural identity which is clearly oriented towards the perceptions of audiences and participants within the local community and beyond. Claire Holder, former chief executive of the Notting Hill Carnival Trust, who now runs the Notting Hill Carnival Roadshow, a carnival entertainment touring company, and believes events like Notting Hill Carnival are ideally placed to achieve community cohesion, because of the "pressures and diversity" of the urban contexts in which they are situated (Holder 2014). Notting Hill is rooted in the history of the African

Caribbean experience in Britain, explains Holder. Many of today's carnival participants are descendants of those, who were invited to the UK to help rebuild the 'Mother Country' after the Second World War. Some of the first arrivals had settled in the overcrowded tenements of the North Kensington district alongside the working class British, Irish, Jews, Greeks and Spaniards. Here they faced exploitation by slum landlords and racial tension spurred on by the likes of fascist Oswald Mosley. Hostilities culminated in the 1958 Notting Hill Race Riots and the murder of Antiguan carpenter, Kelso Cochrane, by racists, the following year. Activists saw the carnival as a way of bridging cultural gaps, uniting the community and easing racial tensions. Emerging from this contested backdrop, Notting Hill Carnival has come to be acknowledged as a "joyous beacon of hope and unity" (Ferris 2010: 522).

The Notting Hill Carnival resonates with sense of belonging and togetherness and has been instrumental in laying a cultural heritage foundation for people of African Caribbean origin and their descendants in Britain today. For many, the event holds special significance as a "liberated territory" where virulent racism has been resisted (Ferris 2010: 521). Over 2-days in August every year, this corner of West London becomes an embodied zone where solidarity is openly embraced. This is particularly surprising amid ethnic tensions, rising hate politics and increased migration across Europe. It means the event has transcended its local social and political boundaries making a broader contribution to community cohesion. As Holder (2014) explains:

> These festivals are not organised by government and are community-led and community driven. They only happen whenever there is a collective community will and therefore, as they evolve in their urban contexts they fulfil that role of community and territorial cohesion.

The idea of collectivity, espoused here, illustrates the fact that the Notting Hill Carnival is about group action, individuals working together, relationships and cooperation. It is these practices that underpin the foundation for togetherness and solidarity of people cohering in a "collective community will", an interrelated effort (Holder 2014). Portraying such events as "community-led" and "community-driven" shows that the notion of cohesion is more than people coming together or merely a social inclusion function (Holder 2014). It is also about empowering people to make choices and having the "will" (Holder 2014) to create the type of environment in which they feel they belong and want to be a part of, irrespective of their circumstances. Holder's (2014) "collective community" is also a counter to the "increasing individualism", which has led to unease about social disintegration, conflict and crime, lack of respect for civic institutions, systematic marginalisation of certain social groups and their geographical concentration in poor areas (Turok and Bailey 2004: 144). In this sense, Holder's notion of community and territorial cohesion encompasses economic, social and environmental concerns; disparities and accessibility to services and opportunities, at both national and local levels, contemporaneously and in the future (Hamez 2005). Urban cultural heritage festivals are, therefore, not just one-dimensional entities, but multifaceted events incorporating spatial, sustainability, and temporal attributes of cohesion.

Whilst acknowledging Notting Hill Carnival's important economic and political role, Holder stresses that it is important for the event make a positive contribution to wider society: "If it does not do this, then it is just entertainment. Festivals such as Notting Hill far transcend that entertainment value and are important vehicles for self-actualisation" (Holder 2014). A sense of belonging is thus bound up with notions of cohesion, as it provides a rationale for a meaningful existence, of being part of or identifying with something and serving a purpose, both to one's in-group and society, more broadly.

In the foreword of his Strategic Review of the Notting Hill Carnival, Ken Livingstone, the former Mayor of London, argues that the event has "succeeded in promoting a fusion of cultures, people and customs" (GLA 2004: 6). This observation was borne out on the Sunday of Notting Hill Carnival 2014 when black carnival goers were visibly in the minority. Even though the event has had a history of predominantly attracting people of African Caribbean origin, this is no longer, strictly, the case. The diversity of people now attending Notting Hill Carnival is certainly reflective of Livingstone's fusion of cultures, people and customs. The vividness of intercultural interactions, different foods, musical genres, entertainment, dress, costumes, parades, languages, rituals, behaviours, and displays all occurring in the name of the carnival, produces strong images of unity. Citing Allport's (1954) contact theory, Lee et al. (2011) argue that positive, personal, and cooperative contact between different groups can reduce or eliminate prejudices. In this regard, events such as cultural heritage festivals, not only help minority groups maintain their own culture of origin, but also augment connections with the dominant population and other groups thus breaking down biases (Lee et al. 2011). This suggests that the Notting Hill Carnival provides a space where linkages extend beyond their bounds appealing to a diverse audience. Lee et al. (2011) argue cultural heritage festivals are an effective resource for promoting social harmony and integration. According to Holder (2014),

> The Notting Hill Carnival was incepted with the idea of bringing the 'black' community together. It was about racial integration. Remember the black community at the time had come from many different Caribbean islands and were not mixing. In time, this togetherness, the entertainment value and ethos of a celebration of freedom, appealed to others who subscribe to that spirit.

Even though Notting Hill Carnival is rooted in African Caribbean culture, it is something that "we want everyone to be a part of and enjoy", explains (Benn 2014), a trustee of Notting Hill Carnival Enterprise Trust. Providing the opportunity for people to experience other cultures, argues Benn, helps them appreciate their own, breaks isolation and broadens their worldview of what the world is all about; "The idea of the world as a melting pot of cultures all coming together is encapsulated in the Notting Hill Carnival" (Benn 2014). The idea of togetherness that Benn rationalises is bound up with notions of identity, in relation to what the event represents and cultural connectedness, in terms of the cultural heritage that is realised at the carnival. The event thus provides an embodied space where the journey from the past coalesces with the present materialising in a connected whole.

For Benn, the Notting Hill Carnival is a medium that amplifies awareness of African Caribbean cultural heritage across Europe and beyond. The event, which he describes as "inclusive and cohesive", is something he wants everyone to be a part of and to share with each other. While this objective corresponds with a sense of belonging, it also coincides with the carnival's perceived broader societal endowment. As the largest cultural event in London, Benn says Notting Hill Carnival has become synonymous with the UK's capital and is representative of the diversity that exists there. This suggests that the attachment to place inherent in the carnival embodies London as a whole and is not just about the Notting Hill enclave. This broader representation is part of the "festivalisation" of cities (Del Barrio et al. 2012: 243) with events becoming pluralised in terms of their economic, environmental, cultural, political, and social impacts on urban landscapes. Such is their influence that even though a sense of belonging is an important benefit of urban cultural heritage festivals, it is only one facet in a complex whole.

For some carnival performers or 'masqueraders' and costume designers, the Notting Hill Carnival is a perennial activity. Preparations usually start the day after the carnival ends with the selection of themes and costume designs for the forthcoming year. Most masqueraders are members of bands, each of which can number up to 500 or more people. More than 50 bands participated in Notting Hill Carnival 2014. The bands are diverse in terms of members, age, sex, race, code of conduct, etc. Costumes are categorised as background, frontline, individual, and king or queen designs. In bands such as London's United Colours of Mas (UCOM), costumes are priced in the region of £200–400 (background), £400–500 (frontline) and from £600 for an individual design. Throughout the year, bands hold regular carnival themed events for members and other activities such as trips or competition at other festivals around the world. The way bands operate means they are a key feature of the actual carnival event, source of participants, cohesiveness, and sustainability.

Jenny[1] is a member of UCOM and masqueraded in an individual costume at Notting Hill Carnival 2014. Now aged 30, she has been attending carnivals from as far back as she can recall. For her, being a member of a carnival costume band and actually taking part in the event itself, adds not only to cohesiveness, but also to her emotional and psychological wellbeing. She argues that playing mas in a scantily clad costume in front of thousands of people has helped to improve her self-esteem and confidence. Carnival has also led to a greater appreciation of her cultural heritage and other people's way of life. Jenny believes these considerations are key to the sustainability of carnival and in educating people about aspects of the cultural heritage that underpins events such as Notting Hill. She contends that attending the Trinidad and Tobago Carnival and taking part in the Berlin Carnival of Cultures has enlightened her about different cultures other than her own. Such is the increasing diversity of cultural heritage festivals; Jenny believes events like Notting Hill are assuming a fluid identity where cultural heritage, community and territorial representations have become blurred.

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[1] Not her real name.

> Berlin's carnival is called Carnival of Cultures and that is very interesting, because you go there as a Caribbean band and you are one band out of 50 different cultures. You've got skateboarders, you've got people from China, you've got people from Japan, you've got Jamaican people, you've got people wearing 1920s flapper girls, so depending on eras, cultures, styles; anything you want. You can have a float and that is represented and I think that's probably where Notting Hill is going. It is not gonna be typically a Caribbean carnival. It's gonna be more of a cultural, any culture represent–bring good vibes, bring good spirit; showcase who you are, what you are about: have a good time (Jenny 2014).

The fluidity of carnival, highlighted by Jenny, is supported by bands such as Holder's Notting Hill Carnival Roadshow, a commercial spin-off, which, like UCOM, operates throughout the year, as an entertainment touring company. The roadshow runs costume workshops, seminars, steel band hire, carnival catering, schools workshops, carnival design, and carnival management services. The company also participates in various festivals such as the Seychelles Carnival and the Abuja Carnival in Nigeria. As a by-product of Notting Hill Carnival, the continuous activities of such bands, is a major contribution to the sustainability and promotion of the London event. Holder argues that such attributes not only apply to sustainability, but also to cohesion. Preparations and activities associated with Notting Hill, she contends, means participants are building the cohesion and social capital in their own communities before they attend events.

> The biggest input that the carnival body make to that cohesion is to foster that sense of togetherness by bringing the disciplines and community together at least three to four times a year in joy, harmony and working towards the same goal of development of the carnival (Holder 2014).

These observations indicate different ways in which the cohesiveness generated by urban cultural heritage festivals is maintained beyond the moment of the event. The open-ended and multidimensional nature of festivals also gives rise to transnational networks or pluralised cultural heritage forms where various traditions are merged under a single banner, none preeminent among the others. It means festivals, though situated in terms of place identity, are neutral independent zones of "joy" where happiness among different people is the prevailing theme (Jaeger and Mykletun 2013: 224). This embodied space, where notions of belonging and togetherness are transformed, contested and communicated, may have as much to do with the sustainability of urban cultural heritage festivals, as any other factor.

Another impact of Notting Hill is its social enterprise contribution. One of the reasons the carnival has enduring impact within the local community is because it generates jobs and activity all year round. This is typified by Mahogany, a limited company run as a not-for-profit social enterprise and receiving funding from the Arts Council of England and Wales. The company first appeared as a costume band at Notting Hill Carnival in 1989 and contributes to the business of carnival and preserving its cultural heritage by making costumes all year round for various events across the world. A main focus of the project is helping underprivileged young people develop their skills and build greater confidence through the art of carnival.

5 Challenges to Community Cohesion

One of the major concerns of participants in this study is the indication that the Notting Hill Carnival has become a victim of its own success. The district in which it is held is a high-density residential area and has to accommodate more than one million people, some stimulated through alcohol or other substances, causes problems in relation to anti-social behaviour, public convenience, overcrowding, litter, etc. The area has also been subjected to increased gentrification. In the mid-nineteenth century, the outer London district became home to the capital's wealthier inhabitants fleeing the inner city only to become a dilapidated enclave in the 1950s housing migrants and those experiencing extreme poverty (Martin 2005). The area, which was seen as an area of deprivation and racial tension, has today gained the reputation as one of London's most fashionable suburbs with homes belonging to the capital's high-flying business people, celebrities and politicians including the Conservative Prime Minister David Cameron and Chancellor of the Exchequer George Osborne. A popular film, which bears the name of the district, has garnished the area's international appeal. Such has been the metamorphosis of Notting Hill that there are fears the area may not only lose its carnival, but also its identity.

Remybyn,[2] who is in her 40s, has lived in Notting Hill and other parts of North Kensington all her life. She runs a stall outside her home selling barbecued gourmet burgers. She confessed that the venture was not purely for financial gain, but a way of being involved in carnival and providing a local meeting point for fellow residents, some of whom had contributed to the enterprise by giving her disposable tableware products, extending storage space to her, and generally lending a helping hand where needed. Remybyn insists the area is a nice place to live.

> You could leave your house in the morning and say you are going to the shops and not come back for two or three hours or even longer on a sunny day. You might bump into people and you stop and chat or you might know a stallholder or people you see everyday; you might not even know their names, but you stop and talk or they talk to you. It is lovely, a really lovely area to live in particularly in the summer when it is warm, you will find everyone out in the streets either sitting on their doorsteps having a cup of tea or drinking or just milling around the market—it is just a nice place to be, a safe place to be (Remybyn 2014).

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[2] Not her real name.

Even though Remybyn insists that the community spirit in the area exists all the time, she argues that things are changing. The popular Portobello Road Market, which she contends, is the hub of the community, like other small businesses in the area, is facing competition from the high street chains springing up in the district:

> One of the charms of the area, until recently, is we have managed to resist a lot of high street chains in Portobello Road. We are made up of a lot of independent shops that are run by local people. We have market traders whose family have been there for 100 years, but now also own multi million pound houses, because their family bought them back in the fifties or sixties and those properties are now worth a fortune, and yet the family still trade on the markets. It is such a diverse community. When I first came to the area, I could not get a cab to drop me to certain parts of the area, All Saints Road, for instance, been one of them. When I lived there, for a brief period, with a friend, it was known as the 'frontline' and the cab driver would drop me two or three streets away and say, 'Am not going there luv' and leave me with a carry cot and a young baby, but now you could go down there and find Prince Harry parked in the Rum Kitchen and it is quite a well to do road—there has been a lot of change (Remybyn 2014).

Not all the recent changes in Notting Hill can be pinned on the carnival; Remybyn argues that the locating of several high street chains in the area has meant increasing commercialisation, which could lead to a loss of "community feel". She also revealed that recent newcomers to area "hate the carnival" and this has added fuel to the speculation that the authorities want to move the carnival to Hyde Park. Losing the event and the on-going gentrification would suggest a complete alteration of the social dynamics of Notting Hill. In his study in issues related to neighbourhood change, place and identity in Notting Hill, Martin (2005) noted that working class people were more concerned about localised issues such as crime, drugs, overcrowding, local authority neglect, new migrants, and gentrification than emotional attachment to place. His middle class respondents, perhaps fixated by aesthetic appeal, appeared more concerned with the loss of traditional landscapes (Martin 2005). While such findings contradict claims (Ferris 2010; Waitt 2008) that newcomers—deemed to be prosperous homeowners—are opposed to urban cultural heritage festivals such as the Notting Hill Carnival, they also reveal the contestation surrounding such events. It is clear that the increasing numbers of such festivals being staged is a testament to their inherency to all societies in terms of celebrating and promoting cultural heritage and identity, regenerating communities, creating jobs and economic opportunities and attracting distinctive audiences. However, due to their heterogeneity in terms of cultural, social, economic, and environmental contribution, urban cultural heritage festivals reside in an embodied space in which notions of belonging and cohesion are transformed, contested, and communicated.

6 Conclusion

The findings of this study suggest the increase in urban cultural heritage festivals can be linked to an appreciation of activities promoting greater diversity and a sense of belonging and cohesion in urban spaces. The study suggests that urban cultural heritage festivals such as London's Notting Hill Carnival can be effective tools in building strong, coherent and balanced social relationships among diverse populations. Formed to counter tension and unease, the event has been instrumental in laying a cultural heritage foundation for people of African Caribbean origin and their descendants in Britain today. Moreover, the organisers' mantra of inclusivity and cohesiveness has engendered the carnival to the wider community in terms of participation and attendance. Findings suggest urban cultural heritage festivals such as Notting Hill Carnival thus provide an embodied space in which ideas of belonging and community and territorial cohesion are transformed, contested and communicated. This indicates that participants are attracted to the event because they can identify with its rationale in terms of their co-existence with their in-group and society more broadly.

The findings further indicate that urban cultural heritage festivals such as Notting Hill are multifaceted activities providing economic benefits, social empowerment and sustaining cultural heritage. However, the study was limited in that the broader economic benefits of the Notting Hill Carnival were not fully explored and neither were the effects of notions such as place attachment and gentrification on the hosting of such events. There is a need for more in-depth and substantial research to examine critical questions about how different sub-groups within local communities interact with large-scale cultural events, especially as large urban populations tend to have a mix of long-established residents alongside many new arrivals and transient groups. There are also further questions about how festivals are organized, how decisions are taken and how diverse groups (according to age, gender and ethnicity, for instance) can be involved. Future research could examine these areas and also investigate the cohesiveness of urban cultural heritage festivals in districts that are not as diverse as Notting Hill to gain a more holistic picture of their influence on community and territorial cohesion.

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References

Attanasi, G., Casoria, F., Centorrino, S., & Urso, G. (2013). Cultural investment, local development and instantaneous social capital: A case study of a gathering festival in the South of Italy. *Socio-economics, 47*, 228–247.

Benn, L. (2014). Director of London Notting Hill Carnival Limited.

Bryman, A. (2008). *Social Research Methods* (3rd ed.). Oxford: Oxford University Press.

Dabydeen, D. (2010). *Notting Hill Carnival.* Coventry: Knowledge Centre, University of Warwick.

Del Barrio, M. J., Devesa, M., & Herrero, L. C. (2012). Evaluating intangible cultural heritage: The case of cultural festivals. *City, Culture and Society, 3*, 235–244.

Eizenberg, E., & Cohen, N. (2014). Reconstructing urban image through cultural flagship events: The case of Bat-Yam. *Cities, 42*, 54–62.

Union, E. (2013). *EU cohesion policy contributing to employment and growth in Europe'*. Social Affairs & Inclusion: Directorates-General for Regional & Urban Policy and Employment.

Ferdinand, N., & Williams, N. L. (2012). International festivals as experience production systems. *Tourism Management, 34*, 202–210.

Ferris, L. (2010) Incremental art: negotiating the route of London's Notting Hill Carnival. Social Identities, 16 (4), 519-536

Getz, D. (2010). The nature and scope of festival studies. *International Journal of Event Management Research, 5*(1), 1–47.

Grappi, S., & Montanari, F. (2010). The role of social identification and hedonism in affecting tourist re-patronizing behaviours: The case of an Italian festival. *Tourism Management, 32*, 1128–1140.

Authority, G. L. (2004). *Notting Hill Carnival: A strategic review*. London: Greater London Authority.

Hamez, G. (2005). Territorial cohesion: How to operationalize and measure the concept? *Planning Theory and Practice, 6*(3), 400–402.

Holder, C. (2014). Former Chief Executive of the Notting Hill Carnival Trust.

Jaeger, K., & Mykletun, R. (2013). Festivals, identities, and belonging. *Event Management, 17*, 213–226.

Jeong, S., & Santos, C. A. (2004). Cultural politics and contested place identity. *Annals of Tourism Research, 31*(3), 640–656.

Laslett, R. cited by Blagrove Jr, I. (2014, August 7) 'Notting Hill Carnival—The untold story'. London Evening Standard.

Lee, I., Arcodia, C., & Lee, T. J. (2011). Benefits of visiting a multicultural festival: The case of South Korea. *Tourism Management, 33*, 334–340.

Martin, G. P. (2005). Narratives great and small: neighbourhood change, place and identity in Notting Hill. *International Journal of Urban and Regional Research, 29*(1), 67–88.

Matheson, C. M., Russell Rimmer, R., & Tinsley, R. (2014). Spiritual attitudes and visitor motivations at the Beltane Fire Festival, Edinburgh. *Tourism Management, 44*, 16–33.

Muir, H. (2011, August 25). The importance of the Notting Hill carnival'. *The Guardian.*

Novy, A., Swiatek, D. C., & Moulaert, F. (2012). Social cohesion: A conceptual and political elucidation. *Urban Studies, 49*(9), 1873–1889.

Organ, K., Koenig-Lewis, N., Palmer, A., & Probert, J. (2014). Festivals as agents for behaviour change: A study of food festival engagement and subsequent food choices. *Tourism Management, 48*, 84–99.

Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. London: Sage.

Quan-Haase, A., & Martin, K. (2013). Digital curation and the networked audience of urban events: Expanding La Fiesta de Santo Toma's from the physical to the virtual environment. *International Communication Gazette, 75*(5-6), 521–537.

Suto, A., Salamin, G., & Szabo, P. (2010). Issues of territoriality and territorial cohesion in the revision of the TSP and the territorial agenda—A sort of connection between geography and regional. *Forum Geografic, 9*, 145–154.

Tompsett, A. R. (2005). 'London is the place for me': Performance and identity in the Notting Hill Carnival. *Theatre History Studies, 25*, 43–60.

Turok, I., & Bailey, N. (2004). Twin track cities? Competitiveness and cohesion in Glasgow and Edinburgh. *Progress in Planning, 62*, 135–204.

Nations, U. (2012). *UN System Task Team on the Post-2015 UN Development Agenda—Culture: a driver and an enabler of sustainable development*. New York: Author.

Waitt, G. (2008). Urban festivals: Geographies of hype, helplessness and hope. *Geography Compass, 2*, 513–537.

www.thelondonnottinghillcarnival.com. Retrieved November 26, 2015.

Tools You Can Trust? Co-design in Community Heritage Work

Simon Popple and Daniel H. Mutibwa

Abstract
This chapter will examine the role of co-design methods in relation to the recent *Pararchive Project* (http://pararchive.com) that took place between 2013 and 2015 at the University of Leeds. It will draw on the experiences of conducting the project and broader critical frames to examine the nature of collaborative working in the field of cultural heritage and storytelling. It will outline the lessons we have learned from the process and the ways in which the relationships between citizens and cultural institutions are central to working in the heritage sector. It seeks to advocate for the necessity of collaborative methods in the creation of cultural heritage tools that are trusted and adopted by communities.

1 Introduction

The *Pararchive* project involved collaboration between a range of communities and two large institutional partners, the Science Museum Group and the BBC Archive. The project developed a platform to facilitate storytelling, research and to provide curatorial tools. It was co-designed and tested by communities in conjunction with academics, curators and technology developers. Using co-production methods in combination with innovative storytelling workshops and creative technology labs, the project demonstrates the necessity of adopting co-working approaches to the problems of cultural heritage curation, engendering democratic encounters with official culture, and developing new partnerships able to consider the challenges of the digital archive. The project resulted in the creation of the new storytelling tool *Yarn* (http://yarncommunity.com) and offers a series of insights into co-creation

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methods, the role of institutional voice, concepts of democratisation of institutional culture, audience, creative intervention and the nature of open digital public space.

2 Nature and Origin of the Project

The idea for *Yarn* originated as the result of frustrations encountered on a previous community-based project that had been considering the reuse and repurposing of a series of archived films owned by the BBC relating to the 1984/1985 Miners' strike (Bailey and Popple 2011). This project, *Strike Stories*, worked with community members drawn from opposing sides in the strike to examine memories and archival materials associated with the strike. In particular it considered issues of the ownership of cultural memory and the desire of participants to directly use archival materials to tell their own stories and add context to what they often felt were misrepresentative materials. The project surfaced a strong community desire to take ownership of cultural resources that represented them and to be able to use them in their own commemorations of difficult events and as a basis for developing their own collective histories. Community members wanted to embrace a clear form of affective labour and work collaboratively with archival institutions to co-curate resources and add their own knowledge and experiences.[1] *Strike Stories* offered a strong proof of concept and demonstrated the willingness of citizens to undertake cultural heritage work on their own terms. It also demonstrated the willingness of organisations like the BBC to work collaboratively to open up resources and explore new models of access and consider issues of copyright and models of community labour or User Generated Content (Popple 2013, 2015).

Nevertheless, within the scope of *Strike Stories* we were not able to fully realise these aspirations and were limited in time and resources. We were able to facilitate the making of a series of films by project members, which revealed their own interests and concerns and offered a response to the archival record. However we were only able to do this for a very limited number of people and were not able to incorporate original archival elements in their films due to copyright restrictions. Thus in designing the *Pararchive* project we were keen to draw out these frustrations and work with citizens and cultural institutions to build tools that would allow for mass participation ideally unfettered by copyright restrictions and with an equality of experience and ownership. The potential of participatory media (Jenkins 2006; Jenkins et al. 2006) to allow for greater equality and cross community operability was something we regarded as possessing democratic potential within a specifically configured open cultural space. The aspiration to create a form of genuinely open digital space, based on Habermas's concept of the public sphere, was an attractive but problematic proposition (Cornwall 2008). The digital sphere is only an open space in so far as Internet architectures, governments and Internet providers allow (Roberts 2009). However we were keen to explore the concept in relation to an ‘open space’ sitting between citizens and communities on the one hand and cultural institutions on the other. Both traditionally operate in different or restricted digital spheres and through strict protocols. As Dovey has forcefully noted, ‘the dynamics of collaboration and exploitation begin to shape new kinds of public space; micro-networks of solidarity, education and intervention’ (Dovey 2014, 20).

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[1] Details of the project and the *Strike Stories* films can be accessed here: http://media.leeds.ac.uk/research/research-projects/strike-stories-films/

Citizens are currently invited into institutional spaces, such as museum web spaces, to view and perform certain defined and restricted activities. They may be able to access catalogues, view selected portions of collections and are subject to the institutional interpretive voice. They are often severely limited in what they can do creatively and curatively. Acts of participation, when they are permitted, are solicited, controlled and institutionally framed. Our aspiration was to break through these traditions and protocols. To achieve this we quickly recognised that co-production methods were essential and that we needed to ensure a parity of ownership within the project (Light and Millen 2014).[2] Using methodologies that are being developed within the AHRC funded *Connected Communities Programme* and drawing on the experiences of a broad coalition of community research projects we designed the *Pararchive* project.[3] The name reflected the concept of a parallel archive, one in which there was an equality of ownership and responsibility for interpretation.

The project, based at the School of Media and Communication at the University of Leeds, subsequently worked with a diverse range of communities to design and build a digital platform that would allow them to tell stories, present their own histories, and research and work collaboratively (Popple 2015). The project team aimed to co-design and build a range of digital resources that could enable communities to develop expertise and resilience. We wanted them to become expert in the telling of their own stories, in communicating their own histories, and sharing knowledge; resilient in developing confidence, forging new communities of interest and affinity, and sharing expertise. We also wanted them to be able to draw on a broad range of archival and cultural materials to facilitate this work. Our groups worked in partnership with academics from Leeds and York University, technology developers from *Carbon Imagineering* and curators, archivists and IT specialists from the Science Museum Group and BBC Archives to create the new digital resource, *Yarn*.

Over the course of the eighteen-month project we created a series of tools that were designed to be intuitive and flexible, aiding users to develop projects that incorporated online heritage materials and allowing them to add their own materials in the form of photographs, films, text, and sound recordings. We wanted to orchestrate existing web functions and innovate new tools that would allow people to work on a single site and draw together disparate and unconnected bodies of content. We also wanted to create a space in which every member could create and curate their own collections of materials, and where institutions like galleries and museums could post collections for public use and gather associative data.

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[2] This guide can be downloaded from the Community Media website here: http://www.commedia.org.uk/what-we-do/projects-partners/connected-communities-media-collection/

[3] https://connected-communities.org.

Once the communities had determined what they wanted to explore we then engaged a range of institutional partners, most notably the Science Museum Group and BBC Archives, to begin to provide content and materials to form the basis of these projects and allowed these institutions to explore their own relationships with communities and consider ways in which their content could be published and enhanced through crowdsourcing and public expertise (Boon 2011; Lynch 2011).

The resulting resource *Yarn* facilitates a number of activities for users and can be summarised in the following manner:

For citizens and communities it means that they can:

1. Tell stories, research cultural and historical themes, create collections, campaign and be creative;
2. Develop links with other people and other communities that share similar interests and concerns;
3. Develop community projects and host collections of community and personal materials including films, photographs and sound files;
4. Keep control of their own intellectual property (IP) by hot linking their own content from third party sites e.g., Historypin, Flickr and Facebook;
5. Explore stories and collections created by other users;
6. Showcase knowledge and personal expertise.

For cultural organisations it means that they can:

1. Feature and promote their collections through the resource without IP transfer;
2. Have access to an open workspace that can create new links to complementary collections and crowd source public expertise;
3. Source content metadata and receive analytics about who is using your content;
4. Run curation or research projects and encourage community use of their digital collections.

For researchers it means that they can access:

1. A set of tools through which to run community projects;
2. A place to feature projects and creative project archives;
3. A means of identifying communities they might want to work with;
4. A collaborative partnership with communities and cultural heritage organisations.

3 Co-Design Approaches on the *Pararchive* Project: Relevant Theoretical Perspectives from Community-Based Participatory Research and Crowdsourcing Literature

Pararchive was conceived as a highly experimental, explorative and collaborative project from the outset. It was experimental in that it afforded anyone the opportunity to contribute ideas and offer creative input to develop, test and critically engage with the production of *Yarn*. It was explorative in the sense that it empowered stakeholders to draw on, add, mix and curate resources around shared cultural, historical and thematic interests and affinities from a wide range of sources. From a collaborative vantage point, *Pararchive* linked local communities with researchers, public cultural institutions, and technology partners concerned with developing collaborative research agendas. It actively fostered the innovation of research practices and knowledge exchange partnerships that continue to develop and expand.[4] Out of this emerged a range of digital tools and a repository of personal and institutional resources, all of which were researched, co-designed, and evaluated by all project stakeholders that included a wide range of other users. We were guided by the principle that this was a collaborative venture at all levels and that everyone involved had equal status. For example we agreed that any subsequent IP created was equally owned, and that we would evolve post project management structures to direct future developments.[5]

In doing so, *Pararchive* made effective use of a number of ways of thinking and working that drew on a host of relevant approaches and theoretical perspectives selected from existing literature, especially in the areas of community-based participatory research (CBPR)[6] and crowdsourcing. To begin with, CBPR—which has its origins in the field of public health especially in the Americas—is understood as a collaborative (and sometimes action-orientated) approach to conducting research on an equal footing amongst academic researchers, community group members, local community organisations and other stakeholders such as local government authorities (Israel et al. 1998; Kindon et al. 2007; Minkler and Wallerstein 2008; Hacker 2013). As Israel et al. (2008, 48) note in their most recent work, the partnerships, 'contribute "unique strengths and shared responsibilities" to enhance understanding of a given phenomenon and the social and cultural dynamics of [local communities] and to integrate the knowledge gained with action [geared towards achieving a common goal].'

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[4] New projects have developed between our original communities, including an audience in residence project between the Ceramic City Stories group and the Science Museum in London (See: http://ceramiccitystories.postach.io/page/science-museum) and *Island Stories* between Brandanii Archaeology and Heritage on Bute and Leeds University to explore the value of cultural heritage tourism facilitated by improved digital connectivity (see: http://www.discoverbutearchaeology.co.uk/?p=992).

[5] The project team are in the process of developing a CIC (Community Interest Company) https://www.gov.uk/set-up-a-social-enterprise.

[6] It is worth noting that CBPR has been referred to in different terms owing to specific geographical contexts. In North America, for example, it is synonymous with Community-based Participatory Action Research (CBPAR) and Participatory Action Research (PAR). Participatory Development (PD), Participatory Rural Assessment (PRA) and Inclusion Research (IR) appear to be the more commonly applied terms to describe CBPR in the global South while Participatory Community Research (PCR) is one term among many others commonly used in Australia. In the United Kingdom, CBPR is closely associated with the terms Action Research (AR), Community Engagement and Co-production Research. Janes (2015, 2) reminds us that whatever the semantic and operational differences these terms/approaches may exhibit, they all demonstrate equitable partnerships bound by a shared commitment to conduct a collaborative enquiry and/or to address a common problem. (Wallerstein and Duran 2008).

Both drawing on a synthesis of earlier scholarship and significantly expanding it, Unertl et al. provide a useful summary of the key principles of CBPR based on their recent comprehensive research in the field of health informatics[7]:

1. Understanding the existing strengths and resources within the community. The community, which has one or more unifying aspects, brings resources to the table. These resources are valued for their unique contribution to the research process;
2. Empowering both academic and community partners through co-learning opportunities, with awareness of social inequalities. Decisions are made in an equitable manner, and activities are planned and implemented collaboratively. Opportunities are made for partners to learn about community needs, strengths, and existing social inequalities;
3. Assisting community-based organisations and community members with building technological and research capacity. The project develops [. . .] software infrastructures [. . .] and technological skills. Community members have the opportunity to learn about research processes and methodologies;
4. Building collaborative partnerships in all research phases. The community is not just included during data collection, but rather is included from problem definition through results dissemination. Resources are accorded to partnership building efforts;
5. Defining ownership of technology-related project outputs and planning for technology maintenance. Ensuring that all partners contribute to and agree with plans for technology ownership through all phases of research is important to building trust in partnerships and enabling equitable access to project outputs. Because information and technology needs evolve over time, projects also need to ensure that plans are in place for maintenance of technology products;
6. Viewing research and partnership building as a cyclical and interactive process. Collaboration between researchers and the community is not a 'one-off' activity. Activities related to building and maintaining academic-community partnerships and refinement of research goals occur iteratively;

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[7] Although the research from which these principles were derived was primarily grounded in the area of public health, the principles can be replicated in other contexts. This replicability informed the co-design approaches adopted on the *Pararchive* project.

7. Integrating user-centred design or participatory design into CBPR projects. User-centred design and participatory design are complementary approaches to CBPR and integrate well into the iterative, participatory framework developed in CBPR projects;
8. Integrating research results for mutual benefit. The research team builds new knowledge and incorporates the knowledge into action through iterative cycles;
9. Incorporating positive and ecological perspectives into research and technology design/deployment. [. . .] Technologies should be deployed within, and leverage, trusted social networks;
10. Disseminating knowledge to all partners through multimodal approaches that build technical capacity and provide opportunities for additional [. . .] research. Presenting knowledge through [accessible] approaches can lead to better understanding of research results and wider dissemination of results in the community (Unertl et al. 2015, 11).

Before we look at how these CBPR principles informed thinking and practice on the *Pararchive* project, it is necessary to engage with crowdsourcing[8]—the second co-design approach embraced in the development of *Yarn* and associated digital tools. Commonly believed to have been coined by Jeff Howe in his *Wired Magazine* article written in 2006 and subsequently developed further in a series of ensuing articles and book he published in 2009, crowdsourcing has come to be known as a primarily web-based approach by which firms and organisations outsource problem-solving or solicit potentially feasible solutions to specified problems from an ideally diverse crowd via an open call (Howe 2006). The focus of subsequent scholarship has tended to characterise crowdsourcing as a refreshingly different, albeit, exploitative web-based business model situated primarily in business studies and creative industries research (Rossiter 2006; Leimeister et al. 2009; Rouse 2010). However emerging work from other fields and disciplines—such as architecture and planning, information management, and social marketing and health communication—is increasingly making use of the approach to advance respective conceptual underpinnings and practice (Nash 2009; Zhao and Zhu 2012; Parvanta et al. 2013).

More pertinent to our discussion here is the potential use of crowdsourcing as a model for problem solving beyond the business sector, academic disciplines and other professional boundaries (Jones et al. 2008). Of this, Brabham (2008, 75–76) observed that the approach is “distributed beyond the boundaries of professionalism” where ‘non-experts’ and/or ‘amateurs’ can contribute creative solutions

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[8] According to Howe (2009, 280–282), there are several forms of crowdsourcing, namely collective intelligence and/or crowd wisdom, crowd creation, crowd voting, crowd funding and any combination of (some or all of) these. We adopted relevant aspects of collective intelligence (e.g., soliciting comments, views, knowledge and other input from all the *Pararchive* project stakeholders), crowd creation (i.e., facilitating active engagement in design and discursive processes through the different stages of the project) and crowd voting (seeking stakeholders' judgement and preferences on, say, interface design and language use) Surowiecki (2005). For a general overview of each of the specified forms, visit http://www.crowdsourcing.org/

"toward non-profit applications for health and social and environmental justice" among other areas. One such area is heritage—a sector that has recently witnessed an emergent body of literature on crowdsourcing based on co-curatorial and participatory rather than business transactions (Boon 2011; Owens 2013; Ridge 2013, 2014; Popple 2015). Its deployment within the cultural heritage sector can, we believe, have a more balanced and egalitarian focus and allow for an exchange of expertise and content to create new knowledge. Where the success of crowdsourcing in the business world has hinged on tapping into the knowledge of the recruited 'crowd' in product and service development processes, such success in the heritage sector has manifested itself through the 'crowd's' contribution to adding value to digital cultural heritage collection content (Owens 2013), ultimately improving this for public benefit (Proctor 2013). It is this understanding, particularly its emphasis on the non-exploitative tenets of crowdsourcing, that guided co-design work on the *Pararchive* project.

Of the ten features or 'rules' Howe (2009) listed that characterise crowdsourcing, we have selected the six that we believe exemplify our approach to collaborative working on *Pararchive* and emphasise the need to:

1. Pick the right model;
2. Pick the right crowd [or—in the specific context of *Pararchive*—better rephrased as: identify the relevant stakeholders -for example, local community groups, institutional partners, technologists and research team—to work with];
3. Offer the right incentives;
4. Keep it simple and break it down into easily understandable parts;
5. [Accept that] [t]he community is always right;
6. Ask not what the crowd [or the selected stakeholders] can do for you, but what you can do for the crowd [or stakeholders] (280–289).

From a conceptual point of view, both CBPR and crowdsourcing as forms of collaborative methodologies, draw on a number of instruments to enhance engagement. In turn, as the argument goes, engagement—if harnessed well—unleashes creativity, energy and optimism in engaged partners. Consequently it lays the foundation of increased interaction, discussion and online and offline action, all of which are crucial aspects in working towards achieving set goals and thereby effecting desired change (Denison and Stillman 2012). This is especially so—as in the case of the *Pararchive* project—where such collaborative enquiries and problem-solving challenges comprise "designing, developing, managing and interacting with information systems, optimising the use of [digital] technologies and managing [a wide range of content]" (McKemmish et al. 2012, 985). But in practice, it all starts with clearly understanding and defining what the enquiry to be undertaken is seeking to achieve and/or what the problem to be solved is.

As noted above, the key overarching objective[9] of the *Pararchive* project was to co-design and co-produce a new ‘open’ access digital resource the aim of which was to facilitate engagement with, and use of, public archival resources for storytelling, historical research and creative practice. The thinking was that the resource would enable individuals and local community groups to research and document their histories via the creative linking of their own digital content (film, photographs and other ephemera) with archival material from public institutions such as the BBC and the Science Museum Group (Popple 2011). Crucially this involved us in an extended consideration of the transfer of IP and the copyright implications of collaborative practice and the value of labour in this context (Kennedy 2011). All parties were concerned with ownership of content. On the one hand communities were unwilling to surrender content to large institutions and see their materials ingested on a remote server over which they had no control or right to redress. On the other museums and galleries, often handling third party materials themselves, were concerned with the implications of publishing material not covered by creative commons models—especially when creative re-purposing or re-authoring was an intended consequence of collaborative work.

The outcome of these negotiations was a consensus of working in a context in which there was no direct transfer of IP and in which institutional and private content could be linked from respective third-party sites through the use of hotlinks and orchestrating text and tagging. In a similar manner there was to be a collective approach to the ownership of content created on the site, with full accreditation of the ownership of stories and referenced materials. Authors and content providers retained the right to edit and ultimately remove materials, securing a sense of individual ownership that would engender trust and confidence in the platform and prevent the exploitation of resources and individuals.

Similarly, the recognition of the value of labour in such creative endeavour was crucial to establishing an equality of experience and opportunity. In implementing this consideration it is useful to situate our experience in relation to current critical framings of ‘free labour’ and exploitative practices often misleadingly presented as mutually rewarding. In his discussion of emergent ecosystems centred on new online collaborative documentary practices, Dovey (2014, 11–32) presents an analysis of critical positions perfectly applicable to other forms of collaborative labour in the cultural heritage sector. Considered within the context of a documentary ecosystem, he argues that assessing who is exploiting whom, is perhaps the wrong question to ask. The assumed inequality of labour and reward predicated by significant post-Marxist critiques is not enough to understand what is happening in new forms of collaborative affective labour, and that a more nuanced understanding is necessary to fully explain engagement and innovation. These he characterises as “new patterns collaboration” that constitute a “new ecosystem” where “the mutuality of exchange creates the value that makes the system itself coherent and meaningful" (Dovey 2014, 21). His model of a negotiated and self-defining system of rewards is borne out in our experiences of working with and across communities and in differing practices and aspirations.

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[9] For a detailed discussion of the other key overarching aims of the *Pararchive* project, see Popple (2015).

Given the complexity of this undertaking in terms of accommodating the varying interests and needs of both local community groups and institutional partners, it was essential to bring on board a technology team that had a vested interest in connecting people from different backgrounds and varying levels of technical capability and digital experience.[10] Our experienced technology team, assembled through *Carbon Imagineering*, were drawn from commercial backgrounds and had worked for large multi-nationals such as Orange. They were excited by the prospect of being able to go beyond the traditional practices of responding to pre-determined briefs and being able to work with and for clients who would develop the specification with them. This challenge to orthodox working patterns allowed the *Carbon* team to explore new ways of working and helped define the innovation of the technology lab model that characterised their working practice with our parent communities. Likewise, it was important that a research team was assembled that—for the most part—shared the affinities and agendas of the rest of the project stakeholders.

As noted in Mutibwa and Philip (2014), four local community groups[11] situated in three different regions in the U.K. were at the heart of *Pararchive*. In line with the aim of enabling storytelling, historical research and creative practice, two of these (*Brandanii Archaeology and Heritage* and *Ceramic City Stories*)—based on the Isle of Bute in Scotland, and Stoke-on-Trent respectively—were heritage-focused while the other two (*Arduino MCR* and *Bokeh_Yeah!*) both from Manchester were more creative and technology-orientated. Although the groups exhibited different foci, the one aspect that they shared in common was that they actively engaged with issues in their respective locales that mattered to them based on the extensive local knowledge and social networks that they possessed. These factors—coupled with the geographical spread—rendered them suitable for collaboration.

Through regular technology laboratory workshops over an eighteen-month period, *Carbon Imagineering*, along with the research team, worked with the respective community groups to identify any storytelling and historical research projects that individual members were interested in pursuing and where possible, to look for connections among these. An early indication of the potential of this approach emerged in the joint interests between our Bute and Stoke-on-Trent groups that centred on industrial archaeology and ceramics history.[12] As observed elsewhere and in alignment with CBPR principles, the initial workshops were designed to:

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[10] Digital inclusivity was a driving concern and led to the development of the supplementary *Island Stories Project*. http://www.buteman.co.uk/what-s-on/leisure/leeds-team-in-bute-digital-heritage-visit-1-3554161.

[11] Visit the following links for more information about each of the four community groups: http://www.discoverbutearchaeology.co.uk/; http://ceramiccitystories.org/about; https://www.facebook.com/ArduinoMCR; https://www.facebook.com/BokehYeah.

> build good working relationships and chemistry with the four *Pararchive* community groups in the co-design lab workshops we held, something that was instrumental in helping us listen to group members' research interests and affinities, understand their aspirations and motivations, and support them [. . .] to tell their stories (Mutibwa 2014, no pagination).

Out of these early conversations arose the input used to design the initial interactive prototype versions of *Yarn* as well as recurrent themes that centred around "archaeology, dairy farming, conservation of natural resources and landscapes, wildlife, urban greening, genealogy, ceramics and pottery, reminiscence and memory, digital and music heritage, as well as the exploration and digitisation of archives" (Mutibwa and Philip 2015, 4).

Ensuing workshops concentrated on two main aspects, namely story-building exercises; and prototype testing. The former involved structuring stories in the form of blocks or events (metadata about dates, places, people), artefacts (which enrich/support the story, for example, photographs, audio-visual content) and connectors (which link the blocks/events together) while the latter comprised inviting project stakeholders and numerous potential external users and groups to test the early interactive prototypes for functionality and suitability (Mutibwa and Philip 2014). In tune with the outlined CBPR principles and crowdsourcing rules above, this move helped integrate key aspects of user-centred design and/or participatory design, especially as far as the prototyping workshops and functionality evaluations of users were concerned. During the various co-production and development phases of *Yarn*, the *Carbon* team put in practice what it preached by responding positively to the needs, anxieties and preferences of the broad range of potential users, thereby ensuring that *Yarn* became a truly and easily navigable resource for the wider public to use.

4 Case Study

To understand how we applied these principles we will briefly consider Ceramic City Stories group (CCS) based in Stoke-on-Trent as an illustrative example. CCS members identify, explore, and tell stories about the people, culture, buildings and urban environment that continue to define Stoke-on-Trent as the unique ceramic city. Often revealing a local, national and even international context, the stories span at least three centuries and recount the history of the Potteries with a particular focus on coal mining, on the production of distinct ceramic ware (e.g., cutlery, vases, jars), and on heavy clay products (e.g., tiles, chimney pots). Furthermore, the stories engage with how associated traditions, customs, values, practices and myths have become inextricably intertwined with the lives, identity, and memory of the people from Stoke over time. Within the context of *Pararchive*, we explored the stories that community members wanted to tell, identified artefacts they wanted or needed to use to support the stories, and examined possible connections between the stories.

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[12] Our communities developed new relationships, identifying common interests, and began working together and sharing knowledge and resources. For example, the famous Victorian toilets on the key side at Rothesay on Bute were manufactured in Stoke-on Trent and an exchange soon began between these two distant communities about its history and shared heritage. A tweeted photograph of the toilet ceramics was almost immediately responded to with information about the ceramic and a picture of the factory in which it was made several hundred miles away. http://www.bute.me/victoriantoilets/

One such story wove together family and working life history in the Potteries. It told the story of a woman who—as an eleven year-old along with her family—was evacuated from London during the *Blitz* and relocated to the Potteries. Research into her life conducted by her daughter–and a CCS member—drew on a range of sources: anecdotal accounts and experiential knowledge of fellow group members within the community lab workshops; conversations with family members and other people from the Potteries who knew and worked with her; family photo albums; archived logbooks at the school she attended; local history websites; audio-visual content provided by the BBC through *Box of Broadcasts*; as well as inspiration from and access to a wide range of medical, ceramic and sanitary ware collections stored at the Science Museum but originating in the Potteries.

The family and working life details that she gathered about the period of her mother's past were new to her and she had been unaware of them until beginning work on *Pararchive*. This story is only one among many that highlight the energy and commitment to engagement with cultural heritage resources on *Pararchive* and played a key role in shaping and influencing the co-design of *Yarn* at all levels.

5 Institutional Spaces and Co-working

The success of the project primarily rested with our community partners, but was strengthened and guided by the support of the project's institutional partners—the Science Museum Group and the BBC Archive. Their provision of expertise[13] and content not only helped enrich many of the storytelling and historical research projects, but it also provided a model through which local communities and public cultural institutions could reconfigure the ways in which they relate to each other with a view to maintaining long-lasting collaborative partnerships. Public cultural organisations now recognise the role that the differently-situated local community groups and interested members of the wider public can play in adding value to historical and cultural assets in a way that ensures the on-going relevance of such assets. This recognition of and openness to collaborative engagement—as prescribed by some of the specified CBPR principles and crowdsourcing rules above—have facilitated the creation of a digital space where shared community and institutional affinities and agendas are nurtured and in which different sets of knowledge are co-produced to enhance public engagement with our common heritage. In doing so, concerns and questions often raised about power dynamics and control stacked in favour of either academic researchers or institutional partners are disproved, meaning that equitable partnerships can be achieved more often if sufficient time and effort is invested.

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[13] See Popple (2015) for an exploration of possible models that could help address perceived contentious issues around third party rights and licensing agreements particularly as they relate to project work emanating from community-institutional partnerships.

Our approach to the project was guided by looking at a key series of problems we felt communities and cultural organisations experience in relation to using online heritage resources and in developing such collaborative relationships. We felt that issues of access, copyright, and the restrictions often placed on usage were compounded by existing problems of web usability and the dispersed nature of existing resources and platforms. The project team was particularly keen to encourage the direct use of digital archives in creative work and historical research and at the same time examine how to break down the barriers between institutional collections (both geographic and administrative) and the publics they served (Adair et al. 2011). Both organisations were similarly focussed on the challenges of changing the nature of the relationships they enjoyed with existing public audiences and in developing new and mutually beneficial alliances.

In the first case the BBC, as a directly publicly funded national and international organisation, has a public service remit regularly renewed by government.[14] It has been accused of being patrician and in enjoying a difficult relationship with audiences in terms of access to its vast archive of heritage resources and in the ability of those who have funded its acquisition to view and use materials (Weissmann 2013). It was keen to explore new models of collaboration and to try and resolve some of the issues around copyright and IP transfer, especially of third party materials, and engage the audience in the collaborative management of some of its resources through crowd funding and creative initiatives. It had made initial steps through projects relating to specific archive areas such as its Word Service programme collection and via the Digital Space initiative.[15] By thinking more conceptually we were able to develop a model (which now needs to be tested) in which we move away from the historical model of the BBC's audience as viewers and listeners, receptors for content, to become active and equal participants. In conjunction with Tony Ageh, BBC Head of Archive Development, we proposed the concept of citizen 'animateurs', citizens who can:

> play an increasingly integrated role in many of the fundamental functions of the archive and engage in a range of creative, research and storytelling activities that are no longer limited

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[14] The current BBC Charter is due to be renewed in 2016 and is proving extremely controversial.

[15] See Kiss, Jemima. *A digital public space is Britain's missing national institution*. http://www.theguardian.com/technology/2015/mar/05/digital-public-space-britain-missing-national-institution.

> or constrained by traditional anxieties about the ceding of power and the retention of a lone authoritative voice (Popple 2015, 137).

The Science Museum group were similarly concerned with reaching new audiences and developing models of collaborative practice which extended beyond local communities and visitors to their four museums based in the cities of London, Manchester, Bradford and York. What was also particularly problematic, and frustrating, was the barrier that existed between people and non-digital materials—objects and images—in a physical archival space. Collections, such as those owned by the Science Museum, were extremely attractive to communities but they felt remote and disadvantaged. One initiative, which has now grown into a follow-on research project of its own, saw us taking community volunteers from Stoke-on-Trent into the Science Museum archive to explore and select from one of the most valuable scientific collections in the world relating to their interest in ceramics. During this intensive weekend our community partners were given behind-the-scenes access to Blythe House, the Science Museum's object store, and encouraged to access and explore more than 170,000 artefacts not on public display. Working with curators they photographed objects of interest and we are now building a 3D visualization of the archive and developing hyperlinks to allow for greater access and ownership of public collections.[16] The potential for creating an open and engaging space is evidenced through this community in residence project and provides a model of communities that coalesce around issues of common interest, shared aspiration and collaborative solidarity. Thus, this small example exemplifies the value of public institutional collaboration, and is emblematic of the project and its future potential to bring communities and institutions together in mutually reinforcing relationships as we seek to take it to the next phase.

6 Conclusions and Reflections

The question of trust, both in terms of the development of collaborative relationships and the resultant tool, and the value of labour and collective experience, is what ultimately guarantees the success or failure of this, or indeed any, collaborative project. Although its first phase is now complete we are developing new threads of research and strengthening relationships that have developed throughout its course. Ultimately we will be judged on the long-term success of the resource we have co-created, but in the interim the knowledge and reflective platform it has allowed us has generated a series of useful conclusions we now want to summarise and hope will prove useful for new projects and collaborative ventures in the field of cultural heritage research.

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[16] See a prototype here: http://tomjackson.photography/interactive/blythehouse.html?html5=prefer. We are also examining the potential of developing 3D patterns for remote community printers to address issues of embodiment and materiality.

1. The project has demonstrated the need for a commitment to partnerships between communities (defined in their broadest sense) and institutional partners to develop digital interfaces to facilitate co-curation, creative exploitation, and shared copyright models that open up cultural resources and normalise relations in open digital space. It has highlighted the need for openness, honesty, and the ability to listen as well as speak. It has highlighted the value of recognising where expertise resides and of the importance of plural voices.
2. It examined the role of co-creation within this developmental context and highlights the importance of current approaches to the problems of liberating cultural resources from formally closed and often remote institutions. This is a necessary, democratic, and moral undertaking.
3. It has also examined the tensions between different cultural sectors and drawn on the experiences of institutional partners interested in exploring these approaches as a means of reaching out to new audiences and allowed public expertise to inform knowledge about their collections. Above all, it highlighted the need to negotiate and recognise mutual needs, and acknowledge barriers such as copyright that are often beyond the control of partners. Crucially, it evidences the need to identify and value cultural labour in all its forms, and to respect mutual boundaries.
4. It has demonstrated the potential of developing social cohesion through collaborative working and collaborative storytelling predicated on shared cultural understanding and shared cultural heritage resources.[17] It has shown the cumulative strength of working together to achieve commonly identified goals with clearly set expectations. (Cameron and Kenderdine 2010)
5. Finally, it demonstrated the importance of openness, of the recognition of different levels of engagement, of different literacies, and of the value of mutual respect across communal and institutional boundaries.

As we continue to reflect on our immediate experiences there is much we would do differently in any future project. But we have only come to this realisation through the experience of collaborative working and from learning from all our partners. Collaborative working is deeply rewarding and continually challenges critical assumptions and models of practice and is thus essential as a consequence.

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[17] One of the most memorable experiences was working with communities to discover what they were passionate about and what they wanted to explore through their own storytelling. This passion and expertise was infectious and as the project progressed communities developed new relationships, identifying common interests, and began working together and sharing knowledge and resources. The famous Victorian toilets alluded to earlier represent an illustrative example among many.

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References

Adair, B., Filene, B., & Koloski, L. (Eds.). (2011). *Letting go? Sharing historical authority in a user-generated world*. Philadelphia: The Pew Center for Arts & Heritage.

Bailey, M., & Popple, S. (2011). The 1984/85 miners' strike: Re-claiming cultural heritage. In L. Smith, P. Shackel, & G. Cambell (Eds.), *Heritage, labour and the working classes* (pp. 19–33). London: Routledge.

Boon, T. (2011). Co-curation and the public history of science and technology. *Curator: The Museum Journal, 54*(4), 383–387.

Brabham, D. C. (2008). Crowdsourcing as a model for problem-solving. *Convergence: The International Journal of Research into New Media Technologies, 14*(1), 75–90.

Cameron, F., & Kenderdine, S. (Eds.). (2010). *Theorizing digital cultural heritage*. Boston: MIT Press (Media in Transition).

Cornwall, A. (2008). *Democratising engagement: What the UK can learn from international experience*. Demos. Retrieved January 9, 2015, from http://www.demos.co.uk/files/Democratising_Engagement-web.pdf.

Denison, T., & Stillman, L. (2012). Academic and ethical challenges in participatory models of community research. *Information, Communication & Society, 15*(7), 1037–1054.

Dovey, J. (2014). Documentary ecosystems: Collaboration and exploitation. In K. Nash et al. (Eds.), *New documentary ecologies: Emerging platforms, practices and discourses* (pp. 11–32). Basingstoke, England: Palgrave Macmillan.

Hacker, K. (2013). *Community-based participatory research*. Thousand Oaks, CA: Sage.

Howe, J. (2006). The rise of crowdsourcing. *Wired Magazine*. Retrieved July 28, 2015, from http://archive.wired.com/wired/archive/14.06/crowds.html.

Howe, J. (2009). *Crowdsourcing: Why the power of the crowd is driving the future of business*. New York: Palgrave McMillan.

Israel, B. A., Schulz, A. J., Parker, E. A., & Becker Adam, B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health, 19*, 173–202.

Israel, B. A., Schulz, A. J., Parker, E. A., Becker, A. B., Allen, A., III, & Guzman, R. J. (2008). Critical Issues in Developing and Following CBPR Principles. In M. Minkler & N. Wallerstein (Eds.), *Community-based participatory research for health: From process to outcomes* (2nd ed., pp. 47–66). San Francisco, CA: Jossey-Bass.

Janes, J. E. (2015). Democratic encounters? Epistemic privilege, power, and community-based participatory action research. *Action Research*, 1–16. doi:10.1177/1476750315579129.

Jenkins, H. (2006). *Convergence culture: When old and new media collide*. New York: New York University Press.

Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison A. J. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. Retrieved January 9, 2015 from http://henryjenkins.org/2006/10/confronting_the_challenges_of.html.

Jones, L., Koegel, P., & Wells, K. B. (2008). Bringing experimental design to community-partnered participatory research. In M. Minkler & N. Wallerstein (Eds.), *Community-based participatory research for heatlh: From process to outcomes* (2nd ed., pp. 65–85). San Francisco, CA: Josey-Bass.

Kennedy, H. (2011). *Net work: Ethics and values in Web design*. Basingstoke, England: Palgrave Macmillan.

Kindon, S., Pain, R., & Kesby, M. (Eds.). (2007). *Participatory action research approaches and methods: Connecting people, participation and place*. London: Routledge.

Leimeister, J. M., Huber, M., Bretschneider, U., & Krcmar, H. (2009). Leveraging crowdsourcing: Activation-supporting components for IT-based ideas competitions. *Journal of Management Information Systems, 26*(1), 197–224.

Light, A., & Millen, T. (2014). *Making media with communities: Guidance for researchers*. Newcastle, England: University of Northumbria.

Lynch, B. (2011). *Whose cake is it anyway? A collaborative investigation into engagement and participation 12 Museums and galleries in the UK*. London: Paul Hamlyn Foundation. Retrieved January 9, 2015 from http://www.phf.org.uk/publications/whose-cake-anyway/

McKemmish, S., Burstein, F., Faulkhead, S., Gilliland, A., McLouglin, I., & Wilson, R. (2012). Working with communities. *Information, Communication & Society, 15*(7), 985–990. doi:10.1080/1369118X.2012.711846.

Minkler, M., & Wallerstein, N. (Eds.). (2008). *Introduction to CBPR: New issues and emphases. In community-based participatory research for health: From process to outcomes* (2nd ed., pp. 5–23). San Francisco, CA: Jossey-Bass.

Mutibwa, D. H. (2014). *Pararchive* participates in the 2014 ESRC festival of social science. *The Pararchive Project Website*. Retrieved 4 August, 2015, from http://pararchive.com/2014/11/13/pararchive-participates-in-the-2014-esrc-festival-of-social-science/

Mutibwa, D. H., & Philip, F. (2014). Open access—Digital communities. *Viewfinder: The Journal of the British Universities Film & Video Council, 97*, 10–11.

Mutibwa, D. H., & Philip, F. (2015). Reflections from within *Pararchive's* engine room. *Connecting Communities: A Pararchive Project Journal, 4*.

Nash, A. (2009, November 14). *Web 2.0 applications for improving public participation in transport planning*. Vienna, Austria: Vienna Transport Strategies.

Owens, T. (2013). Digital cultural heritage and the crowd. *Curator: The Museum Journal, 56*(1), 121–130.

Parvanta, C., Roth, Y., & Keller, H. (2013). Crowdsourcing 101: A few basics to make You the leader of the pack. *Health Promotional Practice, 14*(2), 163–167. doi:10.1177/1524839912470654.

Popple, S. E. (2011). 'It's not really our content': Archiving media history in the digital Age". In W. P. David, N. Jankowski, & S. Jones (Eds.), *The long history of new media: Technology, historiography, and newness contextualized. Digital formations* (pp. 317–332). New York: Peter Lang.

Popple, S. E. (2013). The new golden age? using UGC to develop the public digital space". In S. Popple & H. Thornham (Eds.), *Content cultures: Transformations of user generated content in public service broadcasting* (pp. 131–149). London: I.B.Tauris.

Popple, S. E. (2015). The new Reithians: *Pararchive* and citizen *animateurs* in the BBC digital archive. *Convergence: The International Journal of Research into New Media Technologies, 21*(1), 132–144.

Proctor, N. (2013). Crowdsourcing—An introduction: From public goods to public good. *Curator: The Museum Journal, 56*(1), 105–106.

Ridge, M. (2013). From tagging to theorising: Deepening engagement with cultural heritage through crowdsourcing. *Curator: The Museum Journal, 56*(4), 435–450.

Ridge, M. (2014). Crowdsourcing our cultural heritage: Introduction. In M. Ridge (Ed.), *Crowdsourcing our cultural heritage* (pp. 1–14). Surrey, England: Ashgate.

Roberts, B. (2009). Beyond the 'networked public sphere': Politics, participation and technics in Web 2.0. *Fibre Culture Journal, 14*. Retrieved January 9, 2015, from http://fourteen.fibreculturejournal.org/fcj-093-beyond-the-networked-public-sphere-politics-participation-and-technics-in-web-2-0/

Rossiter, N. (2006). *Organised networks: Media theory, creative labour, new institutions*. Rotterdam, The Netherlands: NAI.

Rouse, A. C. (2010). A preliminary taxonomy of crowdsourcing. *ACIS 2010 Proceedings*. Paper 76. Retrieved January 27, 2015, from http://aisel.aisnet.org/acis2010/76.

Surowiecki, J. (2005). *The wisdom of crowds*. New York: Anchor Books.

Unertl, K. M., Schaefbauer, C. L., Campbell, T. R., Senteio, C., Siek, K. A., Bakken, S., et al. (2015). Integrating community-based participatory research and informatics approaches to improve the engagement and health of underserved populations. *Journal of the American Medical Informatics Association,* 1–15. doi:10.1093/jamia/ocv094.

Wallerstein, N., & Duran, B. (2008). The theoretical, historical, and practice roots of CBPR. In M. Minkler & N. Wallerstein (Eds.), *Community-based participatory research for health: From process to outcomes* (2nd ed., pp. 25–46). San Francisco, CA: Jossey-Bass.

Weissmann, E. (2013). The BBC and the limits of UGC: Some afterthoughts. In S. Popple & H. Thornham (Eds.), *Content cultures: Transformations of user generated content in public service broadcasting* (pp. 199–213). London: I.B. Tauris.

Zhao, Y., & Zhu, Q. (2012). Evaluation on crowdsourcing research: Current status and future direction. *Information Systems Frontiers, 16*, 417–434.

Crowdsourcing Culture: Challenges to Change

Dora Constantinidis

Abstract

Cultural heritage is a perishable resource that is not renewable and is at constant risk of permanent loss. Galleries, libraries, archives and museums (GLAMs) have traditionally been regarded as the guardians and gatekeepers of a nation's culture and have taken on the role of "protecting" heritage. This traditional role can now be extended to incorporate the curation of digital cultural heritage, including that sourced by citizens (crowdsourced). By asking the public for their assistance to preserve their heritage, albeit by digital means, two objectives are achieved. One outcome is the creation and preservation of digital cultural heritage for future generations. Another significant outcome is that crowdsourcing provides a conduit for increased public engagement with heritage that is of significance and relevance to them. The current ability to crowdsource digital cultural heritage potentially challenges the role and status of GLAMs as primary caretakers of heritage. Since the public can play a greater role in preserving their heritage, authoritative control will need to be reconsidered and adapted to align with heritage that has been deemed important by people. Irrespective of these challenges the opportunity to digitally preserve heritage should take precedence, especially in high risk countries facing conflict and socio-political unrest. This chapter will highlight some of the challenges of engaging people with crowdsourcing cultural heritage and the requirement of designing appropriate engagement strategies. The need for crowdsourcing Afghan cultural heritage will be considered given that it is currently facing many threats to its preservation for future generations.

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1 Introduction

Digital crowdsourcing is generating increased research output and applications. Digital devices provide the capability to better engage people's interest and commitment to collectively share their efforts in generating data and information to benefit the wider community. Most noteworthy are citizen scientists who can contribute by digitally monitoring and recording the natural world ranging from flora and fauna, to astronomical phenomena, and of relevance to this chapter, by digitising cultural heritage. Crowdsourcing digital cultural heritage is proposed as an enabler in efforts to rescue and save heritage under threat. The chapter commences with an overview, in Sect. 2, of the significant role cultural heritage plays in society and the need for its preservation in light of the threats it often faces. With a focus on Afghan cultural heritage, a range of hazards are prioritised to create a stronger awareness of the need to deploy suggested strategies based on digital platforms that can help preserve heritage not only in Afghanistan but worldwide. Section 3 then highlights in more detail some potential digital preservation strategies for the protection of cultural heritage with an emphasis on digital crowdsourcing. The need to identify change and engage agents is pivotal to any crowdsourcing project and is discussed in Sect. 4. This section provides insights into the importance of change agents and how crowdsourcing projects can improve their chances of success if appropriate change agents are in place. An example of a change agent as an engage agent is proposed for the case of Afghan cultural heritage as a potential driver to help preserve that nation's culture. A significant means of heritage preservation could be instigated by education campaigns inspired by a change agent's message to people to provide, for example, digital photographs on coordinated digital platforms. Section 5 then goes on to present how crowdsourcing can transform both the protection and dissemination of cultural heritage including how its digitisation can also lead to its virtual restoration. Finally in Sect. 6 some future directions for crowdsourcing digital cultural heritage are presented.

2 Cultural Heritage: Significance and Threats

Family heirlooms facilitate a connection to our personal past, and can contribute to shaping and affirming our individual identities (Belk 1990). For connection to a public past, cultural heritage positions this within a more collective context. Cultural heritage can be considered to be the national heirlooms created by previous generations, typically consisting of physical constructs that include buildings and crafted landscapes. Traditionally galleries, libraries, archives and museums (GLAMs) are the collective "homes" that store and display national heirlooms. Significant or rather "monumental" tangible culture is predominantly curated by museums in order to showcase a nation's heritage (McIntosh and Prentice 1999). What this chapter will present are strategies to digitally crowdsource tangible heritage beyond the confines and constraints of GLAMs. The proposed strategies can be extended to intangible aspects of cultural heritage such as folklore, music, dances and stories, which can also be captured and disseminated by digital means.

Museums usually promote the collective identity of a nation to its citizens and the rest of the world by sharing tangible, cultural heritage which is status-oriented and affect-generating (Assmann and Czaplicka 1995). Sharing cultural heritage can also potentially help bridge differences amongst diverse groups of people within one nation (Ashworth et al 2007). Preserving and sharing, for example, Afghan cultural heritage can play a very important role in peace building (Dupree 2002). An inscribed plaque and banner at the Kabul museum provides a very emotional reminder of the great impact cultural heritage can have on the identity of its people, all 30 million or so in Afghanistan. The current director of the Kabul museum quite emphatically reinforces what has been inscribed on the plaque: “A nation stays alive when its culture stays alive” (Massoudi et al. 2015). Beyond the sentimental and emotional value of cultural heritage for its citizens (Silberman and Purser 2012), it can also provide a means of regenerating the fundamental values of a broken nation and restore some normality to people and their communities. But unfortunately, this most valuable and irreplaceable resource is being exploited with quite the opposite effect. Cultural heritage, both tangible and intangible, faces an onslaught of threats worldwide (Blake 2000) and especially in Afghanistan.

Archaeologists are often associated with uncovering cultural heritage as the physical artefacts and remains of buildings at archaeological sites. Their work is especially pertinent for archaeological salvage operations especially those in war-torn areas such as Afghanistan. Unfortunately remnants of past cultures are often lost forever due to numerous significant threats, the impact level of which can be graded relative to the context they appear in. An attempt to grade threats to cultural heritage in Afghanistan is presented in Fig. 1 below. Cultural heritage is mainly threatened by looting, direct conflict, mining and construction developments. Given all these threats that often lead to a permanent loss of heritage, at the very least, digitally recording tangible heritage wherever possible can help preserve the past. Preservation and access to the past is considered to be a basic human right (Francioni 2008; Silverman and Ruggles 2007; Iacovino 2015).

Physical preservation of threatened heritage is paramount and preferable; however crowdsourcing cultural heritage with mobile devices in whatever mode (Owens 2013; Oomen et al. 2011) should become another avenue for its preservation, especially under dire circumstances. Despite the complexity of challenges that exist in extreme situations, unless there is a pressing humanitarian crisis provoked by war, motivating and generating the interest of local populations to preserve their own cultural heritage with mobile phone cameras may be a viable solution (Alam et al. 2012). By analysing local social drivers, including the most popular means of public communication, and taking ethical approaches in the use of new technology to protect peoples’ privacy and security, crowdsourcing can lead to an effective strategy to digitise cultural heritage that people come to engage with and care about (Ridge 2013; Tait et al 2013). Given that most mobile phones are now equipped with Global Positioning Systems (GPS), the location of any photographed heritage can automatically be captured as well (Han et al. 2014b). With the creation and

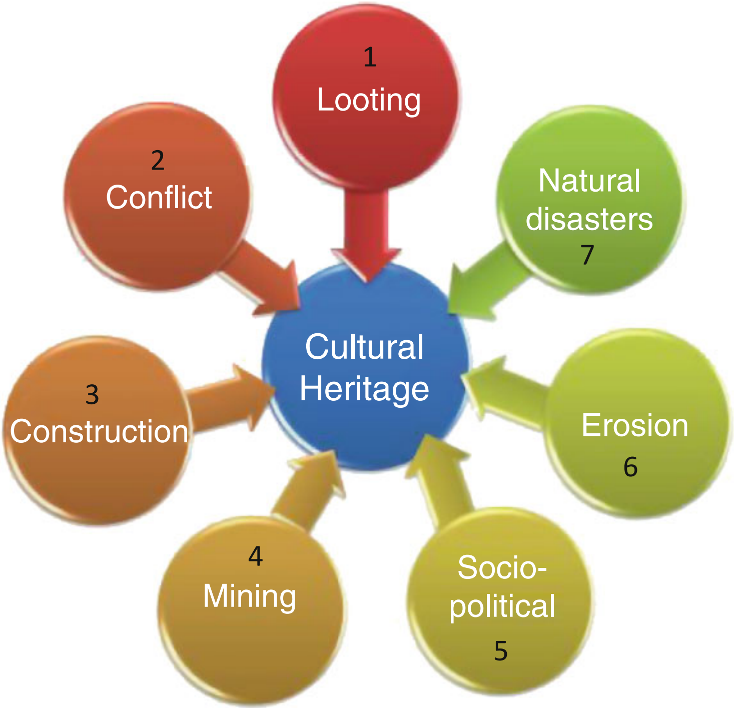


Fig. 1 A proposed gradation of threats to cultural heritage in Afghanistan

availability of a Geographical Information System (GIS) database that can store crowdsourced geo-tagged photos, an archive of digital cultural heritage could then be accessed within a cyber-context by people who took the photos as well as be preserved for future generations for both viewing and analysis, which can include all the spatial attributes as well.

Amidst challenging circumstances in Afghanistan, archaeological salvage operations continue to rescue heritage especially from looters (Benard 2012; Brodie et al 2006). Looting is an age old problem, where cultural heritage such as antiquities are sold for sheer profit. Archaeologists in Afghanistan have reported seeing antiquities being sold in shops in Kabul. Heritage artefacts are even sold in the virtual marketplaces of the internet (Campbell 2013). Despite determined efforts to prevent looting, there is an ever increasing worldwide rise in the loss of heritage by this threat. It will take very targeted and sustained multinational campaigns to prevent the selling and buying of tangible cultural heritage by everyone involved (Brodie et al 2001). For now, the race is on between the archaeologists and the looters. Unfortunately the looters are apparently winning at the moment because unless archaeologists can get to sites before looters do, cultural heritage is displaced and any chance for a better understanding of the past is lost forever.

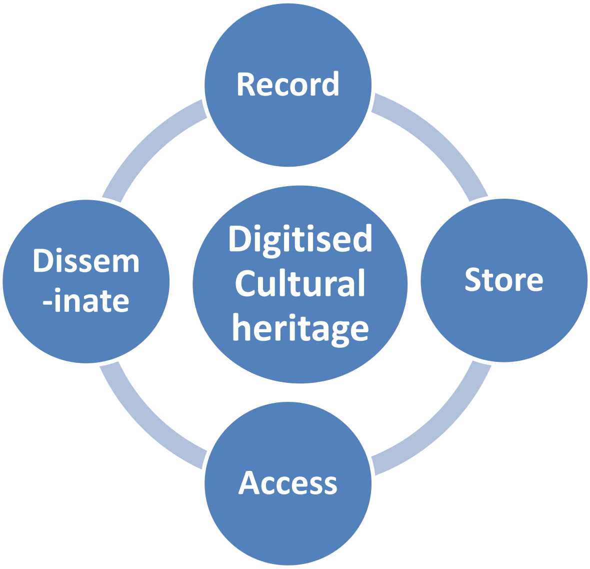
Looting is unfortunately aggravated during times of conflict, with the added burden that archaeological sites are often destroyed because of their proximity to strategic military positions. The site at Mes Aynak is an example of work by Afghan archaeologists who rushed to save what they could when they became aware that it was being looted (Benard 2012). However in this case added to that, is the threat to the site by nearby copper mining (Bloch 2015). Mining can perhaps be placed on the same level of threat as construction in Afghanistan. With an estimated 1 trillion dollars of lithium reserves alone, and billions of dollars of other precious minerals, such as copper, this threat will significantly increase (Risen 2010). Ironically, when national security can be guaranteed it is more than likely that mining companies will expand (Wilson 2010). Hence the threat mining poses to the destruction of cultural heritage is expected to increase and will significantly impact efforts to rescue the cultural heritage of Afghanistan.

Construction and development is another major threat, especially with the expansion of new infrastructure such as roads. This is a real issue in Afghanistan, because the traditional silk route followed the most convenient path through a landscape that has not changed much in over 2000 years. In the process of improving the existing road network, any sites that are located on or near the silk route will come under serious threat. Another serious threat that is also caused by people arises from extreme socio-political outlooks. A preeminent example of this threat having already occurred in Afghanistan is the destruction of the Buddha statues at Bamiyan (Flood 2002). Finally, erosion and natural disasters, such as earthquakes, are always potential threats however in most cases there is very little control over these. This aggregate of threats to cultural heritage worldwide, and especially in Afghanistan, unfortunately permeates all of cultural heritage both tangible and intangible. Any loss of cultural heritage leads to people being further disconnected with their past which eventually will result in impoverishing theirs and future generations' identities (Silberman and Purser 2012). By exploring new digital avenues for capturing and sharing images of culture via mobile devices and online websites, these can, at the very least, 'virtually' preserve and provide some connection to the past, albeit in a digital format (D'Alba et al 2015; Loh 2010). This provides a 'shifting affordance' strategy from the traditional physical presentation of culture in bounded static places (such as museums and galleries) to fluid, location-free and on-demand access to digital cultural heritage, which regrettably in some cases may no longer physically exist.

3 Developing Digital Preservation Strategies for the Protection of Cultural Heritage

Multiple digital enablers are playing a significant role in rescuing, gathering, and provisioning pervasive access to cultural heritage within a cyber-context (Terras 2015; Tait et al 2013). Digital preservation strategies involve an ongoing process of recording, storing, accessing and disseminating digitised cultural heritage products that can then inspire further cycles of this process. Figure 2 represents a high level

Fig. 2 The lifecycle of digitised cultural heritage



process of digitising either tangible or intangible heritage which facilitates a digital avenue to preserve threatened cultural heritage for current and more importantly future generations (Chowdhury and Ruthven 2015).

Any part of the process of preserving cultural heritage by digital means can impact numerous efforts to combat many of the threats it faces. For instance the threat that exists due to looting cultural heritage could potentially be counteracted with targeted online social media campaigns incorporating a dissemination of digital cultural heritage images and information. This can even lead to naming and shaming people who buy looted artefacts thus effectively drying up the market for illicit antiquities. On the other hand, with the availability of online digital access, GLAMs are increasingly engaging in participatory crowdsourced contributions that can also include informed annotation for their digitised cultural heritage collections (Dijkshoorn et al 2012; Tait et al 2013). Digitised images of cultural heritage can be used to create virtual reconstructions of objects and entire sites (Gruen et al 2014) that in most cases can be viewed online by anyone in the world with access to the internet. This worldwide dissemination of digital cultural heritage can lead to increased interest and ultimately improved preservation of cultural heritage. As for the transition to the mobile era, archaeologists are now afforded the use of mobile phones to gather data in the field far more conveniently than ever before.

Because artefacts and ancient structures are found in specific locations at a site, a Geographical Information System (GIS) is the most appropriate means to store and then view heritage data on maps. Spatially referenced objects comprised of the artefacts and buildings found at a site need to be recorded within the context of their immediate surroundings so that any spatial relationships and patterns are later investigated for clues about how people lived in the past. For archaeologists the most time-consuming task is to carefully record all these spatially referenced data and store them in a format that can then be easily accessed for later analyses. This is where computer technology such as GIS can come to the rescue by helping to create digital records that make it easier for geo-locational and spatially bound analyses to be conducted. There are apps or programs that archaeologists can adapt and use on their mobile phones to record and analyse spatial data even in real time. A leading GIS company has already developed an app available on mobile phones to record spatially referenced objects (ESRI 2015).

There are also an increasing number of freely available open-source apps such as the Federated Archaeological Information Management System (FAIMS 2014). The FAIMS app is presented as having been specifically designed for archaeologists and is free to use (Pearce 2013), benefitting many cash-strapped archaeological projects. In the news release Pearce (2013) states that this app can help the way archaeologists capture and record data: "The app allows the recording of text, location, imagery, and audio data on Android devices. The system will also allow data captured by other devices, images from SLR cameras, or [scanned] drawings done by hand to be linked to the records". Given such efficient digitisation of artefacts, the faster archaeologists can gather data with tools such as these, the better chance there is of getting to other sites and saving cultural heritage before looters and other threats destroy it. This is especially pertinent during times of war and conflict, because with conflict comes the added threat of losing cultural heritage to accidental digging as well. Soldiers often unknowingly end up digging artefacts, displacing their all-important spatial contexts, and all the valuable information that goes with that. So apart from being destroyed by rocket fire, cultural heritage is also threatened by soldiers just setting up camp and especially in Afghanistan with such a wealth of artefacts found almost everywhere one digs.

Even though conflict poses so many threats to cultural heritage, archaeology is not usually a priority, for obvious reasons. This was definitely true during the First and Second World Wars, when many major archaeological excavations were put on hold and regrettably a large degree of cultural heritage was destroyed. The destruction of so much cultural heritage during times of conflict was officially recognised by UNESCO after the Second World War and stringent policies were implemented to minimise and mitigate threats to a greater extent than those already established by the Hague Convention in 1899 (Hague 1899). The 1954 Hague Convention states:

> The Convention for the Protection of Cultural Property in the Event of Armed Conflict adopted at The Hague (Netherlands) in 1954, as a consequence to the massive destruction of the cultural heritage in the Second World War, is the first international treaty of a world-wide vocation dedicated exclusively to the protection of cultural heritage in the event of armed conflict. . . . The Convention was adopted together with a Protocol in order to prevent the export of cultural property from occupied territory, requiring the return of such property to the territory of the State from which it was removed (UNESCO 1954).

After the Second World War, these initiatives by UNESCO led to establishing the 1954 Hague Convention that aims to implement policies to protect cultural heritage during times of conflict. UNESCO clearly recognising the pivotal importance of cultural heritage by stating that: “cultural heritage reflects the life of the people, its history, and its identity. Its preservation helps to rebuild broken communities, re-establish their identities, and link their past with their present and future.”(UNESCO 1954). The 1954 Hague Convention was subsequently modified to align with more recent events, as is illustrated by the second protocol that was ratified in 1999, which states:

> The destruction of cultural property in the course of the conflicts that took place at the end of the 1980s and the beginning of the 1990s, highlighted the necessity for a number of improvements to be addressed in the implementation of the Hague Convention. A review of the Convention was initiated in 1991, resulting in the adoption of a Second Protocol to the Hague Convention in March 1999 (UNESCO 1999).

One of the outcomes of this resulted in increased campaigns for cultural heritage training of military personnel to make them more aware and more sensitive to the issues concerning the protection of cultural heritage during war. The document suggests:

> Training for the military with particular reference to Article 7 of the 1954 Convention provides for the obligation to introduce in time of peace into the military regulations or instructions such provisions as may ensure observance of the Convention to establish, within armed forces, services which secure respect for cultural property and to co-operate with the civilian authorities responsible for safeguarding it (UNESCO 1999).

It is noteworthy that UNESCO places emphasis on cooperation with civilian authorities responsible for safeguarding cultural property. This implies that GLAMs are the responsible civilian authorities to ensure the preservation of cultural heritage. However given the availability of digital enablers such as mobile phones, crowdsourcing such efforts beyond GLAMs are now plausible and UNESCO may soon incorporate the importance of crowdsourcing culture by “non-authoritative”, local people into its policies as well.

Currently any UNESCO abiding military force, by necessity, will provide at the very least, pocket guides made available for troops to read about the important role they can play in safeguarding cultural heritage in conflict zones. Within the last two decades these pocket guides have also been transposed to online resources, such as the US Department of Defence: Cultural Property Training Resource website, with reference in this case to troops deployed to Afghanistan (DoD 2013). This online resource is transparent and can also be accessed by civilians who can “take the test” to assess their knowledge on how to protect cultural heritage in conflict zones. This website is yet another example of a digital preservation strategy as dissemination of information, with examples of digitised cultural heritage made available online for education and training of military personnel about how to protect cultural heritage during times of conflict.

Unfortunately despite all these initiatives and policies, there are still destructive forces at work that undermine efforts to preserve cultural heritage, especially in times of insurgency. Often it seems that the representative blue symbol placed at cultural heritage sites around the world, is just that: another symbol. Despite all the efforts of UNESCO, and good intentions internationally, the Buddhist statues at

Bamiyan were still blown up, and looters continue to loot. However there is growing recognition that power to overturn all this destruction can be sourced from change, a change in people's attitudes towards cultural heritage through education. If people's attitudes do change, then there is real hope. Digital technology, like never before, can be a very influential driver for such change (Han et al. 2014a). Education can come in many formats, and internet websites can provide a powerful catalyst for this.

The Association for the Protection of Afghan Archaeology (APAA), which was established by the former Director of Afghan Archaeology, *Dr. Tarzi,* has coordinated the creation of the APAA website. This website provides a very rich resource of information freely available on the internet. The association publicly acknowledges the need for change and is even petitioning for it online. The Change.org online petitioning website included as a link on the APAA website is there to engage and motivate people to provide a sustained effort to help preserve, in this case, the cultural heritage of Afghanistan. This is another example of crowdsourcing but in this case as online support for the recognition of the important role cultural heritage can play in nation building. Current research into gamification (Flanagan et al 2013; Paraschakis and Friberger 2014) and other strategies to motivate people to participate with crowdsourcing in a cyber-context (Ridge 2013), may possibly lead to an increased understanding of what motivates and even de-motivates people to contribute to crowdsourced projects (Alam and Campbell 2012). This research may be pivotal in reducing the current threats that cultural heritage faces by providing key strategies to motivating especially local people to digitally crowdsource images of their cultural heritage. A solution for saving whatever remains of heritage for future generations may be provisioned as crowdsourced projects become more effective, with the help of well-established virtual online communities (Gregory 2014). So the opportunity for protecting cultural heritage, and especially that which is threatened under extreme circumstances, may ultimately come to rely more so on well executed crowdsourcing initiatives.

4 Crowdsourcing Cultural Heritage Motivators: CHANGE = ENGAGE Agents

Crowdsourcing projects could benefit from key influential people called change agents, especially in regions under the threat of social and political instability. These actors can instigate change (Caldwell 2003) and be pivotal in engaging others to act for the common good, which in this context would be to preserve cultural heritage in Afghanistan. In the case of Afghan cultural heritage, the most appropriate change agent is the current Director of the Kabul Museum, *Omara Khan Massoudi*, who, despite great threats to his personal safety, managed to coordinate the rescue of the "Afghanistan treasures" which are currently touring the world (Afghanistan 2015). Thanks to *Massoudi*, and staff at the Kabul Museum, these treasures were not lost forever and, because of him, other cultural heritage may also be rescued from destruction. *Massoudi* could definitely play a significant role as a change agent to inspire and engage other people, especially in the education of children. Education is fundamental in facilitating change to which children are more likely to respond to. With whatever means for delivering education, change for the better has an excellent chance of succeeding. We all know from personal experience that what we learn as children, we never forget, and it lives with us for all our days, so the hope for any change will ultimately be by educating children in Afghanistan. With only an estimated 10 % of people having access to the internet, for now the most effective educational campaigns will be in schools and by radio. In Afghanistan, radio communication has already been exploited as an effective communication medium for promoting Afghan nationhood (Dupree 2002). Radio programs can be developed specifically to educate people about the importance of saving their cultural heritage since this is the most appropriate means for effectively communicating this message at the moment.

However given that mobile phone usage is rapidly increasing in Afghanistan, educational campaigns on protecting cultural heritage could also be delivered as online content and even as apps. When education on cultural heritage is effectively coordinated in Afghanistan, then mobile phones can also help protect and preserve it. Firstly by educating people on the importance of protecting their cultural heritage and then in turn, having people go out and photograph it with their mobile phones, hence preserving it, albeit in a digital format. However communication technology and devices on their own are of no use if people do not see the point. People do need to be inspired: the Book of Proverbs (29:18) states that “Where there is no vision, the people perish”. This is where increased access to virtual images of cultural heritage could inspire people to participate in a more concerted effort to rescue their heritage. People in Afghanistan could upload photos of their cultural heritage online to a dedicated website for the entire world to see, hence effectively providing them with a deeper sense of cultural heritage ownership. Crowdsourcing, as the name suggests, relies on people power: it is within the hands of the people to make a difference and, in this case, to cultural heritage.

Victor Sarianidi, who had excavated the Tillya Tepe Bactrian treasures which are now associated with rediscovery of the “Treasures of Afghanistan”, believing that they had been lost forever, said in great despair, “Now all that we have left are photos.” That was true, for just over 20 years. What remained of the treasures were only their images, reflected by the eyes of the photographer, and it was fortunate that *Sarianidi* had taken many photos. In this case, it was even more fortunate that the physical manifestation of the treasures had been spared, thanks to the efforts of *Massoudi* and a select number of staff at the Kabul Museum (Sarianidi 2015). Photos, of course, can never replace cultural heritage, but considering all the threats it faces, it is better to have photos than have nothing at all. Increasingly museums have embarked on crowdsourcing activities in many formats, one of which is to ask visitors to share their impressions of the exhibitions by uploading their photos, as for example to the official Melbourne Museum website (2015). This is just one case of co-participatory crowdsourcing (Ridge 2013; Owens 2013). With digital cameras converged with mobile phones, creation and access to photographed images has been changed forever. Photos are no longer trapped in treasured family photo albums, photos are free. They can now be shared literally instantaneously all around the world.

Apart from dedicated websites where people can share photos for a specific museum context, there are many other online avenues to share photos. Crowdsourced photos in relation to local cultural heritage instigated by individuals on Facebook are gathering momentum (Gregory 2014). Another digital outlet for individuals is the Flickr site, where special interest groups can also be created, such as the one that the Melbourne Museum (2015) has generated and is using to power its own public crowdsourced photo album. Another place where photos can be shared is on Google Maps/Earth. Google Maps allows people to post photos on any point on their maps. Fortunately, photos sent to Google Maps are vetted to make sure that they are not going to offend anyone, a policy any publicly interfaced crowdsourcing effort should seriously consider. People are already posting photos relating to Afghanistan onto Google Maps. This collective, worldwide map-based photo album is being created at a phenomenal rate with an assortment of photos. There are for example even photos posted of camels out in the Afghan desert just north of Kabul, but of more relevance to consider are the photos of cultural heritage relating to Afghanistan.

The already posted photos of cultural heritage are very promising for any future official and authoritative coordinated effort to preserve Afghan cultural heritage by crowdsourcing strategies. Some current examples of Afghan cultural heritage posted to Google Maps are photos of the Buddhist statue niches cut into the rocky cliffs at Bamiyan. Even more fortunate are the photos that have been posted of the statues before they were blown up. *Elios Amati* posted one of these photos onto Panoramio (2013), a photo sharing platform which has now been incorporated and owned by Google Maps. Hopefully, more people will be inspired to follow suit and post more cultural heritage photos. With strategically elected change - engage agents promoting such campaigns even more images of heritage, especially that which has already been lost and destroyed, could be sourced by crowdsourcing.

Photos on Google Maps/Earth can also be annotated by others by tagging them online and if needed even correcting the location on the map where the photo was attached to. This reflects key strategies undertaken by a number of crowdsourced projects such as the Australian Newspapers Digitisation program that seeks public goodwill to correct scanned newspaper articles (Alam and Campbell 2012). In the case of photos posted to Google Maps/Earth, since people do not always click on the right location allowing this ability for the crowd to make corrections is an invaluable feature. However now that mobile phones have GPS, any photos can automatically be geotagged, with the earth’s coordinates and even altitude embedded into them, thus reducing the need for people to correct locations. Given that photos on Google Maps/Earth are geotagged, later analysis of the distribution and extent of cultural heritage can also be better investigated, however taking into consideration that GPS, for the moment, does not accurately capture the distance from where the photo was taken.

Google Earth incorporates additional GIS functionality that is not offered by Google Maps. Since Google Earth provides extra layers of geographical information about the surrounding environment this feature can be used to analyse the context in which crowdsourced photos were taken to provide for a better understanding of their overall location. Other features these photos have are tags and user generated text, and people can even elect to link Wikipedia entries to their photos. Despite the current challenges in managing (Chowdhury 2015a, b) and accessing all these free-style tags or folksonomies, the information people provide is widely recognised as a means for generating greater engagement in crowdsourcing efforts (Ridge 2013; Han et al. 2014a).

It is encouraging to see the increasing numbers of cultural heritage photos making an appearance on both Google Maps and Earth, especially for Afghanistan. As more photos are posted, eventually a timeline of cultural heritage can even be created. For example, when the Darul Aman Palace [translated as "abode of peace"] is finally restored to its former glory in Kabul, the archived photos of what it appeared as in its ruined state can serve as a stark reminder of a time when there was no peace. Another significant outcome when such crowdsourced images are carefully archived and community considerations taken into account, is the access that future generations will have to these photos (Iacovino 2015). With all these images on Google Maps/Earth, we will eventually be able to view changes in cultural heritage over time in order to reflect on the impact society has had on its cultural heritage and vice versa.

With appropriate change-engage agents in place, such as *Massoudi* in Afghanistan, people can be encouraged to post cultural heritage photos to Google Maps/Earth. As more significant numbers of people in Afghanistan are afforded the opportunity to participate in a digital preservation of their culture, a coordinated and specifically well-designed mobile app for local populations could dominate efforts to rescue heritage that is of significance to them (Chowdhury 2015a, b). Digital crowdsourcing facilitates an open creation and access to digital images of heritage by the public and for public consumption. In Afghanistan, people using mobile phones could take and then upload photos of cultural heritage to a specially created website, powered by a GIS database. The major mobile phone providers in Afghanistan could be enlisted to provide incentives for people to engage in such a crowdsourced project, whether it is giving them extra minutes of talk for every heritage photo they upload (for free) or whatever other means of motivation is deemed appropriate.

A dedicated website showcasing local people's photos could provide a strong impetus to change attitudes towards cultural heritage for the better. Mobile phones and crowdsourcing go hand-in-hand (Han et al. 2014b). The power of crowdsourcing is only as strong as the motivations and drive people have for collaborating, people drawing together to make a difference. There's real hope to protect and preserve cultural heritage in Afghanistan, not only in the cyber world, but in the real world as well. Despite all the challenges that Afghan people are currently facing, there is great potential for collaborative crowdsourced projects because the Afghan people already recognize the power of crowdsourcing: it is reflected in one of their famous proverbs which states that “Many drops make a river.”

5 Crowdsourcing Transformations: Cultural Heritage, Digital Protection and Restoration

Concerted crowdsourcing campaigns have the potential to transform both cultural heritage protection and digital cultural heritage restoration. Apart from viewing photos of cultural heritage that both visitors and local Afghan people upload to either Google Maps/Earth, or a dedicated (GIS) website when it is established, these photos can also be used to digitally reconstruct destroyed heritage. The digital reconstruction of lost heritage could also be undertaken by crowdsourcing efforts as well. An example of this type of crowdsourcing project that has been implemented and is currently under construction is the Mosul Project. Project Mosul (2015) is an initiative led by researchers at ITN-DCH (2014). This crowdsourced driven project has been instigated to mitigate the destruction of cultural heritage by Daesh (IS). It uses crowdsourced imagery provided primarily by tourists who had previously visited these heritage threatened areas to reconstruct that which has now been destroyed. Photos are fundamental to this project since any that were taken of heritage that is now destroyed can be used to recreate virtual images of this. People who have taken photos of sites and artefacts are being encouraged to submit their photographs and these are then logged and digitised by volunteers as part of this crowdsourcing effort. It has been reported that the project has received more than 700 photos so far, including 543 showing artefacts from Mosul (Webb 2015). Currently an online “gallery” showcases fifteen 3D reconstructions, completed by nine volunteers (Project Mosul 2015). These reconstructions are important because while, “[t]hese models don’t have the same scientific value as if we were able to do this with calibrated cameras, laser scans, etc. But the 3D models still have the value of the visualization—being able to see what the artefact was like.” (Webb 2015). Despite the debate about the effectiveness of virtual museums (D’Alba et al 2015) and virtual reconstructions of heritage (Garau and Ilardi 2014), in the case of Iraqi and Syrian heritage, going virtual is the only option for making a connection to cultural heritage that has already been sadly destroyed.

Crowdsourced heritage photos, apart from offering the ability to digitally restore destroyed heritage, can also be incorporated into a dedicated online GIS database. Such online access could be made available for the purposes of recording cultural heritage directly onto digital maps by local people for example in Afghanistan. People, if they choose, can then have access to spatially referenced records that contain both text and images which are retrieved directly on maps. Any digitally reconstructed heritage could also be incorporated on such maps depicting where these heritage objects belong to spatially. Cultural heritage in a map-based context can also be tagged to allow for easier searching and discovery in a cyber-world. Three main levels of information delivery as depicted in Fig. 3 could not only give

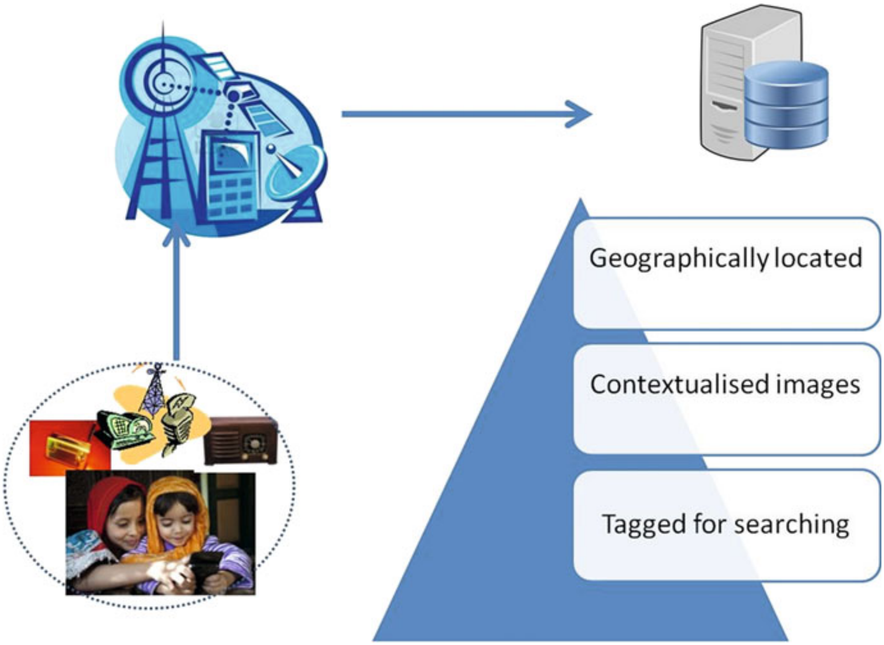


Fig. 3 Digitising spatial cultural heritage: Levels of digital information provision

"authorities" but local people as well the ability to geo-locate heritage and view this within its spatial context, thus providing a more holistic view of cultural heritage.

Access to a dedicated heritage GIS database from crowdsourced images would allow for map-based images of cultural heritage. These spatially referenced images could then also be used to curate a virtual spatial museum (Owens 2013). Digital curation strategies can only be developed given more insights about all the dimensions of digitised cultural heritage collections (Terras 2015). Given appropriately developed digital curation policies and outcomes, even physical museums such as the Kabul Museum could incorporate into their physical catalogues virtual images of cultural heritage. Ultimately the endowment of heritage via crowdsourcing, and the subsequent access to publicly sourced cultural heritage images via a mobile app or online website will allow for more personalised choices of heritage engagement. Once ethical and legal issues of privacy and IP are clearly established, initiating digital heritage exhibitions for education or entertainment can potentially be better informed within the context of being able to analyse public creation and consumption of heritage with the availability of digital analytics. This may then allow traditional GLAM institutions to design more user focused cultural exhibitions that better align with public choices (Chowdhury 2015a, b).

Furthermore in Afghanistan, the Archaeology Police could also benefit in their duties to better monitor heritage protection by accessing spatially referenced digital heritage images to flag any new heritage appearing at different locations on a map.

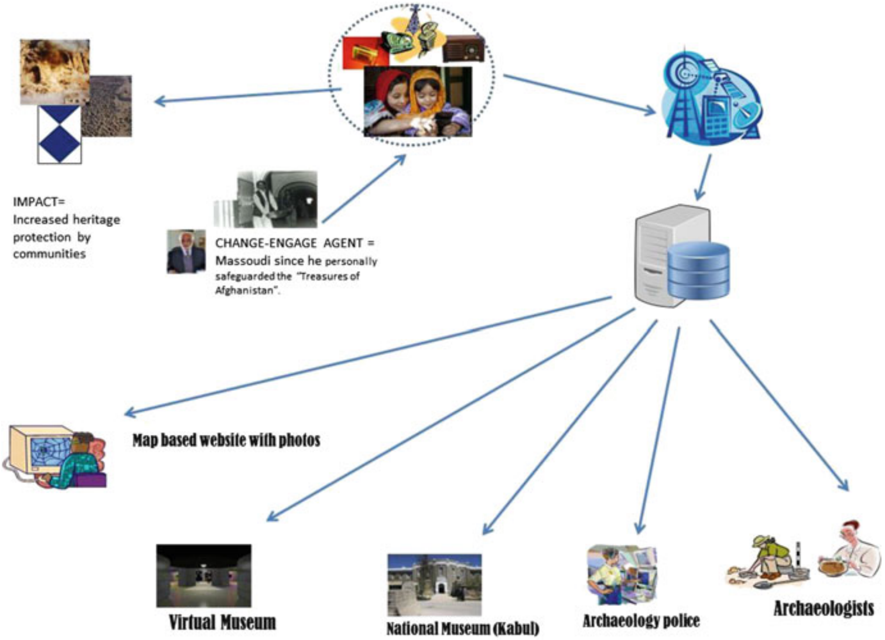

IMPACT=
Increased heritage protection by communities
CHANGE-ENGAGE AGENT = Massoudi since he personally safeguarded the "Treasures of Afghanistan".
Map based website with photos
Virtual Museum
National Museum (Kabul)
Archaeology police
Archaeologists

Fig. 4 Potential impact of digital protection strategy for cultural heritage in Afghanistan

Additionally archaeologists could also access spatially referenced images to help make better links to establishing spatial heritage patterns in the past. Therefore from crowdsourced photos and information, the potential output and impact to local communities and 'authorities' is significant. Hence designing and implementing appropriate crowdsourced projects is paramount. A proposed framework for implementing a crowdsourced project for the protection of Afghan cultural heritage is presented in Fig. 4. The integration of key change agents, such as *Massoudi*, to instigate targeted educational campaigns can possibly better engage people with their heritage inspiring them to participate in recording it. The consequence of this is a number of significant outcomes and impacts, discussed above and depicted in Fig. 4. These outcomes are likely to lead to an improved preservation of actual heritage and dissemination of digital heritage that can benefit both individuals and institutions such as GLAMs.

6 Future Directions for Crowdsourcing Culture

Having considered crowdsourcing for heritage under threat within the context of Afghanistan a number of observations for future research can be presented for cultural heritage that is not only threatened under extreme circumstances but is also threatened by a changing *digital* landscape. By facilitating a more proactive role in creating and accessing heritage that people make available, crowdsourced digital heritage collections can then challenge the domain and standards heritage professionals may be abiding by (Oosterman et al 2014). Digital curation policies for publicly sourced images of culture should also be considered in light of the more open access that crowdsourced projects promote. With the increasing availability of mobile devices that are GPS enabled, developing apps that can allow heritage images to be geo-located on digital maps and be made available to the public online and directly to their mobile devices also opens up new opportunities for traditional institutions to expand their horizons. Who, what and where heritage has been digitally captured and consumed by others can be documented and analysed to determine patterns of preference in relation to heritage that is of significance to the "crowd". Personalised interactions can therefore be regarded as an opportunity to change how culture is "consumed". Despite the challenges facing responsibly and ethically managed crowdsourcing culture projects, especially in how and what motivates the public to participate in this digital creation of culture, significant opportunities to better understand public engagement can also be availed by traditional museums by analysing choices the public make in creating and consuming culture on their mobile devices.

Mobile devices now allow the public to play a more proactive role in creating and accessing heritage they choose. However digital curation for crowdsourced or citizen heritage poses unique challenges to the collation and ease of access to publicly sourced heritage artefacts, be they objects, buildings or places. A key challenge to collating publicly sourced digital heritage is in addressing information management and retrieval methods for reliable, easy access to digital content ranging from images, audio and text-based information. It is generally accepted that folksonomies - the free-style tagging of information and objects (via URLs)—for one's own retrieval can facilitate a more personalised access to online data. It is therefore important to investigate how folksonomies can further instigate open access for digital citizen heritage and the virtual communities that contribute to such projects.

Europeana's Pinterest experiment (2015) to allow people to share and tag heritage that is of personal significance to them is an example of how folksonomies have now morphed into collaborative virtual share spaces. Pinterest is a visual folksonomy that provides numerous access points to digital citizen heritage with particular reference to images of places, buildings and objects that are valued by the online community that creates and tags them. An impact analysis of this visual folksonomy as a self-evolving curatorial process allowing people to "pin" (tag) places and objects of interest to them and post their comments to already pinned content may reveal how often these images are consequently tagged and retrieved which may then indicate levels of engagement and reciprocity of collaboration. This future investigation of folksonomies for crowdsourced heritage may then help to determine patterns of data stewardship which can be traced in order to analyse how digital heritage is created, organised, retrieved, used and preserved. However since crowdsourced heritage facilitates everyone as a provider of data, one possible challenge is that people may be constrained by lack of or limited domain knowledge and the objectives of a heritage project. So it is proposed that contextualised frameworks, such as the one proposed in Fig. 4 for Afghanistan, need to be created to implement crowdsourcing initiatives that are based on an investigation of the underlying motivations and behaviour of people who will engage with crowdsourcing their culture within their unique and specific cultural, social and national milieu.

7 Conclusions

Despite the challenges of instigating and coordinating crowdsourcing projects for data and information creation and sharing in any domain, but in particular for cultural heritage that is under threat, an analysis of the social and political milieu can lead to strategies that successfully implement these initiatives and lead to improved outcomes. Of utmost importance and a possible key to greater success is determining and assigning appropriate change agents to engage people by promoting and being a champion of efforts for any crowdsourced project. Even though this chapter considered some of the challenges of crowdsourcing, and in this case for Afghan cultural heritage, it is hoped that one day such proposed initiatives will be more viable despite conditional circumstances. More research into motivational factors, ethical considerations and information access to crowdsourced digital culture could improve recent efforts and provide digital platforms that both current and future generations can use to connect with heritage that both informs and affirms their identities.

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References

Afghanistan. *Exhibition: Hidden treasures from the National Museum, Kabul*. Retrieved August 11, 2015, from http://www.nationalgeographic.com/mission/afghanistan-treasures.

Alam, S. L., & Campbell, J. (2012). Crowdsourcing motivations in a not-for-profit GLAM context: The Australian Newspapers Digitisation Program. In *23rd Australasian Conference on Information Systems 3-5 Dec, Geelong*.

APAA. *Association for the Protection of Afghan Archaeology*. Retrieved May 7, 2013, from http://www.apaa.info/

Ashworth, G. J., Tunbridge, J. E., & Graham, B. J. (2007). *Pluralising pasts: Heritage, identity and place in multicultural societies*. London: Pluto.

Assmann, J., & Czaplicka, J. (1995). Collective Memory and Cultural Identity. *New German Critique, 65*, 125–133.

Belk, R. W. (1990). The role of possessions in constructing and maintaining a sense of past. *Advances in Consumer Research, 17*, 669–676. Retrieved from http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=7083.

Blake, J. (2000). On defining the cultural heritage. *International and Comparative Law Quarterly, 49*, 61–85. doi:10.1017/S002058930006396X.

Benard, C. (2012). Mes Aynak ARCH—Alliance for the restoration of cultural heritage. White paper. Retrieved August 7, 2015, from http://www.archinternational.org/mes_aynak.html.

Bloch, H. (2015, September 10) Mega copper deal in Afghanistan fuels rush to save ancient treasures. *National Geographic*. Retrieved from http://ngm.nationalgeographic.com/2015/09/mes-aynak/bloch-text.

Brodie, N., Doole, J., & Renfrew, C. (2001). *Trade in illicit antiquities: The destruction of the world's archaeological heritage*. Cambridge, England: McDonald Institute for Archaeological Research.

Brodie, N., Kersel, M. M., Luke, C., & Tubb, K. W. (Eds.). (2006). *Archaeology, cultural heritage, and the antiquities trade* (Cultural heritage studies). Gainesville, FL: University Press of Florida.

Caldwell, R. (2003). Models of change agency: A fourfold classification. *British Journal of Management, 14*, 131–142.

Campbell, P. B. (2013). The illicit antiquities trade as a transnational criminal network: Characterizing and anticipating trafficking of cultural heritage. *International Journal of Cultural Property, 20*, 113–153. doi:10.1017/S0940739113000015.

Chowdhury, G., & Ruthven, I. (2015). Cultural heritage information management issues and challenges. In G. G. Chowdhury & I. Ruthven (Eds.), *Cultural heritage information access and management* (iResearch series). London: Facet.

Chowdhury, G. (2015a). Management of cultural heritage information: Policies and practices. In G. G. Chowdhury & I. Ruthven (Eds.), *Cultural heritage information access and management* (iResearch series, pp. 37–62). London: Facet.

Chowdhury, S. (2015b). Cultural heritage information: Users and usability. In G. G. Chowdhury & I. Ruthven (Eds.), *Cultural heritage information access and management* (iResearch series, pp. 135–152). London: Facet.

D'Alba, A., Jones, G., & Wright, R. (2015). Comparative analysis of visitors' experiences and knowledge acquisition between a 3 dimensional online and a real-world art museum tour. *Journal of Educational Multimedia and Hypermedia, 24*(1), 5–22.

Dijkshoorn, C. R., Oosterman, J., Aroyo, L. M., & Houben, G. (2012). Personalization in crowd-driven annotation for cultural heritage collections. In 4th International Workshop on Personalized Access to Cultural Heritage.

DoD. Retrieved May 5, 2013 from http://www.cemml.colostate.edu/cultural/09476/afgh01.html.

Dupree, N. H. (2002). Cultural heritage and national identity in Afghanistan. *Third World Quarterly, 23*(5), 977–989. doi:10.1080/0143659022000028549.

ESRI. (2015). Collector for ArcGIS. Retrieved from http://www.esri.com/software/arcgis/collector-for-arcgis.

Europeana. Pinterest. Retrieved August 10, 2015, from https://www.pinterest.com/europeana/

FAIMS. (2014). *Federated Archaeological Information Management Systems eResearch Project*. Retrieved August 14, 2015, from http://research.unsw.edu.au/projects/federated-archaeological-information-management-systems-eresearch-project and https://www.fedarch.org/wordpress/about/#About.

Flanagan, M., Punjasthitkul, S., Seidman, M., Kaufman, G., & Carini, P. (2013). Citizen archivists at play: Game design for gathering metadata for cultural heritage. Institutions *Proceedings of DiGRA 2013: DeFragging Game Studies*.

Flood, F. B. (2002). Between Cult and Culture: Bamiyan, Islamic Iconoclasm, and the Museum. *The Art Bulletin, 84*(4), 641–659. doi:10.1080/00043079.2002.10787045.

Francioni, F. (2008). Culture, heritage, and human rights: An introduction. In F. Francioni & M. Scheinin (Eds.), *Cultural human rights*. Leiden: Martinus Nijhoff.

Garau, C., & Ilardi, E. (2014). The 'non-places' meet the 'places': Virtual tours on smartphones for the enhancement of cultural heritage. *Journal of Urban Technology, 21*(1), 77–89. Retrieved from http://dx.doi.org/10.1080/10630732.2014.884384.

Gregory, J. (2014). Connecting with the past through social media: The 'Beautiful buildings and cool places Perth has lost' Facebook group. *International Journal of Heritage Studies, 21*, 22–45. http://dx.doi.org/10.1080/13527258.2014.884015.

Gruen, A., Remondino, F., & Zhang, L. (2014). 3D Modeling and visualization of large cultural heritage sites at very high resolution: The Bamiyan valley and its standing Buddhas. *IAPRS, 35* (B5), 522–528.

Hague Convention of 1899. *The convention with respect to the laws and customs of war on land*. Retrieved from www.icrc.org/ihl.nsf/INTRO150?OpenDocument

Iacovino, L. (2015). Shaping and reshaping cultural identity and memory: Maximising human rights through a participatory archive. *Archives and Manuscripts., 43*(1), 29–41. http://dx.doi.org/10.1080/01576895.2014.961491.

ITN-DCH. (2014). Retrieved from http://www.itn-dch.eu/index.php/about-us/

Han, K., Shih, P. C., Rosson, M. B., & Carroll, J. M. (2014a). Understanding local community attachment, engagement and social support networks mediated by mobile technology. *Interacting with Computers* 2014a.

Han, K., Shih, P. C., Rosson, M. B., & Carroll, J. M. (2014b). Enhancing community awareness of and participation in local heritage with a mobile application. *CSCW 2014-Mobile Apps for Enhancing Connectedness*. pp. 1144–1155.

Loh, L. (2010). Conserving for change. *Journal of Architectural Education, 63*(2), 71–73.

Massoudi, O. K. *Afghanistan: Hidden treasures from the national museum, Kabul*. Retrieved August 11, 2015, from http://museumvictoria.com.au/melbournemuseum/discoverycentre/videos/afghanistan/

McIntosh, A. J., & Prentice, R. C. (1999). Affirming authenticity consuming cultural heritage. *Annals of Tourism Research, 26*(3), 589–612.

Melbourne Museum. (2015). Retrieved August 10, from https://web.archive.org/web/20140112195831/http://museumvictoria.com.au/melbournemuseum/whatson/current-exhibitions/melbournestory/visitors-photo-album/ and http://www.flickr.com/groups/melbournemuseum

Oomen, J., & Aroyo, L. (2011). Crowdsourcing in the cultural heritage domain: Opportunities and challenges. In *C & T '11 Proceedings of the 5th International Conference on Communities and Technologies,* pp. 138-149. ACM digital library http://dl.acm.org/citation.cfm?doid=2103354.2103373

Oosterman, J., Bozzon, A. Houben, G.-J., Nottamkandath, A., Dijkshoorn, C., Aroyo, L., et al. Crowd vs. experts: Nichesourcing for knowledge intensive tasks in cultural heritage. *international World Wide Web Conference Committee* (IW3C2), 2014. ACM 978-1-4503-2744-2/14/04. http://dx.doi.org/10.1145/2567948.2576960.

Owens, T. (2013). Digital cultural heritage and the crowd curator. *The Museum Journal, 56*(1), 121–130.

Panoramio. Retrieved May 11, 2013, from http://www.panoramio.com/map/#lt=34.831844&ln=67.822019&z=3&k=2&a=1&tab=1&pl=all

Paraschakis, D., & Friberger, M. G. (2014, May 27–31). Playful crowdsourcing of archival metadata through social networks. *ASE big data/social com/cybersecurity Conference*, Stanford University. ASE@360 Open Scientific Digital Library http://www.ase360.org/handle/123456789/45

Pearce, R. (2013, April 9). UNSW researchers push open source, Android for archaeology: FAIMS project prepares for public beta of Android-based digital tools for archaeologists. *Computerworld*. Retrieved from http://www.computerworld.com.au/article/458425/unsw_researchers_push_open_source_android_archaeology/?pp=2

Project Mosul. (2015). http://projectmosul.org/ and http://projectmosul.org/gallery.

Ridge, M. (2013). From tagging to theorizing: Deepening engagement with cultural heritage through crowdsourcing. *The Museum Journal, 56*(4), 435–450.

Risen, J. (2010, June 13). U.S. identifies vast mineral riches in Afghanistan. *New York Times*. Retrieved from http://www.nytimes.com/2010/06/14/world/asia/14minerals.html?_r=0

Sarianidi. (2015). http://video.nationalgeographic.com.au/video/treasure-wars/bactrian-gold-tw.

Silberman, N., & Purser, M. (2012). Collective memory as affirmation: People-centred cultural heritage in a digital age. In E. Giaccardi (Ed.), *Heritage and social media: Understanding heritage in a participatory culture* (pp. 13–39). London: Routledge.

Silverman, H., & Ruggles, D. F. (Eds.). (2007). *Cultural heritage and human rights*. New York: Springer.

Tait, E., MacLeod, M., Beel, D., Wallace, C., Mellish, C., & Taylor, S. (2013). Linking to the past: An analysis of community digital heritage initiatives. *Aslib Proceedings: New Information Perspectives, 65*(6), 564–580. doi:10.1108/AP-05-2013-0039.

Terras, M., & Ruthven, I. (2015). Cultural heritage information: Artefacts and technologies and digitization technologies. In G. G. Chowdhury & I. Ruthven (Eds.), *Cultural heritage information access and management* (iResearch series, pp. 63–88). London: Facet.

UNESCO. (1954, May 14). *Convention for the protection of cultural property in the event of armed conflict with regulations for the execution of the convention 1954*. First Protocol, The Hague.

UNESCO. (1999, March 26). *Convention for the protection of cultural property in the event of armed conflict with regulations for the execution of the convention 1954*. Second Protocol, The Hague.

Webb, J. (2015, May 19). "Cyber-archaeology" salvages lost Iraqi art. *BBC News*. http://www.bbc.com/news/science-environment-32742622

Wilson, L. (2010, June 16). $1 Trillion Motherlode of lithium and gold discovered in Afghanistan. *Financial Article Summaries Today*. Retrieved August 14, 2015, from http://www.mining.com/1-trillion-motherlode-of-lithium-and-gold-discovered-in-afghanistan/

Part IV

Identity