

MEDIA
INNOVATIONS
AND DESIGN
IN CULTURAL
INSTITUTIONS

Dagny Stuedahl & Vitus Vestergaard (eds.)

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Introduction

Media Innovations and Design in Cultural Institutions

Dagny Stuedahl & Vitus Vestergaard

Media innovations in cultural institutions, archives, museums and science centres affect the way stories and objects are mediated as well as the relations these institutions build with their audiences. Various media have always been central as means of display in these institutions, where screens, cased objects, interactive installations, dioramas, 3D visualisations and collected things and objects have communicated knowledge and stories (Henning 2006). Today these media are attached to not only concerns about transmission of knowledge, but also to an attention towards how such media can involve audiences in new ways in the communication. For example, in the museum field there are multiple concepts trying to come to grips with the new communication forms and organisational shapes that media has introduced: The distributed museum (Bautista & Balsamo 2016), the participatory museum (Simon 2010) and the connected museum (Drotner & Schröder 2013) give examples of how museums and museum visits are not necessarily fixed to a building, but can also exist online and on mobile devices in multiple spaces, in the streets and in excavation areas for example. Museums are therefore, because of media innovation, more and more becoming social institutions that are accessible from ‘everywhere’ and for ‘everybody’. The same tendency can be seen in archives, where digital media have introduced new practices of collecting, storing, management and access as well as new definitions of archival material and conceptions of archiving (Bowker 2005; Røssaak 2011; Stuedahl, Runardotter & Mörtberg 2016; Blom 2017). Therefore, media innovations are also one of the main change agents in the archival sector for development of a new form of institutions, with a different relation to audiences and to society.

Media innovations are central when cultural institutions change from emphasizing presentation of stories and messages that engage visitors, to emphasizing audience interaction, manipulation, participation and contribution. Cultural institutions in this way increasingly define themselves in terms of the audience experiences and engagement they provide, and also in relation to the roles they have and can have in society. Currently, museums are increasingly connected to health and wellbeing (Dodd & Jones 2014), and to community work, equality and social justice (Sandell & Nightingale

2013). Museums are in this perspective seen as having many more societal functions than simply to display objects of history, art, science and nations. While these changes are based on redefinitions of the well-known aims and programs of democratic cultural institutions, we see that various media play an increasingly central role as tools for this re-orientation. This shift of orientation represents a next step from the former digitization focus in the cultural sector, and introduces issues of social networks, and the various forms that mediation, articulation and cultural products can take in the broader societal endeavour of future cultural institutions. The shift does not only include re-orientation and re-definitions of the role of cultural institutions. It also includes innovation in the sense of introducing *something new* (Storsul & Krumsvik 2013) that consists of *new combinations* of existing ideas, competences and resources. While innovation in cultural institutions is still about communicating and sharing cultural knowledge, heritage and history, many museums are nowadays adopting an innovativeness orientation (Camarero & Garrido 2008). This implies being accessible to a wider audience, attracting funds from donors and sponsors as well as investing in improving exhibitions, scenography and digital resources. But innovation in museum management remains mission-driven, borrowing marketing strategies from for-profit businesses (ibid). In short, the communication comes in new forms and shapes that in several ways changes the role and practices of the institutions.

So how can we understand media innovations in cultural institutions, and how does this innovation differ from innovation in the media sector? As we see it, media innovations in the cultural sector include the same aspects as in the media sector (see for example Storsul & Krumsvik 2013), e.g. development of new media platforms, new business models and new ways of producing the media texts of cultural institutions. Consequently, media innovation in cultural institutions can be targeted by the same four P's that has been used to describe other innovation processes; product innovation, process innovation, position innovation and paradigm innovation (Francis & Bessant 2005). At the same time, media innovation in cultural institutions also require a focus on the social innovation, where innovations aim to meet social and cultural needs (Storsul & Krumsvik 2013). The European commission recognized in their Green Paper on Innovation that innovation is not just an economic mechanism or a technical process, but above all a social phenomenon. By its purpose, its effect and/or its methods, innovation is intimately involved in the social conditions in which it is produced (Cresson & Bangeman 1995). Social innovation brings up social change that requires changing existing practices, in some cases also social structures, while technical innovations are directed towards advancements to create new products or artefacts (Cajaiba-Santana 2014).

In media innovations, the focus on social innovation is connected to recognizing how media changes are deeply connected to changing social and cultural practices and conceptions. In cultural institutions, we also see a change of the responsibilities for the welfare of people.

Background

Since the late 1990s the use of digital media in cultural institutions has been moving into a more advanced phase of integration. Commercially available platforms and devices such as mobile services, multimedia kiosks, virtual/augmented/mixed reality, and web-based and social media technologies are used to enhance audience participation and engagement in activities of reflection and involvement. Meanwhile, these media products are usually not tailored adequately for this domain, and represent challenges for established practices and understandings of how cultural heritage communication should be handled in cultural institutions. The transformations following media innovations in cultural institutions are therefore active on multiple levels that include services, communicational forms and practices as well as institutional goals and social aims.

There is still limited knowledge about the use of digital media and technologies and even less principles for how cultural institutions may apply these media to develop participation, engagement and involvement (Runnel et al. 2013). We see a tendency where existing conceptions of good relations to audiences and the public are translated into new forms to fit with the fluent and networked character of current media practices. For example, the social innovation in museums may include a replacement of the traditional concept of audiences, *visitors*, with the conception of *participants* (Simon 2010) and *users* (Baggesen 2014). The range of hyphenated concepts currently active in the museum sector illustrate the significance of social innovation, where concepts such as the connected museum, the participatory, reinvented, re-imagined, responsive and dialogic museum (Witcomb 2003 Lang, Reeve & Wollard 2006; Simon 2010; Drotner & Schrøder 2013) describe the various social and cultural aspects of changing roles of cultural institutions. Equally, in the archival sector we see product innovation related to archiving practices of born digital media material (Røssaak 2011). This also changes the social and institutional role of archives and introduces the concept of participatory archive (Huvila 2008), proposing decentralized curation, radical user orientation and a broader contextualization of archive content. These examples of current application of media in cultural institutions illustrate how media innovation is imbricated with the institutions societal and cultural ends.

The social and cultural innovation of cultural institutions in the twenty-first century

Studies of media innovations in cultural institutions show how changing media products are closely related to social innovations. New media bring new manners and modes of communication, which result in new social connections and new translations of audiences and users (Drotner & Schrøder 2013). This may involve a de-institutionalization and de-professionalization where professional and amateur voices are equally important in the communication process, and where professional

practices are challenged by collaborative content creation and de-centralized production of meaning (Holdgaard & Klasttrup 2014; van Passel & Rigole 2014).

Hence, there is a need for close scrutiny of social and cultural innovations and new understandings of creativity, participation and collaboration in a cultural institutional setting. This is where a perspective that encompasses the wider cultural and social contexts of media innovations comes to the fore. For example, social media and mobile media have basically been used by museums to re-orchestrate existing institutional communication models that aim at safeguarding cultural heritage. This has resulted in emphasizing audience reflection, wellbeing and social change as the main role of memory and heritage institutions (Russo et al. 2008, Stuedahl 2011). This is different from the previous focus on questions related to simple inclusion of audiences' cultural products and articulations. The mediatized museum has been proposed as a concept to capture this transformation (Rudloff 2013) and it emphasizes the close relation between media innovation and the sense and meaning of cultural institutions.

Media innovations in cultural institutions

The study of media innovation in cultural institutions requires understanding the processes of integration of an additional media product in already existing media ecologies. In this endeavour, concepts from mediatization studies provide interesting analytical tools to identify the character of transformations and how social or cultural activities change (Lundby 2009). These consequences of changes are sometimes vague and unclear when cultural institutions launch new communication projects involving media. The values and the logic of new media products and communication forms have to be translated, criticized, explored and adjusted in practice, to be able to make the right choices in relation to what affordances the new forms of mediation may bring and how the audience may respond to that.

One example is the insights embedded in the concept of the distributed museum, which contains a relocation of cultural heritage communication to sites outside and beyond physical buildings of museums, for example urban and virtual spaces (Bautista & Balsamo 2016). This phenomenon illustrates how mediatization involves new scales and dimensions of user interactions and extends from fixed, physical and material locations in institutional buildings into digital experiences in everyday locations and social situations. It involves social innovation processes where media become central for creating sensitive relations with audiences and negotiating cultural practices and imaginations. This requires an understanding of culture as a serious part of innovation (Balsamo 2011). Media innovations are not linear, the argument goes, but happens in the social and material processes of designing, where media products are created in interplay with cultural practices, values and conventions. The imagination and ideas that were active during these design processes become inscribed in media and are negotiated in all phases of innovation.

The process of making media innovation by design

Media innovations in cultural institutions lead to questions about how the affordances and potentials of new media are translated and related to existing practices and principles of documentation, registration, curation and communication. Media studies offer perspectives into how genre, rhetoric, discourses and semiotics of media and digital technologies may play a fundamental role for developing a critical language to describe, compare and create digital cultural heritage content and communicational forms (see for example; Liestøl 2003; Henning 2006; Philipsen, Agerbæk & Walther 2010; Løvlie 2010; Morrison et al. 2010; Fagerjord 2012).

Remarkably, many media researchers interested in cultural institutions at the same time share an emerging interest in the creative process of designing that underlies and fuels media innovations (Liestøl 1996, 2013; Morrison 2008; Løvlie 2010; Philipsen, Agerbæk & Walther 2010; Fagerjord, 2012; Bolter, Engberg & MacIntyre 2013; Gauntlett 2013). In order to be capable of understanding how the inventions included in innovations come about (Nyre 2014), these voices argue for media studies to focus on the process of creation of the material product or service. Such research calls for an interdisciplinary and practice-based approach that often integrates perspectives from fields such as human computer interaction and interaction design to build a conscious and methodological grounding for an alternative media design research.

This fits well with current developments in cultural institutions and research on cultural production. For example, museums have long had an established practice of experimental design approaches to exhibits, installations, dioramas, catalogues, or public events (Basu & Macdonald 2007, Weibel & Latour 2007). While this tradition in museum design has been primarily focused on processes of exhibition design, we see an emerging trend in these institutions to use experimental methods to explore media and communicational forms and services as well. However, there is a lack of vocabulary and methodological approaches to help museums in the endeavour of shaping the mediation between museum intentions and visitor experience (Macdonald 2007).

This anthology has its point of departure in the fact that the humanities have isolated itself, in effect, by withdrawing from key arenas of interdisciplinary interaction and enquiry that incorporate the communication technologies of the twenty-first century (Liestøl 2013). There is a need for multidisciplinary perspectives of media innovations in cultural institutions, where design methods and design thinking are seen as valuable inputs for research on, and with, cultural institutions in transformation.

This anthology

The anthology is structured in three parts. The first part focuses on *collaborative design and media innovation in museums*. Here collaborative design methods are used as vehicles for innovation and for rethinking media in a museum setting. The second

part reflects upon *media making and meaning making*. Here it is demonstrated how video and other artistic forms can be used to contextualize and re-contextualize archival and historical material to motivate new interpretations, engagement and cultural understanding. The third part investigates innovation in terms of *civic engagement and local communities*. Here social and cultural innovation primarily takes place outside the traditional institutions and safe-keepers of culture and is to a large degree put in the hands of local communities.

Each part consists of two chapters:

In chapter 1, Dagny Stuedahl and Torhild Skåtun report from the project *To and From the Youth* where a group of young people designed a learning program in collaboration with museum educators, Save the Children and the Norwegian University of Life Science. The chapter describes the collaborative design process and discusses how cultural institutions may integrate co-design as a method for innovations, and in which way mobile media work as a tool for co-creation, sharing and communicating as part of collaborative processes.

In chapter 2, Anne Rørbæk Olesen and Line Vestergaard Knudsen scrutinize two collaborative design processes in terms of how discursive and material design methods enhanced negotiations regarding museum users. These enhanced negotiations informed the design of museum media, namely a digital platform for collecting user-generated content and digital exhibition apps. One collaborative design process took place at a Danish cultural history museum, the other took place at a Danish art museum.

In chapter 3, Lily Diaz and Teresa Macchia describe a project where an introductory video panorama was created for the *Sibelius and the World of Art* exhibition at the Finnish National Gallery. The chapter discusses the aspects of the time and life of Sibelius that inspired the video; it also presents the outcomes of an interview study aimed at analysing the perception visitors had about Sibelius' life after, during, and before watching the video.

In chapter 4, Mariana Salgado presents the argument that archivists and media scholars need to take on new practices to facilitate the co-creative re-use of archival material. The chapter focuses on organizing hackathons or marathons as a possible method. A case study is presented in which a group of international writers and video makers joined forces to re-use audiovisual archive material in Helsinki, Finland.

In chapter 5, Henry Mainsah examines the role design innovation can play in helping cultural institutions to create spaces for civic engagement among youth through social media. The chapter draws on a four-year Norwegian-based research project, *DELTA*, and focuses on the challenges cultural institutions face because they do not fully comprehend the changing nature of civic identities among youth and the particularities of youth cultures in relation to social media.

In chapter 6, Ann Light analyses what happens when communities take their cultural heritage into their own hands. The chapter focuses on *SPICE* (Stimulating Participation into the Informal Creative Economy) – a project to co-research the

meaning and interpretation of place by people concerned with their environment and local economy in four different English locales.

We think that all of the chapters give important examples of the many ways in which innovation take place within different contexts in- and outside cultural institutions. It is our hope that this anthology will not only provide descriptions and analyses of cultural innovation but also provide inspiration and aid for such processes.

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Collaborative Design and Museum Media Innovation

The 'To and From the Youth'-project – Including Youth as Experts

Dagny Stuedahl & Torhild Skåtun

Introduction

Museums and science centres might be the cultural heritage institutions that are most influenced by changing technologies and changing modes of media usage. Media are at the core of all three fundamental museological domains: materiality, engagement, and representation (Welsh 2005). The range and variety of display forms, interactions, participation and engagement forms that new exhibition media bring to the museum, creates a whole field of new competencies to museum practices. The properties of particular media do open for specific audience relations and include aspects of genre, authority, attention-getting and authenticity that bring new representational forms to museums' mediated communication (Macdonald 2007). There is also an ongoing process to re-focus museum communication from transmission of knowledge to sharing their cultural authority (Lundgaard & Jensen 2013), and to focus educational activities on dialogue-based learning (Dyhste et al. 2013). The current development of digitization and integration of mobile and social media into museum communication represents a paradigm shift that includes not only questioning the fundamental museological domains of materiality, engagement and representation; the paradigm shift also includes a change of museum agency in contemporary society.

The media innovations in museums extend across media products as exhibition tools into including mediational processes as means of creating social relations between museums and society. For the museum, this includes a transfer from focusing on collections into becoming user-oriented and people-catered institutions. This may be well understood as the concept of the *new museum* (Weil 1999), introduced to shift the museums' attention to a concern with visitors' self-expression and self-recognition (Horta 1997, cited in Weil 1999). The new museum concept called for a re-focusing of museums as public service institutions, to 'provide the communities they serve with something of value beyond their mere existence' (Weil 2002: 4-5). Weil's main argument was for a public foundation museum, not as a cause but as an instrument for communities to have some choice to determine their use (Weil 2002,

cited in Graham et al. 2011). His vision for the new museum therefore included communities' decision-making and citizenship. This view has later been strengthened in discussions of museums as educational institutions, where for example, museums has been defined as places for shaping of identity, belonging and citizenship (Sandell & Nightingale 2012; Hooper-Greenhill 2008).

The museum consultant Nina Simon later proposed the concept of the *participatory museum* (Simon 2010), a term that widened the scope from communities to involve wider audiences and society as part of the public. The participatory museum has since then been intensely discussed with a focus on how audience contributions and performances are important parts of reception and interpretation of museum narratives, representations and objects. The participatory museum defines visitors as cultural participants, emphasizing that every participatory project has three stakeholders: the museum, its visitors and the participants (Simon 2010). Museums increasingly talk about users and publics instead of visitors (Bradburne 1998; Baggesen 2014). In this change of perspective, museums are expanding their concerns to consider their role as agents of social change by serving as public meeting spaces (Dodd & Jones 2013), and to have a socially responsible role (Davis 2008). This implies that museums focus on supporting actions rather than broadcasting facts, and that success is measured by repeated actions rather than the number of visits (Bradburne 1998). These principles of active participation are currently taken one step further from providing participatory activities into participatory practices of museum design. Numerous recent projects explore how participation can be expanded into collaborative methods, where audience groups are included in exhibition design processes (e.g. Bradburne 1998; Taxén 2005; Davies 2008; Giersing 2012; Modest 2013; Smith 2013; Mygind & Hällman 2015). Facilitating collaborative processes with audience participation involves museums rethinking who their stakeholders are, and how the museum could create relations with a diverse group of people (Modest 2013).

Many museums today also explore participation not only as an activity in museum exhibitions or on their online sites but as practices of public engagement. We have seen a growing interest in participatory approaches across museums and science centres – mainly focusing on including stakeholders in participatory exhibition development (see Graham, Mason & Nayling 2011 and Mygind et al. 2015 for extensive reviews). We also see numerous participatory initiatives, especially in art museums, where for example young people are engaged to translate electronic tour guides into the voices of young people (Hulshoff Pol 2014). In the UK, funding bodies under the New Labour government policy of social inclusion identified youth as a target group because they were a hard-to-reach group. As an outcome, numerous educational projects were aimed towards this group, and an increased interest in learning outside the classroom led to strategies for leisure-time opportunities for youth (Tzibazi 2013). These projects instigated participatory innovations, but have not resulted in any fundamental shift in museum practice. One example is Stories of the World, a London-based project related to the 2012 London Cultural Olympics which supported 59 museums to establish

partnerships with young people to participate in reforming their public services. After the Olympic games, these projects ended and the efforts to include youth came to an end. Despite these ground breaking and innovative projects, and the funding invested in public engagement and participation, public engagement work has not succeeded in shifting from the margins of project-based initiatives into museums core practices (Lynch 2011). Other studies show that the UK policy of social inclusion expects museums not only to eliminate barriers and attract underrepresented groups of users but also to make themselves relevant and to form relationships with communities (Tlili 2008).

For example, UK museums and galleries have created new cross-sector partnerships, careful community consultation and co-production, productive relations with local authorities and a focus on local community outcomes of museum participatory projects (Lynch 2011). However, while the expectation of socially engaged museums has grown over the past decades, there has been little attention to how museums develop the competencies and working environments required to support this emerging area of participatory practices (Davis 2008). This provides a background for the focus on methodological questions of how to reach audiences and communities in this chapter.

This chapter reports from an innovation project at the Norwegian Museum of Science and Technology, exploring how museums may conduct collaborative approaches as forms of public engagement beyond exhibition design. The project, called *To and From the Youth*, was based on collaboration with young users and aimed at gaining a better understanding of their media usage and how the museum's educational activities may respond better to these in their design of educational activities. The project involved design activities related to the highly awarded exhibition *Things – Technology & Democracy* (Rasch & Treimo 2014), and aimed at extending reflections on how Internet technology, with its weaknesses and strengths, introduces issues of democracy in young peoples' everyday lives. The project involved museum educators, Save The Children Norway and a group of eight youths. The co-design project ran at the Norwegian Museum of Science and Technology over one year, 2014–2015, and the learning programme that was an outcome of the process is now integrated in the school services of the museum.

The project explored how co-design methods may provide a 'good for all' version of participation (Graham et al. 2011; Lynch 2011) by benefitting the museum, the participants involved, and the public. This includes the museum having a better understanding of the benefits for young people of using the museum as a space for reflection, actively dealing with complex societal issues, and, also how digital media could actively support this. The project illustrates how handling the 'good for all' principle of participation requires museums to apply methodologies suitable for gaining a proper understanding of the digital media practices of young people today. As our project will show, the connective and social inclusive museum requires methodological innovations, which, in fact, introduce a new area of competence to the museum's core practices. We will here focus on how the adoption of collaborative design methods

challenged the beliefs and practices of the museum educators, and consider how the museum may approach media innovations on a methodological level.

Media innovations in museums

Media are, and have always been, key tools for a museum's work concerning audience engagement and democratization. Indeed, some consider museums *as* media and discuss how media theory can be used to theorize museum communication (Hooper-Greenhill 2004; Henning 2006). It is relevant here to make a distinction between the semiotic approaches to media and to materialist perspectives. For example, discussions of semiotic processes of media and museums emphasize the role of media in exhibitions as part of the museum's communication of messages for visitors to decode (Hall 1973; Hooper-Greenhill 2004). This differs from materialist theories of media that emphasize media as more than just means for transmission of messages, and focuses on how media shapes and is shaped by tangible, experiential and social aspects of media. The material properties of media are in this way defined as more than just a means of an interface and visual perception, and consider media's role for organising experiences in space and time, following theories of Innis, McLuhan, Williams and Kittler (Hennion 2006). In media studies, this perspective has been emphasized by a school of media scholars that focuses on the mutual relationships that media technologies bring. For example, media studies have lately included perspectives from science and technology studies (STS), emphasizing the politics of materiality that technology introduces to mediation (Gillespie et al. 2014). Another example is the non-media-centric and embodied perspective on media use, proposed by media anthropologists in order to focus on the mundane aspects of social practices, including media (e.g. Crossley 2001; Moores 2012; Pink 2012).

Museums' understanding of media involved the materialist approach because museums very quickly started to use media to both dematerialize and bring museum objects closer to the audience in exhibition reconstructions and simulations (Hennion 2006). For example, the mediatic museum of Otto Neurath, so influential for avant-garde thinking of the museum at the beginning of the nineteenth century, developed a whole language of icons or pictograms, the Isotypes, which aimed at using people's everyday-life knowledge and experiences for shaping museum language. The role of media in Neurath's mediated museum was essential for his concern with the museum's societal role.

Frank Oppenheimer, the founder of The Exploratorium in San Francisco in the 1960s, also understood interactive installations as explicit media, with the potential to facilitate reflection on how topics of science relate to personal lives (Hennion 2006). Oppenheimer's work was a reaction to the mysticism and extra-sensory perception of nature that, alongside sceptical views about science, flourished in San Francisco during the late 1960s. Oppenheimer's work with The Exploratorium was based on

an understanding of museums as educational institutions. The politics of education was in Oppenheimer's work closely related to ideals of interactive- and hands-on media in science museums. In this way, the early innovations of science museums were built on a fundamental understanding of the politics of media materials and the mediatized museum.

The mediatized museum has meanwhile also been recognized for its potential for social development and activism, and discussions of how museums may act as 'third spaces' (Bhabha 2004) that may facilitate historical, political and moral relationships (Pratt 1991; Clifford 1997). The mediatized museum has meanwhile also been recognized for its potential for social development and activism, and discussion of how the museum may act as 'third spaces' (Bhabha 2004), or contact zones that may facilitate historical, political and moral relationships (Pratt 1991; Clifford 1997). These potential social consequences of museum communication seriously address how media can provide the means and space for social practices. This goes far beyond the traditional communication of the collections into museums as social institutions. In addition to the innovators mentioned above in the history of museum, we should remember that the history of the modern museum coincides with the history of modern recording media (Hennion 2006). Museums quickly saw the potential of media technologies to develop both display and archiving modes. Also, with the contemporary social media, mobile and GPS-based simulations, mixed and augmented reality, we recognize an inherent interest from the museum to use these media to facilitate the participatory and democratic museum.

The concept of the *connected museum* (Drotner & Schröder 2013) has been introduced to media studies to capture the central role digital media have for this development. Digital media bring an end to linear thinking in museum education and communication strategies (Din & Hecht 2008), and this brings new conditions to the ways museums take a role of meeting the societal challenges of mediated and participatory culture. The connected museum introduces new mediated practices that go beyond communication into acts of caring for and supporting communities. Recently, lots of attention has been given to how social media are decentering museum expertise on content production (Stuedahl 2011; Russo 2012), when, for example, the properties of imagery are used to create new relationships with online communities of interest (Colquhoun & Galani 2013). Social media enables the crowdsourcing actions of correcting, contextualizing, complementing, co-curating and finding of content (Oomen & Aroyo 2011), while they, at the same time, challenge museums to handle the new connections created. Inclusion of social media practices can be too ambiguous and may cause friction between social practices and the technological and institutional infrastructures in archives and museums, as amateur content may challenge an existing conception of quality, copyright and responsibilities of the museum (Holdgaard & Klastrop 2014; Van Passel & Rigole 2014). The dilemmas of museum connectedness are still to be explored, and the connective museum gives a contemporary example of how media act as a driving force for museum innovation.

From participation to collaborative design in museums – methodological perspectives

There has long been a growing interest in hermeneutic approaches and action research methods for visitor research and for professional development (see e.g. Anderson 2012; Tal 2012), especially in science museums. While the use of action research methods has rested on an overall aim to bridge the gap between theory and practice in formal and informal science education (Ash & Lombana 2012), it is less focused on democratic practices of social inclusion. Meanwhile, the literature demonstrates how central principles of action research methodologies may feed the museum visitor's understanding and professional competence building. Through engaging participants in acts of creation (Freire 1970), participatory action research emphasizes that the participants' understanding of their practice develops in authentic contexts (Kemmis & McTaggart 2005). This is based on an understanding of participation as transformative, and of methods as tools to strengthen the participant's sense of agency in transformation processes (Fine & Torre 2004; Cahill 2007; Pratt et al. 2010). This ethical imperative for involvement and participation in museums goes beyond the boundaries of participation stated by policy and, Tzibazi (2013) argues, constitutes the real challenges for the inclusion of youth in museum practices. Application of participatory methods must overcome the preconceptions, boundaries and norms connected to existing understandings of participation.

Reporting from a longitudinal project that was based on participatory action research methods and included young people between 15 and 17 years of age, Tzibazi's conclusion was that to involve young people beyond the role of consultancy brings new practices and identities for the museum to handle. It also requires a move away from the traditional transmission model (Tzibazi 2013). The study shows how museums lack trust in the participants' abilities, which makes it difficult for museum professionals to meet the participants' needs, and Tzibazi calls for museums to re-conceptualize their role as responsible social institutions and base their participatory projects on ethical and reflexive educational groundings. This points towards a distinct reflection on the methods that participatory projects are based on, the aims and goals of the project, as well as the expected outcome for all partners.

Participatory design in the museum

In a recent review of participatory models and approaches to museum exhibition design, Mygind and Hällman (2015) conclude that participation has many of the same obstacles as participatory practices of development and research in engineering-related fields such as urban planning, health promotion, or technology development. It is about coordinating degrees of participation, the methods, the multiple rationales, obstacles and tensions caused by power relations and diverse rationales for participatory approaches. Mygind and Hällman point to the tradition of participatory design

(PD) as a relevant framework for advancing participation in exhibition design. This methodological tradition builds on action research principles for involving participants in concrete development projects, and has a long tradition, especially in technological development in the Scandinavian countries.

The core principles of PD are political and focus on how technological development processes need to equalize power relations, how practices may be democratized and how alternative visions of technology and society may be integrated and given a voice through participatory methods (Robertson & Wagner 2013). This ethical motivation to support and enhance people's engagement in technology development has been enshrined in techniques and models for handling power relations and mutual learning in participant involvement. The core principles of participatory design are based on pragmatic, theoretical or political rationales that frame involvement in decision-making as an issue of empowerment and as a democratic development aiming at better quality products. Participatory design methods have been used in research projects as methods for exhibition concept development and evaluation (Taxén 2005; Smith 2013) with both a quality and democracy argument about including children and young people in exhibition design. Meanwhile, the pragmatic findings from these research-driven projects have experienced the same challenges of participation as the participatory projects described earlier in policy-based projects and initiatives: namely, that the appropriation of participatory design as part of broader innovations of processes and practices involves new forms of relations with visitors and the public.

Thus, while participatory design may provide opportunities for methodological development on several levels in museum innovation, it would need to be framed more consistently as being a collaborative project. In participatory projects, the museum and the users need to be collaborating on an equal footing, and it is necessary that both take advantage of the collaboration. We define this as a *collaborative design* endeavour, and have focused on how collaborative formations may be about museums extending their methods for understanding users, about an ethical and educational grounding as well as about the professional development that is required for supporting social inclusion in museums. The extension from participation to collaboration includes ethical, analytical and practice-related aims, and includes situated and authentic actions, mutual learning and equalizing power relations as part of collaborative design. This builds the background for our pragmatic approach to conduct museum innovation through collaborative design.

Collaborative design of a learning programme on technology and democracy

To and From the Youth was a collaborative design project running at the Norwegian Museum of Science and Technology. The aim of the project was to design a learning activity where pupils engage in reflections on issues such as freedom of speech,

extreme opinions, inclusion and societal participation, and where the pupils express themselves through digital media production. The project was set up in partnership with the Norwegian Telecom Museum and Save the Children Norway's (STC) programme on safety for children on the Internet. The project ran from August 2014 and arranged five workshops throughout the autumn and winter 2014/15. Working in partnership with STC strengthened the collaborative process by virtue of the fact that STC has a long tradition of developing projects together with children and young people.

The project had as an overall goal to co-design a learning activity that connects issues of technology and democracy to young people's lived experiences of everyday handling of digital technologies, including freedom of speech, cyber-bullying, anonymity and information flow. To include young people in the very early stages may enhance young people's alternative interpretations. The project was especially aimed at exploring how the introduction of media production as a visitor activity may scaffold young people in connecting the issues of the exhibition to their own everyday digital practices and democratic experiences.

The learning programme was connected to a temporary exhibition, *Things – Technology & Democracy*, which explored the complicated relationship between technology and democracy, focusing on eight specific museum objects as starting points for the reflection. The exhibition has won several prizes for its interactive communication of complex scientific questions. The core activity in this exhibition was a round, multi-touch table, where eight technologies – the Internet, 3D printer, smartphone, solar panel, robot seal, DNA sequencer, drone and bucky ball – were up for discussion. The guiding tour, facilitated by a museum educator, had the form of a parliament where visitors vote on contemporary technology questions related to these technologies.

The design project focused on how young people could be engaged in learning activities as an extension of this parliament session that related the overall questions on specific technologies to their own life. The design aim was to form a participatory and production-based learning activity that furthers their reflections on technology and democracy to self-reflexive discussions with their peers. The project included student media production as tools for reflections on own practices and habits with digital media and with bigger issues of democracy. The core aim of the project was to define central questions that would engage young people in these reflections. The secondary question was how media production could be included as a means for young people to articulate their thoughts on complex issues.

The young participants, aged 16 to 18, were recruited by Save The Children's network from different high schools in and around Oslo. During the process, there was a core group of four, though at some workshops eight youngsters participated. Defining the youth as experts, their participation was paid for each time they attended a workshop. From both STC and the museum's perspective, this was experienced as taking seriously the work the youth carried out. It also recognized the knowledge and skills, and

especially the time, invested in the project. Between the five workshops, arranged at the museum after closing time, a closed Facebook group was used for discussions and appointments. The results from the workshops and the youths' digital productions were shared here. The intention of this was to establish continuity and supporting the overall aim; to support engagement in co-creation of a learning activity that would engage pupils of their own age.

The first meeting introduced the exhibition in focus, *Things – Technology & Democracy*; our aim for the project *To and From the Youth*, and our motivation for the co-creation process and the expected outcome of it. The young participants were asked to discuss the overall issues and help us to develop questions that could prompt other youth to make the same reflections:

- Where do young people draw the line for freedom of speech and cyberbullying?
- How can we handle extreme utterances online and in everyday life?
- What do we mean by democracy online?

The emphasis during this first meeting was on digital/tele communication, and we started with affinity mapping of the relation between these technologies and democracy. The youth wrote keywords such as 'Instagram', 'unsocial media', 'surveillance', 'filtered and unfiltered', 'Facebook', 'noise and information', 'screening and sharing', 'online debates', 'twitter', 'Internet trolls' on a shared brown paper roll. The session ended with a plenary session grouping the keywords and topics, and discussion of what issues of technology and democracy they pointed to.

A strong focus on involvement requires that one keeps in mind that the aim of the collaborative process is both the process and the product that the process is supposed to result in. Our partner from Save the Children was concerned that we could lose the overall objective for the collaborative process, and wrote a comprehensive notice emphasizing that the aim of the project was that the participants should reflect on issues of technology and democracy, and express themselves through digital stories. Another aim was to design a museum learning activity that recognizes that young people are experts on their own learning, and to take this principle into consideration in the design.

The second workshops focused on narrowing down the list of keywords, and to group them in thematic dichotomies. We ended up with five keyword pairs; 'social and unsocial media', 'noise and information', 'surveillance and safety', 'anonymity and transparency', 'new voices we wish to hear and not to hear'. These were the keywords found most relevant by the young people.

At the third workshop the youth tested the learning activity by producing digital stories, not an unknown concept for the group. The museum had earlier used iPads as tools for production of digital stories, and the youth were familiar with the genre from school. We then asked the youngsters to think about the keyword pairs that were defined in the former workshops and served as prompts for their production



Image 1. Design process

The collaborative design process in *To and From the Youth* involved methods as affinity mapping to capture youth central concerns about digital technology and democracy.

of digital stories. They could choose either working in groups or on their own. They had one hour to produce the stories, and were asked to actively use the exhibition as object and background for their productions. First, we had asked them not to use sound, thinking that this would take too much time. However, it is a good thing that young people do not always do as they are told. Sound proved to be essential for the presentation of the digital story to their peers, as without sound, those who had created the story needed to be present. The session ended with showing the stories produced, and with a plenary discussion of the way the digital stories enlightened the topics.

The youths' input for the design of the learning activity was essential. For example, the youths claimed that creating a digital story was a fairly complex and time-consuming activity for less engaged young people. The youth doubted that students with less interest would be able to see a digital story production through during a visit to the museum. As a solution, we found that focusing on the production of shorter digital utterances would lower the threshold.

Another important input was their recommendation that, when the learning programme was running, the brainstorming and concept mapping session and the keyword pairs should be a starting point. They argued that the five central topics were important for motivating students to engage in the task, and to prompt their reflection on the rather demanding topics. Also, they argued that starting the learning session with discussions on the role of smartphones will help the pupils to focus, and gives an entry point to the learning activity.

Discussion: Learning from participating youth

Museum innovations go beyond exhibition design, include re-thinking central concepts of museum communication and call for transforming educational and communicational practices. Within this shift lies the questioning of institutional authority and the role the museum may fill in future societies. This demands the formation of new, engaging interactions and relations with the public. The shift also requires that museum professionals handle the museum users' media practices and appropriation in interaction with museum objects, and the museum as a space for social knowledge activities. The shift, then, involves understanding the role of media from the users' perspective, and handling mediation processes in ways that are recognized by and engage users. Handling, understanding and designing with media is at the core of these endeavours.

We will here focus on three main findings from using collaborative design methods as a way to learn from youth, which have given insight into how media usage can be more motivating for young people's engagement with museum topics and how the museums can work innovatively to change their practices to meet with these forms of engagement. These three findings relate to understanding the role of the multimodality of media usage, understanding the scale of digital productions suitable for visits to physical museum exhibitions, and the role of collaborative methods for gaining deeper insight into the experiences of young people in museums. All of these outcomes were strongly related to the situated and authentic actions, mutual learning and equalizing power relations that are the core principles of collaborative design.

The role of multi-modality for youth engagement

The constant flow of social media applications, which each provide new properties that potentially open for new mediated user relations, constantly challenge the museum. Museums need to achieve an understanding of digital media usage to find the best ways to connect people, knowledge and objects across boundaries of communication onsite, online and beyond the museum walls. Thus, if museums want to continue being places for shaping identity (Hooper-Greenhill 2004), handling the new connectedness becomes central. The collaborative project focused on how a visit to the museum could spark reflection on being a young person in a digital world. To develop a learning programme that is experienced as creative and interesting about the abstract and complex topic of technology and democracy, it is important to give a memorable learning experience, as one pupil responded while producing a digital utterance. When museums develop learning programs for youths, a hard-to-reach group, it becomes central to include tools and techniques that are not used in formal schooling.

Originally, we had thought the use of affinity mapping to be a technique for the collaborative design process only. When, at our last workshop with the youth, we outlined how we would facilitate the learning activity with future school classes, we suggested

starting working with digital utterances without the concept mapping. However, the young people thought that affinity mapping was necessary for the mind-set of the task. They underlined that affinity mapping would be an engaging activity that would pave the way to deeper reflections on the topic of technology and democracy. One reason may be that, though the learning activity has young people's digital everyday life as a topic and is important on a youth-identity level, the theme still is abstract. When one is asked to use key words on Post-it notes to reflect on these topics, the young participants argued, it may lower the threshold for engagement.

In a group of people, there will always be some who are quiet and those who express themselves clearly and loudly. Affinity mapping gives all the participants the chance of writing down thoughts and ensures they get involved in the collaborative process. We also found that affinity mapping using Post-it notes was a simple way of sharing thoughts as well as a way to stay focused on the theme during the collaborative process. This multi-modal approach to the definition of the keyword pairs created an entrance to deeper reflections on the abstract topic of the museum exhibition. Meanwhile, it was clear that future school class visits to the exhibition starting with this open form of brainstorming was far too time-consuming. As a solution we agreed upon starting with the five-keyword pairs from the design process as a fixed departure point for the reflections school classes had to do before starting producing digital stories.

From digital storytelling to digital utterances

The exhibition *Things – Technology & Democracy* enabled for museum users to participate in a discussion with the aim of, among others, building competence in citizenship (Rasch & Treimo 2014). The creative activity designed in the project was appreciated, one participant remarked: 'It's very seldom we have the experience to create something in the Norwegian school'. Thus, we think that opening up for creative production as an informal learning form is one of the museum's strengths. The themes of technology and democracy are closely connected to political as well as ethical questions of how new media platforms challenge both individuals and society. The exhibition and the learning program enable the museum to be a meeting place with social functions of public dialogue on politics and ethical questions (Pratt 1991; Clifford 1997; Bhabha 2004). In this context, it was important to facilitate a learning program that supports public engagement forms such as articulation and collaborative reflection at the same time as the activity supplements the activities of parliamentary voting in the exhibition. The choice of digital storytelling as a production-based museum activity is based on the origins of digital storytelling as a means of 'giving a voice' to people in public spaces. The seven principles of digital storytelling relate to affective and personal reflections around a specific topic (Lundby 2008) and meet well with current discussions of student active learning in educational contexts. In our case, digital storytelling was used to give the youth a voice and to express their reflections on technology and democracy related to their everyday life on the Internet.

There will always be a discussion about whether the participants have any real influence over the collaborative process and it would be important to focus on the degrees of involvement and the power relations (Mygind & Hällmann 2015). In the *To and From the Youth*-project, our aim was to give the young participants influence equal to that of museum educators and researchers. Therefore, we listened closely when they suggested changes in the design, with the aim of a better quality of the learning programme (Taxén 2005; Smith 2013).

While we recognize that the youngsters are digitally literate, it was also our experience that not all of them were familiar with using tablets as tools for collaborative media production. Not all of them knew how to make a short film that contained sound, pictures, film and voice. The youth made us aware that digital storytelling production is time consuming, and not necessary for the reflections we wanted to achieve. Authoring a story as well as producing it took time; and we were reminded that the digital storytelling method often lasts over a period of two to three days. This made us decide that by taking away such elements as sound we would shorten the process of making the digital stories. However, the young people pointed out that sound was necessary, and a down-scaling of the story production would be more efficient. It also became clear that sound was central to trigger discussion. During the design process, the digital stories were published on the project's closed Facebook group, and this demonstrated that stories without sound did not properly carry the message. Stories published with a narrated voice invited more comments to be shared.

The youth also argued that photography would make the production and editing process simpler, and that photography would make it easier to approach the abstract themes of technology and democracy. They suggested using the five key-word pairs as a starting point and argued that a shorter genre of digital statements or utterances would serve as tool for giving voice and articulating reflections. The utterances were shorter in time and did not really effect on the experience and the outcome of the production. An utterance may contain a personal statement and differs from a whole story in that it does not have the shape of a narrative. As a result, the final learning activity of *To and From the Youth*, is based on a downscaled co-producing process. This downscaled production time, likewise in choice of media use and content, gave more time for discussions and collective reflections. We made this amendment after co-designing with the youth group; thus, it was a direct outcome of the collaborative design process.

One of the premises for the design process was that when it became part of the museum school program the pupils would have to create utterances in groups. This was based on earlier work in the museum with tablets, and the experience that production with tablets invites collaboration. However, some of the participants wished to work on their own rather than together. Creating a digital utterance, they argued, was something more personal and for some a more private activity. Also, creating statements was an important aspect of the exhibition *Things – Technology & Democracy*, where the parliament session was based on voting in accordance with given statements.

Thus, refocusing the digital production on private utterance and statements creates a better fit with the exhibition.

Collaborative design methods as tools for museum innovation

The co-design process in the *To and From the Youth*-project has given museum educators experience and insight in ways to take a user-centred perspective in museum design. The collaborative design process contributed to the exploration of how young visitors may like to share their reflections, and how the museums may use their space and collections to facilitate reflection rather than just transmitting knowledge (Hooper-Greenhill 2004; Lundgaard & Jensen 2013). The young people were invited to interpret the museum exhibition on their own terms, as an attempt to share the museum authority. Processes like this can contribute to museum professionals, curators and educators reflecting on how the museum could have an impact on the *usage* of museum content (Weil 2002). But it became central to make sure that the collaborative process was good for the participants as well as the public (Lynch 2011). This take on collaborative processes demands that the museum practitioner becomes a facilitator, who introduces the task of museum communication to the participants, and then mentors the collaborative process. This is a major difference from the guided tour that normally shapes museum activities and museum practices.

The collaborative design process emphasized authentic and situated actions where the young participants developed the learning activity and tested it in the natural setting of the museum. The aim of the collaboration was to explore the possibility of new media to enable museums to make knowledge accessible and contribute to a shift away from the transfer model towards a dialogic one (Dyhste et al. 2013). We conducted affinity mapping as a core method for involving young participants and the museum educators in collaboration on equal terms. For the museum, this resulted in adjusting pre-existing conceptions of the young people's usage of new media. At the same time, the equal dialogue resulted in the museums giving away some authority in the interpretation of the exhibition and its objects, gaining insights into how young people associate these objects. Collaborative processes like this, where the museum focuses on the youth population, strengthens knowledge about young people growing up today. In this particular project, an improved understanding of the young people's digital world was an essential outcome. A process like this also increases the ability to build relations that are flexible (Modest 2013) and suitable for a diverse group of youngsters.

In a collaborative process, there is also the potential for the museum professionals to reflect on their own practices, as well as exploring the scope for action that museums can offer to young people. For example, museum meetings arranged outside the museum has been suggested to contribute to altering the balance of power (Modest 2013). When asked if it would be better if the meeting place was arranged somewhere outside of the museum, one youth in the project said that being in the exhibition added more seriousness to the project. This demonstrates that *where* the museum meeting takes

place is not the most important; more important is *how* the media and participatory practices are used to extend visitor collaboration and how this has the potential to open up for reinterpretation of the museum's content. In this way, collaborative design methods have the potential of helping museum practitioners to establish other kinds of authority in the museum and give opportunity to get to know the age group better; to understand the diversity in interests and background between them.

In this project, the museum served as a facilitator throughout the process, and although we were careful to recognize the participants both as experts on being young and as learners, their work at the museum was given honorary status. Thus, the young participants were defined as professionals on equal terms with the museum professionals, and the honorary defined their participation as an important contribution. We could alternatively have let them use the museum space for designing an exhibition or shown the digital utterances in the exhibition space, without the collaborative process. But this would not have given the museum practitioners the insights reported above.

The project being externally funded may have been a weakness. The impact of external-funded projects on the museum's core practices has shown to decrease when the funding has ended (Lynch 2011). In our case, the collaborative design of new programs and exhibitions by including users may suffer the same fate. It is time-consuming and has the risk of uncertain outcomes. Meanwhile, we argue that the gained outcomes of collaborative processes are important sources for the professional development of the museum that are central for museum innovation to happen.

Conclusion

Current innovations in museums are in many ways mirroring the discussion of participatory culture (Jenkins et al. 2009) in other cultural and educational institutions. Changing media practices inform the transformation of cultural practices and expressions, affiliations, circulations and collaborative problem solving. These aspects are defined as central for participatory culture, and therefore also challenge the participatory museum. Meanwhile, the cultural consequences of participation, transparency and ethics of media innovation may bring bigger concerns to museums about power and authority than to other institutions. Media innovation in museums goes beyond questions of handling media for exhibitions and visitor relations. Media innovation also build the ground for furthering museums communication practices and role as democratic institutions in society.

Our project has shown how setting up workshops and bringing together young people from different geographic locations may also inspire museums to expand their school program to cover more than just pupil visits as part of their school education. An important qualification will be to identify the digital competence the youth groups possess and, from that, facilitate the usage of media. The science museum, which set the stage for this project, is principally aimed at children and young people. At the

same time, young people have few places in this museum, as in most other museums and in society in general, where they can express themselves and practice being a citizen. This neglect of young people collides with the aim of the museum to be a democratic institution that serve the society that they are part of (Modest 2013). The transformation required to fill this gap between intentions and practice of democratic ways of working built the overall background for the innovation explored in the *To and From the Youth*-project at the Norwegian Museum of Science and Technology.

The properties of media platforms open up new possibilities for museum users to re-frame the museum's collections and exhibitions and bring in new representations of the mediated communication (Macdonald 2007). This challenges museum practices of curation and education to set standards for new media practices entering the museum. One of the premises is that the pupils are using digital media to express themselves. New media also enable self-driven learning in other ways. In a museum context, where the object or the art is usually at the center of the visitor's reflection in guided sessions of 45 minutes, this project is different. The collaborative design project took departure from the fact that digital and social media are non-linear and invite content production and sharing (Din & Hecht 2008) beyond this scope of time.

The fact that museums are knowledge institutions, with the cultural authority to represent nations and cultures (Lundgaard & Jensen 2013), has led to discussions on how museums may work with democratic principles and, thus, how their position in society might change (Sandell & Nightingale 2012). Innovations in museum, therefore, also include thorough discussions of what participation means in the context of a democratic public institution, and several voices have asked for a clear agenda for democracy and to define the key concepts that underpin museum participation (Graham et al. 2011; Lynch 2011). We have, in this chapter, explored museum participation through the lens of collaborative design methods, not only to develop a service but also as a way of exploring how museums might position themselves in society and how museum practitioners may work to gain deeper knowledge about current and future audience groups. We argue that collaborative methods may serve as a new method for museums innovations that has the goal to include museums in society, and to open their space for participatory actions. Media becomes both a central means and goal for this innovation.

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Design Methods for Museum Media Innovation

Enhancing Museum User Negotiations by Discursive and Material Explorations of Controversies

Anne Rørbæk Olesen & Line Vestergaard Knudsen

Introduction

Museums increasingly pursue digital innovation by collaborating closely with creative industries, cultural institutions, researchers, digital designers, museum users and the like. In this chapter, we analyse two collaborative design processes to understand how discursive and material design methods did enhance negotiations about the museum user. These enhanced negotiations informed the design of museum media, namely a digital platform for collecting user-generated content and digital exhibition apps.

One of the collaborative design processes took place at a Danish cultural history museum where museum employees, museum users, a digital designer and other professional partners were engaged in the development of a digital platform for collecting user-generated content. The other design process took place at a Danish art museum where a series of digital exhibition apps were developed in the collaboration between museum employees, employees from a digital design company and, to a smaller extent, museum users.

In both design processes, we encountered controversies regarding the understanding of museum users and how to design for them. These controversies unfolded in negotiations of use situations, who the target users were, and how to engage them. Through user negotiations we point to the way different understandings of designing for the user interact and are mutually refined in the course of a design process. We found that the user negotiations in the design processes were greatly enhanced by exploring controversies discursively and materially. Against this background, we come to the conclusion that collaborative design of museum media benefits greatly from design methods that explicitly explore controversies and their socio-material negotiations.

Controversies in museum studies and in design research

Controversies have previously been presented in relation to both museums and design as challenging grounds as well as productive means. Whereas the focus on controversies in museum studies has primarily regarded museum subject matters and museum knowledge creation, design research has emphasized controversies appearing in design processes as potentials for innovation development.

Controversies in museum studies

During the last decade, several studies (Cameron & Kelly 2010; Lynch 2013; Tøndborg 2013) have presented and discussed museums as forums for controversies, 'hot topics' and conflictual meaning exchanges. The purposes of unfolding controversies as part of museum practices seem to register with a range of different arguments. Foremost it is argued that the subject matters and knowledge creation of museums are often controversial in their own ends, tackling, for instance, colonial issues (Henningesen 2010; Lynch & Alberti 2010), abuse (Hamran & Lange 2013; Tinning 2013), fictional child pornography (Mortensen & Vestergaard 2011), World War II (Macdonald 2009; Nielsen & Ringskou 2013) and climate changes (Einsiedel & Einsiedel 2004; Cameron & Kelly 2010; Meyer 2010).

When presenting such issues, museums inevitably engage with knowledge creation related to identity or ethical, emotional, social or political issues that are most often open for contesting approaches, arguments and ways of practising. Such contestations and controversies are suggested as better revealed and emphasized than avoided and by-passed (Lynch & Alberti 2010). At the same time, controversies are presented as productive means for engaging audiences 'in formulating new knowledge; in contributing meaningfully to current debates to more effectively operate within an increasingly pluralistic society' (Cameron 2010: 53). Thus, controversies are seen as both preconditions and means for museum practices, something museums need to care for as well as something museums can work with while they develop their knowledge in relationships with the surrounding society.

As we will further describe later, the controversies dealt with in this chapter were related to more mundane topics than those described above, namely controversies regarding the understanding of museum users and how to design for them. These controversies were thus related to design issues unfolding in collaborative design processes taking place 'behind the scenes' (Macdonald 2002) of the museums studied, and the way they were dealt with impacted the museum media being developed.

Controversies in design research

Within design studies, controversies have previously been flagged as influential and noteworthy for the understanding of design development. During a design confer-

ence in 2008, Bruno Latour suggested that designers should orient themselves more towards the socio-material controversies that designed objects are part of (Bannon & Ehn 2013). By using the term socio-material, Latour emphasizes that objects are hybrids that bind multitudes of human and non-human, discursive and material, substances together and meanwhile ‘[trigger] new occasions to passionately differ and dispute’ (Latour 2005: 5). Designed objects thus assemble and expose differences.

According to Latour, design processes should be planned in order to make visible how objects – rather than being matters of facts – are constructed by and construct diverse matters of concern, and thus call for attention towards diverse situations of use. Especially in the field of Participatory Design (PD), this approach has been embraced and at the same time recognized as an already ongoing practice, since PD processes have always evolved around diverse matters of concern (Telier 2011).

However, the thoughts of Latour regarding matters of concern and their discursive and material controversies, request for an explicit facilitation of controversial interests in the process within which an object is constructed (Bannon & Ehn 2013). Also, it calls for thinking of the design object as something that is able to handle, or co-exist with, controversial matters of concern. Thinking of design in this way leads to thinking of a design object not only as something heterogeneous (Mol 2002) responding to a variety of user situations, but also as something which centres around given discursive and material controversies. Importantly, the controversies should not necessarily be solved. Rather, they should be recognized, handled and configured for co-existence. This has been envisioned by reference to Chantal Mouffes ‘agonistic’ approach to understanding democracy, which emphasizes ‘constructive controversies amongst “adversaries” who have opposing matters of concern but also accept other views as ‘legitimate’ (Telier et al. 2011: 187). In the framework of PD, such ‘agonistic struggles’ could be unfolded as ‘passionate, imaginative and engaged’ activities leading to ‘creative innovations rather than rational decision-making processes’ (Telier et al. 2011:187). In this way, PD embraces controversies as a means towards creative innovations. As in museum studies, controversies in design research are thus seen as preconditions, constructions and potential triggers of knowledge and innovation.

Controversies in museum design research

In relation to museums, researchers studying design have brought attention to the co-existence and consequential controversy of, for instance, different communities of practice (Hansen & Moussouri 2004; Lee 2004; Moussouri 2012), curriculum theory ideals (Lindauer 2005) and values (Davies 2011; Davies, Patona, & O’Sullivan 2013) in museum design processes. In line with this, Sharon Macdonald (2002) has advanced the idea that museum design controversies often orchestrate negotiations of the museum users and their needs. As Macdonald (2002) describes it, these negotiations often imply that museum employees and designers ‘virtually’ represent the users in the design process rather than the users being ‘factually’ part of these processes.

In her study of an exhibition design process, Macdonald (2002) displayed how the multifarious ‘virtual constructions of the visitors’ led to ‘uncertainties’ regarding the objectives and means in the exhibition work. Our design cases similarly exemplify the centrality of controversies and negotiations regarding the understanding of museum users in museum design processes, particularly negotiations on who the museum media users were to be and how to target them. We explore both the ‘virtual’ and ‘factual’ presence of users in order to be able to discuss and expand on these insights in relation to concrete museum design methods.

In this chapter, we further want to stress the importance of both discursive explorations of controversy as well as material explorations of controversy for negotiations regarding museum users. In this socio-material orientation (Latour 2005), a central point is to highlight the connection between discursive and material explorations and how these can be seen and used as concrete design methods for museum media innovation. Other studies have similarly stressed the relevance of physical experimentation in terms of design controversies, referring to, for instance, sketching, prototyping and/or material artefacts (e.g. Perry & Sanderson 1998; Henderson 1999; Brereton & McGarry 2000; Eckert 2001; Suchman, Trigg & Blomberg 2002; Lee 2004), but only few studies (e.g. Lowe & Stuedahl 2014; Stuedahl & Smørdal 2015) touch upon the connection between discursive and material explorations of controversies in a museum design context. This chapter seeks to do just that by showcasing analysis of two collaborative museum design processes and discussing how discursive and material explorations of controversy regarding the use situation were more or less explicitly used as design methods for enhancing museum user negotiations, resulting in museum media innovation.

Case descriptions

The first study concerned a new and small Danish cultural history museum, the Danish Museum of Rock Music.¹ A digital museum collection, exhibition and communication tool was developed collaboratively by a design group consisting of museum employees, museum users, a digital designer and other professional partners, such as a venue owner and a rock journalist. The digital platform had the working title *The Map of Danish Rock History* and was imagined as a tool for mapping and describing places of Danish rock music, such as music venues, festivals, youth clubs, etc. It was envisioned by the museum that the mapping consisted of digital content, such as collected or created pictures, videos, written stories, etc. These materials were to be uploaded by both users and museum employees. As a new museum pursuing collection and documentation of a popular cultural topic, The Danish Museum of Rock Music found the engagement of the public especially relevant, both on the digital platform and in the process of designing the digital platform. The collaborative development process was planned to engage all involved participants in ideation, conceptualiza-

tion, designing and prototyping of the digital platform over a period of two years. The outcome of the collaborative process consisted of a digital beta version of *The Map of Danish Rock History*.

The second study took place at a Danish art museum² where a series of digital exhibition apps were developed in the interplay between employees from different departments of the art museum (educators, curators, communication specialists, etc.), employees from a digital design company and, to a smaller extent, museum users. More particularly, the participants developed three apps for three different exhibitions of modern visual art with the aim 'to revolutionize the exhibition communication by replacing other media, for instance, screens, wall texts and pamphlets' and 'to expand the quality of both the off-site and the on-site experience that will increase the accessibility to the museum.'³

The first two apps developed were intended for temporary exhibitions and the processes of developing them took approximately two months and four months, respectively. The third app was intended for the permanent exhibition and, since they were not pressured by exhibition deadlines, the participants chose to spend approximately eleven months developing it. Compared to the other case, museum users were not permanently part of the development group. Rather, they were involved in the three processes at particular instances. In the first process, museum users were invited to a test workshop, where they tested a prototype of the app being developed. In the latter two processes, museum users were invited to ideation workshops, before concrete ideas and prototypes were produced. Thus, the involvement of users was quite different in the two cases studied, as were the nature of the controversies being unfolded.

Methodically, the two cases were followed for more than a year by two different researchers, both using ethnographic methods, such as participation, observation, interviews and collection of materials (e.g., design sketches, drawings and maps). At the cultural history museum, the researcher had a very participatory role, engaging in the planning and facilitation of the design process, while the researcher at the art museum had a more observational role.⁴

In the following sections, the data from the two design processes is analysed; firstly, by focusing on discursive explorations of controversies in the two design processes and, secondly, by focusing on material explorations of controversies. Even though we see discursive and material explorations of controversies as highly interwoven socio-material configurations, we find this distinction useful for analytical purposes.

Discursive explorations of controversies

The controversy of factual versus experience-based knowledge: The Map of Danish Rock History

During the collaborative design process leading towards *The Map of Danish Rock History*, one controversy in particular was explicitly constituted. This controversy re-

garded whether the digital platform should be designed as a factual and encyclopaedic mapping or as a platform for mapping experiences of rock music.

The invited participants represented a broad range of potential contributors and users of the digital platform, such as three young rock fans, a former rock musician, a music venue owner, a rock journalist, a rock librarian, a local archivist, a digital designer and two museum employees (a history curator and a communication specialist). Initially, the group was urged to tell their own stories about places of rock music in Denmark. In this way, the design process was planned in order to explore user situations that were envisioned to be central to *The Map of Danish Rock History*, namely, to tell stories about the places of Danish rock history.

The stories presented at the workshops in the early stages of the design process had varied scopes. Some presented personal views on and memories of certain places. For instance, a young participant described how she waited for hours for the band to come while making her own band t-shirt and how she later got up on stage to sing with her idols. Other stories were more distanced from those telling them: a portrait of a certain cinema that was once used to record big Danish radio hits; an overview of activities related to rock music in a specific urban area during the 1960s. While the first story was told by a participant representing rock fans, the latter were told by participants representing rock journalists and local archivists, respectively.

Thus, the design process presented different matters of concern related to telling the stories of the places of Danish rock culture, and the digital platform was, on the one hand, articulated as factual and, on the other, as experience-based. But how these two approaches could co-exist was not explicitly discussed by the collaborating group at this point. In the early stages of the design process, such different approaches to how users of the digital platform should map and perceive the places of Danish rock culture and, thus, which users should do this, were able to co-exist peacefully (Mol 2002), although in a vague manner.

Later in the process, these two approaches gradually came to develop into more and more opposed approaches. For instance, the rock journalist articulated one approach favouring the perspective of a factual mapping:

Søren (rock journalist): I would simply start by contacting your organization [addressing the venue owner, also a member of the Danish organization of music venues] and say, 'we need your help to put all venues in Denmark on the map, they all relate to your organization'. [...] This would make a starting point. And before the platform is launched, you obviously will have built some layers with stories like yours [the personal anecdotes], it will end with the specific anecdotes when the user has reached certain places on the map.⁵

While the approach of the rock journalist seemed practical and pragmatic it also seemed to have implications for the design by calling for a design to primarily facilitate contribution of content already created, for instance, archived pictures, video, audio and other documentation. Following these suggestions, the personal anecdotes could

then be attached to the material uploaded by the venues that, in this version, were seen as the prime contributors to the platform.

As this version of *The Map of Danish Rock History* was articulated – in particular by the rock journalist – other participants felt urged to challenge it. These participants were interested in giving the users' contributions of personal anecdotes a more central role in the digital mapping. They argued for experience-based knowledge as different from just providing additions to the factual documentations of the places of Danish rock. This could for instance be heard in an expression by Claus, who emphasized the personal perspective as a significant element to the future digital platform:

Claus (venue owner): I think it's important to get the personal stories and the anecdotes because I learn best through anecdotes. If there is a teacher who has some good stories to some issues, some personal stories, then I get caught by it. Not when it is just some mechanical facts, I might almost say [laughs].

Thus, as a reaction to the suggestion of taking a practical starting point in the material already to be found at the venues, Claus (together with several other participants) argued that the personal stories and anecdotes about experiences with rock music should be essential to the *The Map of the Danish Rock History*. The approach of the rock journalist was found to be rather mechanical in its focus on factual documentation and archival material. Rather, the digital design should, in the view of those participants, be constructed in a manner to engage the user in storytelling and providing documentation of their own experiences with rock music. Contributing to the map should be more about personal storytelling than about presenting archival material.

At a later point, the rock journalist refined his version of *The Map of Danish Rock History* by considering the personal anecdotes as a more highly prioritized part of the mapping. Thus, he suggested re-articulating the anecdotes as something that should describe the unique characters of a certain place: A personal anecdote about an amazing concert should be part of the mapping only if it contributed to describe how the given location uniquely staged this experience. Several participants found this approach excluding. A participant representing the young rock fan said that she would not be able to generate content on the future digital platform if such criteria were used. The venue owner agreed and said that stories like those imagined by the rock journalist would demand an almost academic approach to the mapping. At the same time, the museum communication specialist, Lise, added: 'Music is about feelings and experiences', and, to sum this up, the venue owner, Claus, said: 'It is the live music experience, which should be central to the mapping, that's the central issue of places of rock music.'

The controversy thus brought with it an engagement from the participants to refine and innovate their versions of the use situation related to *The Map of Danish Rock History*. By relating and opposing the two approaches to the design of the digital platform, the group mutually refined their claims regarding the user of the digital platform. What started out as several stories about places of Danish rock culture de-

veloped into conceptual discussions on the design of the digital platform: Should the main priority and starting point of *The Map of Danish Rock History* be to encourage people from the venues to gather factual documentation or should it rather be centred around encouraging users to tell anecdotes about live music and thus be a matter of experiential knowledge?

This controversy helped to develop criteria for either approach to why users would be motivated to participate on the platform: the interest in creating and consuming factual portraits of rock places or the interest in being the contributors and users of personal anecdotes. By coming up with answers to such questions, the design participants gradually refined their visions and arguments for each approach. Refining visions happened because visions and ideas were challenged in a controversy between different matters of concern. This controversy was not necessarily a rational and logical opposition but, rather, it was the practised controversy of this situated collaborative design process. This might or might not have unfolded in other cases, with other design participants, activities and matters of concern. At the same time, it was seen that several participants especially supported a user situation in which they could imagine themselves taking part. Thus, the inclusion of ‘factual users’ (Macdonald 2002) in the process led to discursive contributions to the negotiations that somehow closely represented the users’ matters of concern. Thus, the negotiations were not purely founded in the ‘virtual constructions of users’ (Macdonald 2002). Meanwhile, the matters of concern of the users – manifold as they were – took shape in the situation of the process just as much as they derived from the participants’ relations and experiences with rock music in general.

A narrow versus a broad target group: The art museum case

In the case of the art museum, one controversy in particular was explicitly constituted in the collaborative design between the museum employees and the digital designers. This controversy was not directly related to different use situations, as was the case in the collaborative process leading to *The Map of Danish Rock History*. Rather, the participants in the art museum case were concerned about meta-level discussions on whether ‘the target group’ should be narrowly or broadly defined.

In contrast to the first case, opposing arguments in terms of the controversy did not co-exist peacefully in the beginning – it became evident at the very first meeting in the process. Before this meeting, the participants had had only minor discussions about the project. However, an application for funding had been written – mainly by museum employees – and, in this application, it was stated that the group would involve ‘four focus groups that represent different audience categories: School classes, the museum members club, families and young people’. The involvement of a broad and multifaceted group of users was clearly visualized in the application for funding, thus sustaining an approach in terms of targeting a broad user group. The project was granted money based on this application but, at the very first meeting, the digital

designers from the design company strongly questioned the rationale of the broadly composed user group mentioned: ‘But are they the target group you want to communicate to? Are they the end users as you define them?’ as Julia, one of the designers, asked the museum employees. Contrastingly, her ideal was a more narrowly defined target group: ‘We cannot make a digital solution that appeals to everybody so you have to dare to make a choice [...] and then we can work with another target group in the next project.’

Throughout the entire project, arguments for the one or the other approach were continually refined. In the process of developing the second app, arguments for a broadly defined target group stated that the museum was obliged by law to appeal to everybody and that the number of potential users of the museum was too small to target narrowly. In the process of developing the third app, it was further argued that the museum had a demographic commitment to appeal broadly and that target-group definition was anchored in a deterministic, functionalistic marketing logic with no room for unpretentiousness, playfulness and surprise. At the same time, arguments in favour of a narrowly defined target group stated that it was ‘extremely important’ to define a target group so that the solution would become intuitive and easy to use and, later on, that it was ‘absolutely necessary’ to make choices about target group. Thus, arguments for one or the other approach co-existed throughout the entire project, and the controversy was generally articulated more and more strongly.

While there seemed to be a tendency for the museum people to argue for a broadly defined target group and the digital designers for a narrowly defined target group, this dichotomy proved to be too simplistic. Arguments for one or the other approach could be found in both camps and the participants positioned themselves differently depending on specific situations. This contrasts the more clear-cut opposition between different groups (or people) in the process leading towards *The Map of Danish Rock History*. Furthermore, even though arguments for one or the other approach were continually refined throughout the process, arguments bridging the two sides were also introduced discursively in the processes of developing the second and the third app in the art museum case. For instance, in developing the second app, a curator from the museum hesitantly stated:

Maria (curator, museum): I could imagine having a very specific target group as you [the digital designers] say, and I’m very open for that; well, I do want to talk about it, but you really have much more concrete experience in terms of which groups it might be beneficial to choose. In addition I would like if it was visible to a broad audience; that it exists and that they can participate if they feel like it even though they’re not the target group.

Maria was clearly ambivalent about choosing a very specific target group, fearing that it might exclude. To answer this fear, the designers explained how they saw a target group as an elastic concept and, even though very specifically defined in the design situation, the actual design would often end up appealing more broadly than intended.

In this way, the designers also expressed ambivalence regarding the controversy. Later in the process of developing the second app, one of the digital designers introduced another example of arguments bridging the different positions. As mentioned earlier in the case description, the participants held ideation workshops with potential users before concrete ideas or prototypes were developed. At the ideation workshop with potential users in the process of developing the second app, the invited users talked about having different knowledge needs. Inspired by this, Julia suggested:

Julia (designer, design company): One of the groups was particularly passionate about the different interest points or knowledge needs – that these vary. Maybe you could appropriate that in different ways in a solution so that we can actually appeal to more target groups because there are different ways to access the content. And more concretely, one of the groups talked about being interested in the details of the artwork; so that could perhaps be one way to engage with the artwork. While another could be interested in knowing more about the artist, and some would perhaps want a historical approach.

Here, Julia suggested a way to bridge the opposing arguments, outlining a new way to understand and approach the controversy. Thereby, the controversy did not just result in developing and refining opposing arguments but also in coming up with new, alternative understandings and ideas. In line with this, the matters of concern changed throughout the design process, and the workshops with potential users in particular seemed to have a strong significance here. While potential users took part in the collaborative design process leading to *The Map of Danish Rock History*, they were only involved at certain instances in the art museum case. Up to these instances, the potential users were imagined virtually in certain ways and meeting the ‘real’ or ‘factual’ users face to face tested and reconfigured these imaginations (Macdonald 2002). Thus, these instances were used to refine the opposing arguments but also led to new ones, as illustrated by Julia’s solution-oriented suggestions above. Involving users thereby helped to enhance the central controversy on target groups that turned out to have a visible impact on the museum media being developed in the art museum case.

Material explorations of controversies

Physical experimentation and prototyping were carried out in both cases, however in quite dissimilar ways. As we will describe in the following, we found that these material efforts were highly interwoven in the more discursive aspects of the controversies and at the same time gave ways to explore the controversies in other manners.

Intertwining approaches in the 'Tour': The Map of Danish Rock History

Physical experimentation was conducted in the collaborative design process of *The Map of Danish Rock History*. For instance, mock-up activities were carried out by the entire design group at the end of the process. These paper-based mock-ups created by the design participants were envisioned as sketches of the digital platform that the digital designer should afterwards take into account. The mock-ups consisted of sketches of the interface of a 'place' on the map, and, by outlining a number of functions and subcategories, they also suggested what type of content should be generated to portray a place.

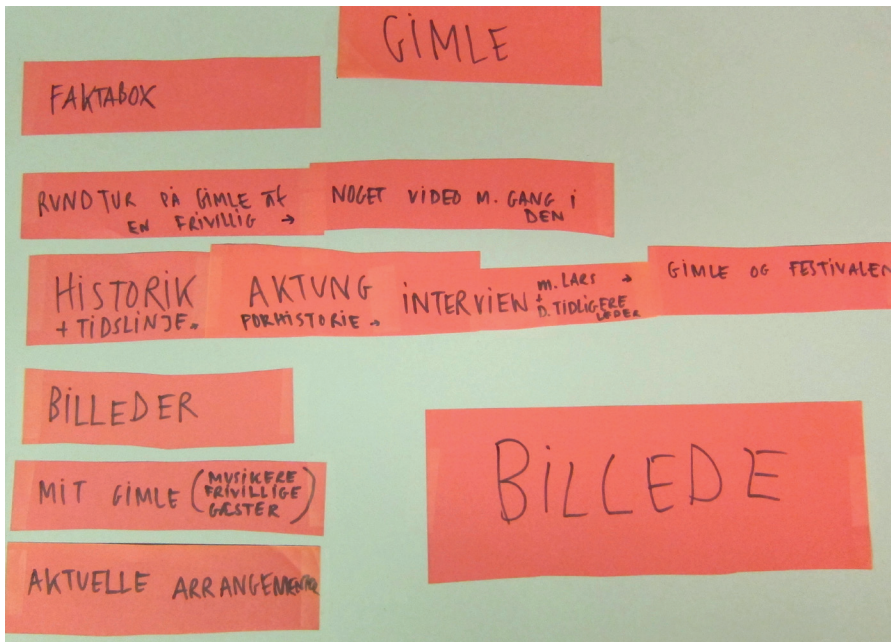


Image 1. Paper-based mock-up

Photograph of the paper-based mock-up created by one group in the third workshop leading to *The Map of Danish Rock History*. The mock-up displays the functions and subheadings by which the story of 'Gimle' – a venue in the Danish city of Roskilde – could be told.

The paper-based mock-ups were visually rather simple, as the example in Image 1 shows, but each component was accompanied by presentations given by the groups, which more thoroughly described each element and the content that was envisioned to belong to the elements. While the group at this point in the design process had not discursively resolved the controversy regarding a factual versus experience-based approach, it is interesting to examine how elements of the paper-based mock-ups suggested alternative versions of the co-existence of the two approaches. For instance, one group created a mock-up of a digital portrait of the

music venue Gimle with an element which they called ‘Tour’ [rundtur] (see Image 1). The group explained this element of content as a video-tour that presented the characteristics of the place and audio-visually guided viewers around at the venue. The contributor of this video-tour was envisioned to be a volunteer, or a former volunteer, at Gimle. The group argued that volunteers had a strong role in this particular place and should, therefore, be the voices through which its story was best told. As a suggested element of the content on the map, the video-tour entailed a vision of merging together the factual portrait of a place and the experience-based approach. In ‘Tour’, the volunteer could contribute with their personal approach to the factual information while the factual information became the historical hinges of the personal experience. This element could thus constitute the two approaches as mutually dependent and interrelated: Just as the personal anecdote would gain strength by being situated in the midst of a factual portrait of a place, the factual information would be exemplified and underpinned by the personal anecdote. ‘Tour’ suggests that the user is valued as both contributor of facts and as contributor of anecdotes in telling the stories of the places of Danish rock history, just as it valued these two user types in a mutually beneficial intertwining.

The ‘Tour’ can be viewed as a rather simple and obvious suggestion about how to present a place on *The Map of Danish Rock History*, but it tells stories about controversy and digital design innovation. It shows how issues that could not be discursively negotiated and solved can take on new articulations when more concretely materialized in prototyping. The prototype developed another route by which to deal with the controversy of the user negotiations, or even make this controversy productive, since oppositions created new perspectives rather than constraints and exclusion when materially unfolded in the design prototypes. In ‘Tour’, the significance of both approaches as well as their mutually beneficial relationship was articulated. Meanwhile, it could be suggested that the foregoing discursive controversy regarding a factual versus an experience-based approach helped shape and refine both versions of the digital platform in ways that made arguments for either side more elaborated and qualified before entering a material form. In this way, the discursive and material versions of the controversy were interwoven and mutually dependent.

‘Hedging one’s bets without causing confusion’: The art museum case

As in the first case, the participants in the art museum case made sketches and prototypes throughout the process. Furthermore, the first two apps developed serve as particularly interesting examples of material experiments that worked as resources for exploring the controversy of a narrow versus a broad target group.

For the first app, museum users were invited to a test workshop where they tested a prototype of the app being developed. The users here were characterized as part of two of the four focus groups mentioned in the application for funding: ‘the members club’ and ‘young people’. Both groups were asked to test a simple, digital PDF proto-

type of the app being developed. Julia, the digital designer who conducted the test, described the workshop as ‘problematic’ since it ignored the idea of targeting a specific user group. Furthermore, neither the members club participants nor the young people saw themselves as the target groups for the tested prototype: As Julia commented, the members club participants were, on average, 75 years old and, even though they were rather positive about getting extra information in front of the artworks, the format of an app was not intuitive and easy for them to use. The young people also liked the idea about getting more information, but only factual information. They did not like the interpretational framework in which the app encapsulated the artwork, since they wanted to experience it for themselves. Thus, they were not at all likely to use such an offer at a museum.

The group did not have the time to fundamentally change the design of the app, since it had to be launched at an exhibition opening not long after. Also, the workshop made it clear that the two user groups were too different to develop the chosen solution format in a way that would appeal to them both. Furthermore, Emma, the project manager from the museum concluded that these user groups simply ‘didn’t relate to the medium’. Thus, the materiality of the prototype test showed that the broad target group manifested in the application for funding was problematic in relation to the solution being developed. Instead of trying to design for these user groups, the participants therefore chose to redefine the target group, focusing on one target group: ‘the creative segment 25–35 year olds who are well educated and crazy about new gadgets’.

Redefining the target group at this point did not, however, prevent the finished app from being ‘too complex’, the group concluded later. Therefore, when initiating the development of the next app, the participants involved in the first app process were very concerned about defining a target group from the beginning. For instance, Emma stressed this point to newcomers in the group at the first meeting of the second process:

Emma (project manager, museum): We have experienced that a very specific target group has to be chosen, to whom it should appeal. So maybe that should determine the content of the app, be it high school students or fashionistas: who do we want to choose as a target group? Because, we can’t appeal to all of them.

This statement highlights a shared, material experience developed in the group at this point, favouring arguments for a narrowly defined target group. And, indeed, the group did decide at this meeting on a very narrow target group for the second app, namely what was termed ‘the Cover girl segment’, meaning young women who read the Danish fashion magazine *Cover*. However, the ideal of a broadly defined target group did still exist, which was strongly manifested not long after. Thus, in this project, the museum organized a user workshop before concrete ideas or prototypes were developed and the invited participants surprisingly proved to be a much more diverse group of users than would fit the definition of ‘the Cover girl’. At a meeting following the user workshop, Julia, the digital designer, noted this, to which Emma,

the project manager, explained: ‘There were two of those [*Cover girls*], but that was because we wanted it to be broader than we first discussed.’ This further resulted in a more broadly defined target group, namely ‘iPhone users between 25 and 35 years old’.

Interestingly, the second app proved to be particularly popular with children and families with children and not the chosen target group. This was deemed to be a success by the digital designers who used this fact to highlight that target-group definition should be seen as an elastic exercise. However, the group once again seemed to agree that the app was ‘too complex’, thus sustaining the arguments for a narrowly defined target group:

Julia (designer, design company): It is simply absolutely necessary that we make some decisions about what we want, who the target group is and how we communicate to that target group. That might be the most important thing.

Maya (educator assistant, museum): But still, that was exactly what we tried to do with the first app. In the beginning, it was really basic, but then a lot more was put into it when we first got started. It’s extremely difficult.

Benjamin (creative director, design company): Well, it’s bloody difficult.

Emma (project manager, museum): But it’s much simpler than the first app.

By evaluating and comparing the material explorations (the two apps), the participants collectively recognized that designing for a specific target group was easier said than done, pointing to an ambivalence in terms of different matters of concern related to the controversy. This ambivalence was, for instance, vividly portrayed at an evaluation of the second app by a group of museum employees, in which it was praised for being ‘inclusive in terms of children and families’ but at the same time criticized for ‘not appealing to all target groups’.

While these kinds of opposing arguments indeed co-existed throughout the process of the art museum case, and were tested and refined in relation to the concrete products developed, a bridging position actually became defining for the final solution: the third app. The idea to appeal to not just one specific target group, but to different groups or knowledge needs (mentioned by Julia in the second process) was further explored in the third process. Here, the material experience of the group from the two first apps was very much taken into account. As pointed out earlier, the user test in the first process showed that the solution format (the mobile app) did not appeal to both user groups invited. Also, the participants largely agreed that the two first mobile apps were too complex. Thus, it seemed, the co-existing different matters of concern could not be accommodated in this kind of solution. Instead of trying to resolve the controversy, the digital designers suggested another format for the final app, namely a stationary iPad solution that could better accommodate differentiation. This format, with the larger screen of an iPad, left room for complexity in relation to giving different access points to different target groups (see the sketch in Image 2). As Julia said, when presenting one of the ideas for the final app, ‘It’s a way to try to

avoid having to talk about a specific target group; maybe we could actually address different visitor combinations in this solution. [...] So that might be a way to hedge one's bets without causing confusion.'

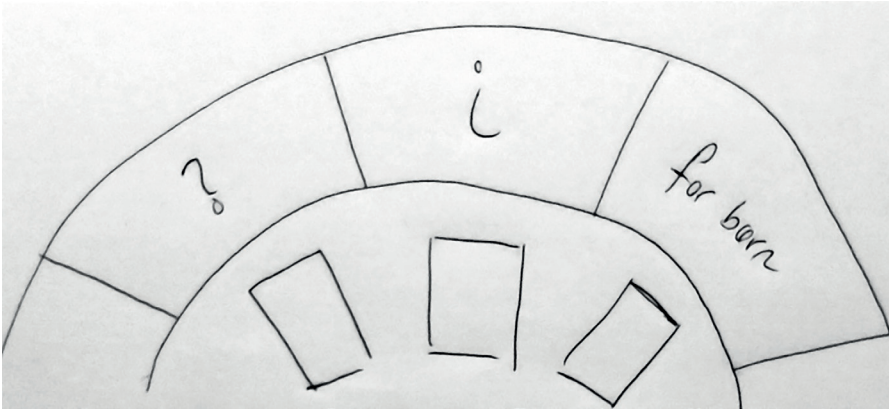


Image 2. Paper sketch

A sketch proposed by the digital designers in the third process of the art museum case (drawn by the researcher). 'For børn' means 'for children', 'i' means 'information' and '?' means 'questions'. The three squares in the lower part of the sketch are meant to be additional access points appealing to different interests (of different target groups).

Thus, the material explorations of the prototype in the first process and the two first apps developed demonstrated that the mobile app format would not be able to contain the co-existence of the two opposing approaches. Instead, a new solution format was chosen in which both approaches could be valued and in which they could be closely intertwined. In that way, the stationary iPad solution became another route – a material route – by which to deal with controversy and make controversy productive.

Conclusion

In this chapter, we have scrutinized two collaborative design processes in terms of how discursive and material design methods enhanced negotiations regarding divergent understandings of museum users and how to design for them. As exemplified in the analysis, such enhanced negotiations greatly informed the innovative design of museum media in both cases, despite their differences. Even though the goal of the processes was similar – to develop museum media – the participants and their activities were quite dissimilar, as were the controversial issues and the ways these were explored in the design processes.

In both cases, negotiations of how to understand museum users were central for the controversies in focus. But they were central in dissimilar ways: In the case of the

rock museum, the controversy was centred around use situations, while the controversy in the art museum case was centred around meta-level discussions on how to define target groups. As stipulated earlier, this difference might have occurred due to the different ways of involving users in the two cases. Thus, the two cases exemplified two dissimilar design strategies in terms of Macdonald's (2002) concepts of factual versus virtual users: In the rock museum case, the presence of factual users was prioritized throughout the process; in the art museum case, the users were mainly virtually constructed by the museum and design professionals, yet tested in relation to factual users at certain instances.

This difference in design strategies may also explain why the controversy of factual versus experience-based knowledge co-existed peacefully at the beginning of the rock museum case as opposed to the art museum case, where arguments for targeting a narrowly and a broadly defined target group were strongly present as opposite approaches from the very first meeting. In the art museum case, exploring this controversy discursively from the beginning was a deliberate design strategy and, throughout the process, this exploration ensured a high degree of attention to how the users were virtually constructed. When factual users were involved, these constructions were challenged and new ideas arose. In the rock museum case, the users were not such an abstract and professionally articulated concept. Rather, they were concrete design participants in the process. They were not encouraged to be explicit about their understanding of the use situation and generally tended to implicitly support a future use situation in which they could imagine themselves taking part. This, of course, was as much an act of virtually constructing the end user as in the case of the art museum, even though this construction of the user might be argued to have the benefit of being more 'factual' and anchored in concrete user needs or interests. Thus, in the rock museum case the design strategy was to start out by not explicitly emphasizing negotiations of different user types, but rather to let the sketches of different use situations evolve and co-exist vaguely. In this way, the factual users could start out by contributing with dissimilar imaginings of the use situations of the digital design object without having to deal with the more overall conflicting matters of concern regarding different user types which were latent in the design process. To sum up, our studies suggest that involving both factual and virtual users in the negotiations of end users can and should be done in a variety of ways. Nonetheless, it is important to be attentive to how dissimilar design strategies have different implications for the user negotiations in design processes and the material outcomes they lead to.

Based on our studies, we furthermore argue that material explorations of controversies became particularly central for enhancing negotiations regarding the understanding of museum users and how to design for them. Thus, materialization in mock-ups, prototypes and products gave other ways to explore the controversies by challenging, refining and evolving the matters of concern in the design processes of both cases. Actually, the emergence of the controversies could be argued to be less dependent on the types of participants taking part in the processes and more on the

introduction of the materiality of the concrete use situation. For instance, we found that negotiations of use elaborated in more discursive forms could contain a certain amount of virtuality despite the involvement of factual users, as in the rock museum case. These discursive forms maintained the different positions instead of evolving and dynamically developing them. On the other hand, when materialized in, for instance, a material mock-up, the design idea could be articulated by synthesizing different positions. Since the material experimentation regarding this aspect of the design of *The Map of Danish Rock History* was not introduced until a later stage, this design process unfolded as ‘virtual’ and somewhat stalled, despite the fact that this collaborative design process had been imagined as concrete, factual and dynamic due to its active and thorough involvement of users. On the other hand, in the art museum case, materiality was introduced early on and thereby catalysed an alteration of the different arguments regarding the virtually constructed users.

As illustrated in Figure 1, two different continuums are worth noticing for an understanding of the way user negotiations informed the collaborative design of museum media in the two cases:

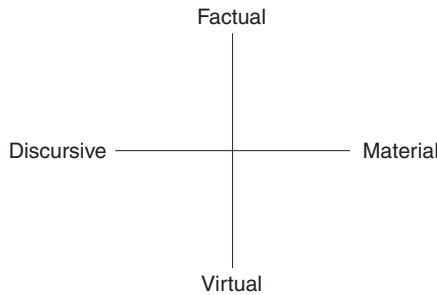


Figure 1. Diagram of user negotiations

Comment: Points to be attentive to when planning and managing the development of museum media. The continuum of users ('factual' versus 'virtual') is inspired by Macdonald (2002).

The rock museum case could be characterized by particularly the upper-left elements in the figure, as implementing ‘factual users’ in mainly ‘discursive explorations’. Contrastingly, the art museum case could be characterized by particularly the lower right elements, as implementing the ‘virtual users’ combined with a great amount of ‘material exploration’. As we have described in this chapter, we found that the most innovative re-articulations of the controversies were triggered by materiality: Thus, when it came to parameters towards creative and dynamic innovation alongside different matters of concern, it could be suggested that the ‘factuality’ of users proved less productive compared to materiality of the design process and its ability to introduce the actual use-situation early in the process. However, we have also noticed that the discursive negotiations were often interwoven with and highly influenced the material experimentations and their routes towards alterations in the controversies.

Negotiations and controversy have earlier been presented as drivers towards creative innovation in museums (Telier et al. 2011). We can support this, and we add that the ways controversies about users and use situations are dealt with, in interplay between virtual and factual representations of users, and between discursive and material design activities, are significant for the ability of controversies to actually drive, enrich and dynamically evolve design processes. In museum media innovation we therefore encourage museum designers to be attentive to how museum users may be involved and take part in the negotiation, discursively and materially, when planning and managing processes of developing museum media.

Notes

1. The museum was renamed Ragnarock in January 2016.
2. The name of the art museum and participants in the case will not be disclosed due to ethical considerations and since it has no importance for the conclusions presented.
3. Excerpts from the application for funding written before the project was formally initiated.
4. See Olesen (2015) and Knudsen (2015) for more elaborate analyses and reflections on the methods used.
5. All citations are translated from Danish and all names are pseudonyms.

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‘I Did Not Think About That!’

New Media for Stimulating Exhibition Re-interpretation

Teresa Macchia & Lily Díaz-Kommonen

Introduction

This chapter discusses the role of new media tools to inspire the visitors’ interpretation of an exhibition. In the chapter we investigate the implications of the use of new technologies in museum spaces and look at the opportunities offered to visitors to experience unexpected nuances of curatorial projects. Our primary objective is to emphasize the interpretive opportunities afforded by new media. The main question is: How do visitors perceive and reflect upon the messages conveyed through new media in an exhibition?

The discussion is based on a new media project developed for the exhibition *Sibelius and the World of Art* held from 17 October 2014 to 23 March 2015 at the Ateneum Art Museum in Helsinki, Finland. The exhibition was part of the celebration events marking the 150th anniversary of the birth of Finnish composer Jean Sibelius. A new media work was realized through a design research project in cooperation with the Finnish National Gallery, the Ateneum Art Museum, and the Media Lab at Aalto University. The tangible goal of the project, which included the authors of this chapter, three Master of Arts students and curators and managers of the Ateneum, was to produce an introductory video (in panorama format) for the exhibition. The introductory video was created to unveil Sibelius’ life and stimulate visitors’ interpretation during the visiting experience.

In this chapter, we describe different stages of the project focusing on the features of the new media. In the first section, we concentrate on features that make the museum a space where people can create and build their *own* perceptions. The focus is on the communication shift triggered by the increased use of new media in museum spaces. In the second and third sections, we present and discuss the exhibition *Sibelius and the World of Art* and the activities conducted in the project for producing the introductory video. In the fourth section, we evaluate the potential impact of new media on enriching visitors’ interpretation of the exhibition. We present the impact of new media through the description and discussion of interviews we conducted

with a number of visitors. Our chapter concludes by presenting and summarizing the outcomes of the research.

Museum as an evolving experience

During the mid to late twentieth century, the role of museums shifted from being a symbol of monolithic power to becoming an instrument for serving the ‘collective good of the state’ (Bennett 2013). As a result of this transformation, contemporary museum activities, such as exhibitions, interweave the latest topics and concerns of society with educational and civic principles to inform and create interrelated forms of knowledge (Bennett 2013). Social, educational, and civic messages are communicated to the public via the museum curatorial projects and materialise *in* and *through* visitor involvement. The curated information, which can often be characterized as interpretive, becomes embedded in narrative structures created for the exhibition spaces to draw a communicative configuration. Communicative configurations of exhibitions inspire visitors’ opinion and act as a hub for social aggregation (Macchia 2016) and reflect an evolution of the notion of museum from a ‘collection for scholarly use’ to a ‘means of communication’ (Hooper-Greenhill 2013: 35). Moreover, during the last twenty years, there has been an impressive growth in the use of different types of media for engaging museum visitors. This has resulted in an expansion of the communication repertoire of museums (Black 2010). Today, the introduction of media in the museum repertoire enhances the sense of sight as well as the other senses. New media provide visitors with a surrounding and intense body engagement experience (Wagner et al. 2010).

Various authors have emphasized the extended use of new media and interactive technology as a means for empowering visitors to become active agents in the transmission of the message and cultural exchange (Miles 1985; Russo 2011). Moreover, new media and interactive technologies are now regularly used to explicitly support new forms of museum experience (Proctor & Bicknell 2012). Museum professionals are now expected to develop strategies and participative opportunities for the museum that link together content and messages from diverse perspectives and audiences (Hooper-Greenhill 2013). According to Hooper-Greenhill (2013), museums communicate a wide variety of content in very different ways:

[Museum communications] can include communicating information in a clear and effective way, perhaps through a leaflet or telephone answer service; enabling a learning experience related to the demand of a school curricula, with a role-playing session for a small group of school curricula, with a role-playing session for a small group of school-children; promoting enjoyment and fun possible through manipulating interactive technology; and facilitating reminiscence and mental activity in the old and frail through the provision of sustainable objects as stimulus. (Hooper-Greenhill 2013: 52)

Thus, it can be argued that the media and the communications and messages created are themselves an essential component of the exhibition project. Therefore, in line with the role of museums to foster tolerance in human society and vehicle messages through the exhibition of collections (Carr 2011), contemporary museums play a generative role in providing new ways of interpreting information. This evolution of the museum towards a communications-oriented entity has altered the previously existing division between the 'hidden space of museum in which knowledge is produced and organized and the public spaces in which it is offered for passive consumption' (Bennett 2013:103). Within this 'media turn', the communicative activities are brought to the fore to enable content (and information) to be an instrument of change: from being 'disabling institutions' that inject information into the visitors' minds, museums themselves are fast becoming meaningful institutions of change (Miles 1985).

From this perspective, museum spaces can now be regarded as active sites of communication, interaction and exchange with visitor audiences who openly mingle with artefacts exhibited as the result of carefully choreographed narratives created by the museum staff.

It is in this direction that new media have been introduced into museums over the last twenty years, and it is in this direction that media is now used to enhance, change, and impact visitors' interpretation of an exhibition (Stogner 2009).

Media for enhancing the messages of exhibitions

The curatorial activity of museum spaces involves different channels for encountering and speaking to the preferences of a diversified audience. The curatorial activity is built upon a narration embodied in the way content and collections are displayed and represented through educational activities and media.

Primarily, museum exhibitions have the goal to tell visitors a story 'about a period in history, about a culture, the life of an artist, about scientific discovery' (Wolff & Mulholland 2013). The narration of a story may include texts, figures, different organizational methods, the selection and arrangement of chosen objects, and the way that objects relate with one another.

The museum that we know (and is coming into being) is grounded on the evolution of social and political principles that presuppose an institution operating as an active space meant for education, entertainment and the wellbeing of communities. Media play a central role in the success of this paradigm shift. Media provide visitors with a variety of new expressions and a range of possibilities to engage with these new expressions of museums exhibition. Moreover, museum exhibitions are no longer restricted to the local physical space but afford opportunities for expression 'indoors' (Ciolfi & Bannon 2002) as well as 'outdoors' (Stuedahl & Smørdal 2015). 'Indoors', media, sensors, and interactive technology enhance the individual and collective visiting experience. 'Outdoors', social media and web platforms engage visitors by offering the opportunity to share their indoor experience.

Furthermore, the inclusion of indoor and outdoor media provides visitors with a flexible and customizable museum experience. By using media, visitors have the chance to examine a specific topic and build personal connections and interpretations of the story. In fact, media are useful when they receive input and promote reactions from visitors (Dernie 2006). The media can play the role as triggers of visitors' engagement, imagination and interest in the exhibition's topic.

By using media, museums today have the opportunity to change from being 'expert-centric' to 'visitor-centric' (Stogner 2009). Media can provide opportunities for museums to reframe their contents by allowing the design of new forms of narrations. Media can e.g. be combined 'to inform and immerse, providing atmosphere and a temporal and spatial connection to ancient Egypt' (Stogner 2009).

Filling the gap between the experiences *past* and *present* is part of the work that the museum undertakes when organizing an exhibition. This is a monumental task, especially when considering that the experience of the museum visit comprises the public and the collective as well as the private 'inner' dimensions of each individual within the audience. It was in this spirit that in 2014 the Finnish National Gallery, with the collaboration of several other museum institutions in Finland, organized an exhibition to celebrate the 150th anniversary of the birth of Finnish composer Jean Sibelius.

The next section examines the shift of museums from being exclusive to inclusive institutions by discussing the media design research experience carried on in the context of the *Sibelius and the World of Art* exhibition. Biographical information about the historical events is also presented in order to contextualize our empirical data. The chapter continues with a discussion that calls for reflection on the use of new media for creating communication and encouraging personal interpretation of information in the museum.

Sibelius' life re-narration

For providing a fair picture of the composers' cultural inspirations, we initially delve into some historical and biographical aspects. We understand that the brief description on these pages cannot do full justice to the complexity of the person, but we think that it will at least offer guidelines and pillars for understanding the design process of the introductory video we created for the exhibition.

Among the objectives of the exhibition was to portray the genius, the unique life and work of the composer, and the many contexts in which it unfolded, thus establishing links to the *zeitgeist* of his time, including the different historical events and communities that coalesced in his lifetime and in his works. Even today, Jean Sibelius is widely regarded as the quintessential Finnish composer and his popularity as an icon of Finnish culture continues to grow (Ojanperä 2014). In a poll carried out in 2013 Sibelius was even elected as one of the top five most important personalities in Finnish history altogether.

The composer saw it as part of his creative mission to develop music that would be based on and reflect the soul, the landscape and nature, as well as the traditions of Finland. This can be appreciated in his use of mythical figures and themes from the *Kalevala*, such as is the case with the *Kullervo* symphony. This is one of Sibelius' earliest works, from April 1892, and is also considered one of his most complex and significant compositions. In it, Sibelius not only used themes from the epic poem but the choral arrangements are also said to reflect the runic patterns of *Kalevala* (Rickards 2008). It is conjectured that Sibelius even met with Larin Paraske, a well-known Finnish bard also immortalized in the art of Gallen Kallela and other Finnish painters. Many events in his life were connected both directly and indirectly with the emergence, through art, of the *ethos* of the Finnish nation. Sibelius' *Finlandia* was presented at the 1900 Paris World Fair, which attracted great attention in Finnish history. The Finnish Pavilion was a total work of art which presented the story of Finland with exceptional breath (von Bonsdorff 2014).

In this effort to re-contextualize and make more understandable the life and times of the composer to contemporary audiences, the exhibition brought together paintings, sculptures, as well as assorted visual media such as illustrations about Sibelius with immersive music and art installations. Hence, visitors had the opportunity to immerse themselves into a multisensory experience of Sibelius' times.

This was a time of marked contrasts, since the nationalistic spirit that saw its fruition in the creation of the Finnish state also collided with the destructive forces of conflict and war. Considering the role that art and artists of the time played in the development of the notion of Finland as an independent nation, it is not surprising therefore that many of the works shown in the exhibition are part of what is now regarded as the canon of Finnish national romantic painting. As Sibelius moved in these artistic circles, it turns out that a large number of the works shown were created by close acquaintances of the composer.

An example of this can be seen in Image 1, *The Aino Myth*, an 1891 oil triptych by his close friend Akseli Gallen Kallela, depicting the tragic tale of Väinämöinen's loss of the young maiden Aino (Knuutila 2011). This tale also from *Kalevala* had its own musical composition created during Sibelius' time by Robert Kajanus, a composer who, as a contemporary, has often been described as both mentor and competitor of Sibelius. Accompanying this work in the exhibition, and also by Gallen Kallela, was *En Saga*, another very famous work that depicts a romanticized version of the young composer. His head is topped by unruly curls and every feature of his face is glowing 'with happy genius' (Rickards 1997, 2008).

Artworks about the composer were shown together with works such as Oscar Parvianen's *Invocation* ('Child's Death', 1910) which bears direct reference to the death of Sibelius' daughter; Pekka Halonen's *Heikki Playing* (1903), portraying violinist Heikki Halonen; Albert Edelfelt's *Larin Paraske's Lamentations* (1893), a rendering of the famous kantele player and bard, and *Portrait of Opera Singer Aino Ackté* (1901). These were further complemented with landscape paintings such as Pekka Halonen's *View over Heikko* (1899) and Eero Jarnefelt's *Landscape from Koli* (1928). Featured in

the exhibition were also contemporary works related to the famous Sibelius monument by sculptor Eila Hiltunen. Additionally, a variety of new media art installations, involving different interaction modalities and created by the current generation of new media artists from Finland, were included and used as both part of the quest for reinterpretation of Sibelius in a contemporary context and to highlight the use of synaesthesia by the composer. Note that synaesthesia – the ability by which one sensory experience, such as sight, triggers a response in another modality such as sound or taste – has been considered a key characteristic of Sibelius’ genius. It has been reported that synaesthesia enabled Sibelius to experience the environment differently from others (von Bonsdorff 2014).

The goal of the introductory video was to give key access to the story of the composer from a contemporary perspective – a challenging task if one considers the complexity of the times in which he lived. In the next section of the chapter we describe how we investigated new media practices as a tool for communicating exhibited subjects in a different light.



Image 1. The Aino Myth

The Aino Myth, Triptych, by Akseli Gallen-Kallela (1891, Public Domain). The triptych illustrates the story of Väinämöinen’s doomed betrothal to Aino.

Building awareness of media development

The situations and events as portrayed in official narratives of Sibelius’ life guided and inspired our video production. However, a deep understanding of Sibelius’ life was to be combined with additional information about implications related to introducing contemporary media into the exhibition. Thus, a set of related activities were organized, including lectures and critical discussions with experts. These complementary activities nourished our understanding throughout the conceptualization of the piece since the insights obtained would either support or invalidate our design ideas and thus guided our decisions on what aspects to stress in the video.

Three MA students from Aalto University's Media Lab – Antti Hietaniemi, Mari Kemppinen and Tommi Koskinen – designed and created the video panorama and music remix, *Pieni Valosinfonia* ('Small Light Symphony') installation as part of their work in the so-called 'media design research seminar'. During the spring of 2014, the educational goal aimed at engaging students by using the notion of new media artefacts as forms of 'expressive artefacts'. We discussed the use of new media to generate representations of the world (Diaz 2004). Such representations of the world are created with new media and can provide a setting for the audience to engage in a process of reinterpretation.

We scheduled the course in two parallel sections: Together with traditional lessons on design research methods, we built a series of complementary activities. The complementary activities were planned in the form of seminars and an open lecture series that focused on a range of topics related to the *Sibelius and the World of Art* exhibition (Table 1). These sessions aimed to provide and build competences for the students to produce a media work for the upcoming exhibition. By participating in the complementary activities, the students considered the request of the museum management to design and produce an introductory video that targeted a young audience (ages 10-16 years of age) and expressed Sibelius' life by using a contemporary lens that could even include the notion of pop stardom.

Table 1. Schedule of development activities in the project

Date	Activity
11 February	<i>Remixing culture</i> seminar session at Media Lab Helsinki: Lily Díaz discussed on how to re-think how 'ways of seduction' are used in an established genre such as a rock music concert.
18 February	History of Ateneum and the exhibition of Sibelius: The class met with museum experts Anna-Maria von Bonsdorff and Siina Hälikkä at the museum.
25 February	Artist, researcher and curator Juhani Räsänen presented the topic of <i>Synaesthesia in the art of Jean Sibelius</i> from a critical perspective.
4 March	<i>New media opportunities for cultural institutions</i> : A discussion on The Orchestra app for iPad was presented by museum expert Anu Ahonen.
11 March	<i>Approaching the study of a phenomena</i> : Visiting researcher Teresa Macchia described how to use online surveys and social networks as tools for preliminary studies.
18 March	Elaboration of the concept: A workshop activity was held that focused on development of concepts to present to the museum management
8 April	A review of the two concepts for the video developed by students was carried out with selected members from the museum present.
21 May	The first presentation of the video prototype given to a larger audience at the museum.
15 August	Presentation of the final draft for the video.
16 October	Final video showed during the press opening for the <i>Sibelius and the World of Art</i> exhibition.

Comment: The organization of the complementary activities can be divided into two periods that respectively ended and began on 8 April.

As Table 1 shows, the organization of the complementary activities can be divided into two periods that pivot on 8 April, an important day for the evolution of the project. While activities and meetings before this date had the purpose of preparing the ground for developing the concept communicated by the video, the following meetings were meant to harmonize the museum management's needs and preferences with the students' interpretations of the task. Subsequent to the presentation by the students of their two design concepts, the museum management initiated a conversation about the two different concepts and provided useful feedback. The feedback allowed the students to tune the design of the video along the desired interpretative lines for the exhibition.

The feedback received was positive and welcomed our reinterpretation of Sibelius' life. The conversations after the presentation gave the students ideas on how to proceed with the prototype for the next viewing (planned for 21 May). For example, suggestions were made to include allegories and symbols associated with Sibelius, such as the violin (Image 2 recalls the video frames representing Sibelius' violin) or the piano. To have a deeper understanding of what the video would eventually introduce, the curators provided us with access to the exhibition materials that included information on Sibelius' travels, his life in Helsinki and the countryside, his association with Finnish folklore, and details about Aino Sibelius – his wife and unyielding supporter. Thus, we decided to design the video combining the natural and urban environment, and making use of folkloric ornaments (see, for instance, Figure 3). Moreover, we took inspiration from Petri Sakari's remarks about the composer being a 'rough diamond'. Sakari – one of the main interpreters and conductors of Sibelius' music – served as inspiration for the 3D animated sequence used at the beginning of the video. Additionally, Tommi Koskinen's musical score that included segments from Sibelius' work provided by the museum gave the work a contemporary electronic feel in contrast with the traditional and folkloristic symbol in Image 3.

We think that the video piece named *Pieni Valosinfonia* ('Small Light Symphony'), broke the Museum's expectation of reframing the figure of Sibelius. At the end of the projection held on 16 October 2014 (See Table 1), the response from the audience was completely absent: Not a word or a single clap. However, after a couple of moments thunderous applause broke the silence. Afterwards, we discussed with the students whether this was a cultural reaction rather than an effect related exclusively to the video. We agreed that, while culture might have had some influence, the pause and the applause might have had more to do with a feeling of surprise generated by the unconventional approach to the topic.

In this context, it became relevant for us to understand whether the video indeed influenced the audience's interpretation of the exhibition. With this in mind, we organized an ethnographic session for the three subsequent days consisting of interviews with museum visitors. We decided to act quickly after the opening to avoid comments from journalists and critics influencing the authentic reactions from visitors. The intention of our study was to gain a picture of the visitors' perceptions about Sibelius' life as portrayed in the exhibition before, during, and after watching the video.

The following section describes the project and discusses the activities through which we found inspiration for designing and producing the video.

A panorama video for Sibelius' 150th anniversary exhibition

This section includes additional highlights from the project and materials from visitor interviews. The interviews have been conducted right after the opening of the exhibition as part of our aim to expand our knowledge on the role of media communication processes enacted in the gallery space and how, and if, the video in any way influenced the visitors' interpretations.

Closing the gap

In seeking to portray Sibelius as a contemporary, we asked questions such as: Who would he have been today? Could we recognize in him and the events of his life traits of some of the famous music celebrities of today? With these questions in mind, we unpacked the main traits of the Finnish composer's life – such as his love for Finnish nature and landscape, his interest in the local customs and folklore, how, instead of using the piano, he composed for the violin – and re-proposed them in video frames.

For instance, Image 2 represents a sequence in the video that introduces two main aspects of Sibelius' life, the landscape of the country and his violin, to interlace together the artistic style and narration of Sibelius' time and the contemporary eclectic music tradition of the country.

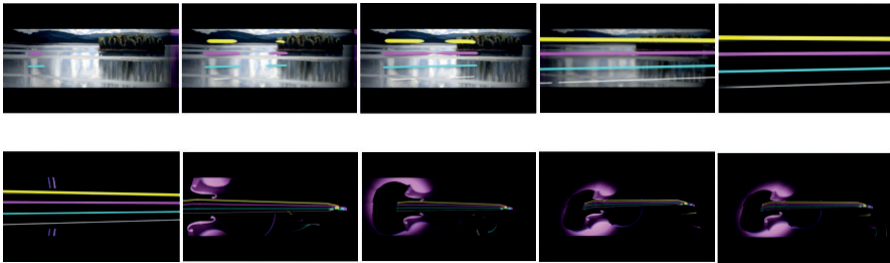


Image 2. Sibelius' violin

Representation of Sibelius' violin, a symbol of his career that interweaves the natural landscapes that often inspired the music of the Finnish composer.

Similarly, the audio created for these frames combined the composition *Finlandia* with sounds from the forest. The audio also included tribal music created by Tommi Koskinen that recalled the epic history of the mythology of the *Kalevala* (see Image 3).

The formal opening of the exhibition was 16 October 2014. The following day we began to investigate the visitors' appreciation and understanding of the video panorama and the exhibition. With the intention of grasping the visitors' feelings and

their understanding, we decided to use ethnographical techniques and interviewed a sample of visitors inside the museum. Each interview was regarded as an interactional experience that evolves with the participation of both the visitor and the interviewer (Suchman & Jordan 1990). We made sure that enough space was left in each interview to allow for those interviewed to actively participate in the construction of the interaction. Still, our main focus continued to revolve around clarifying how visitors, after the experience at the museum, perceived and possibly reconfigured Sibelius' life. Did they, for example, follow the contemporary idea and opinion of fame?

In this respect, we feel the need to underline the difference between fame and celebrity even though this difference appears quite straightforward. The notion of fame creates a complicated interweaving of politics and art, and of stability and changes.

'It is easy to confuse fame with celebrity. Celebrities come and go. But the famous become the characters in our national story.' (Slogan that was used in an exhibition at the National Portrait Gallery, London, 2015)

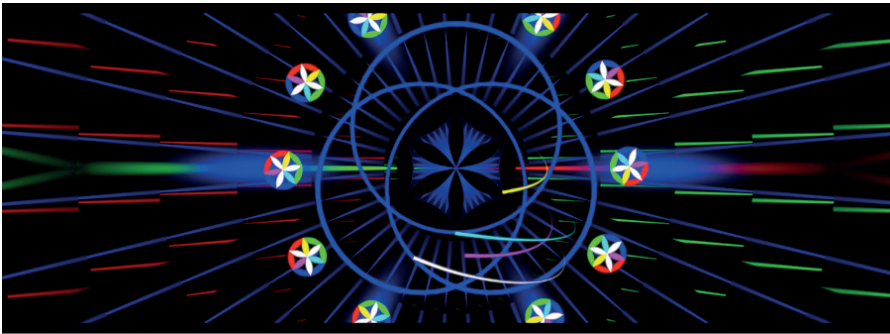


Image 3. Kalevala patterns

Frame from the introductory video: the objects in the frames recall the iconographic patterns associated with *Kalevala* mythology.

The implicit difference between personalities, who persist in and through time inspiring the new generation, and those who momentarily arouse enthusiasm, convinced us to do the interviews. With the video we had hoped to emphasize the influential and leading role of Sibelius' composition in the contemporary music culture in Finland and abroad, and therefore we also wanted to understand if and how the video triggered a reinterpretation of Sibelius' figure. By providing a transparent image of Sibelius through the video, we also aspired to emphasize the complexity of such a famed figure that has come to influence and affect future generations of musicians.

The following section unpacks visitors' interpretation of Sibelius' life before, during, and after watching the video.

Messages from the audience

The intention of the video was to stimulate and engage visitors towards a reinterpretation of Sibelius' life. In order to understand if, and how, the video supports the reinterpretation of Sibelius' life, we talked directly with a sample of visitors. Hence, for our study, we developed a set of guidelines for conducting interviews. Initially we recorded some demographic data, and then we asked about their general interest in and perception of Sibelius. The interviews were designed to investigate their perception of the video in combination with their previous knowledge of Sibelius. To facilitate a discussion about a re-interpretation of the composers' life based on the input at the museum, we mixed explicit questions related to the video and Sibelius' life, with 'soft' questions about the elements that attracted the particular interviewee. While discussing the reasons for their interest in specific elements of the video or the exhibition, the interviewees went deeply into elucidating their perceptions and opinions of the video.

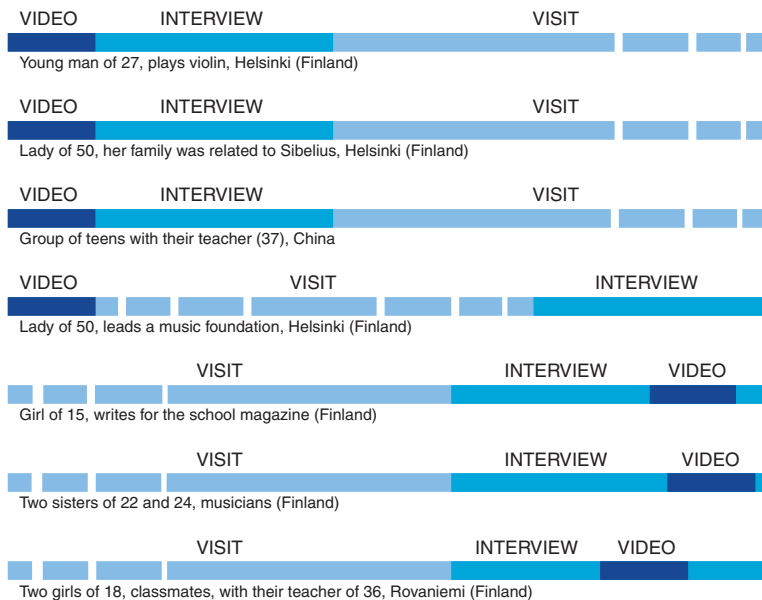


Figure 1. Management and organization of the interviews

As Figure 1 highlights, people usually visit museums in pairs or groups. In our case, we conducted seven sets of interviews: four individuals, one pair and one trio, and a collective one of a group of teenage students from China, led by a 37 years old professor and accompanied by a Finnish interpreter.

The four individual interviews comprised a woman who leads a music foundation; a woman whose family is related to the composer; a young man who plays the violin;

and a teenage girl who writes for her school magazine. We also interviewed a pair of musician sisters and a trio of two high-school students and their teacher.

We looked at each interview as ‘fundamentally an interactional event’ (Suchman 1990: 241) between the interviewee and the interviewer and we adjusted the length for each occasion. Even though we had a guideline that included four areas of investigation, we approached them differently based on who we were talking to. For instance, with the two musician sisters who talked a lot about Sibelius’ music, we adjusted the discussion, and focused on the colours used in the exhibition and whether the colours recalled music for them. This shift helped to reframe the discussion into a different, perhaps less technical, level. Moreover, after watching the video (see Figure 4) they adopted colours for describing their own *new* interpretation of Sibelius.

In our analysis and for evaluating the implications of video, we organized three different clusters of interviews, depending on when those interviewed had seen the video panorama installation:

- three of the interviewees, and the group of Chinese teenagers with their teacher and the guide watched the video before the interview and before the visit;
- three others watched the video after having visited the museum and during the interview;
- the remaining three people watched the video at the end of the interview and after visiting the exhibition.

The interviews were organized and designed to be experienced as an opportunity for expressing personal perceptions (Atkinson & Silverman 1997) about the exhibition and the impression they had about Sibelius prior to and then after the museum visit. Moreover, by leaving the interviews open for dialogue, we expected to facilitate the narration with the support of non-verbal elaboration. Thus, we invited visitors for a cup of coffee or tea at the Museum Café and informally presented the project and ourselves, and asked visitors to tell us about themselves. At the end of the interviews, we gifted visitors with a branded Ateneum pencil and notebook. The young man declined our invitation for coffee or tea and preferred a rather formal interview outside the room where he had watched the video. The other interviewees talked openly about their likes and dislikes about the exhibition and about their understanding of Sibelius’ life.

We adopted a flexible structure for the interviews, encouraging interviewees to give their points of view as if they were stories. In this way, interviewed visitors elaborated their thoughts while talking about the topic (Gherardi & Poggio 2009).

We think that this approach might have prompted a re-examination and re-elaboration of their image of Sibelius with us. For instance, when telling us about aspects of Sibelius’ personality that they knew, interviewees often stopped and said something like ‘I did not think about that’ and then they re-arranged their description of Sibelius introducing their new understanding about the composer’s life. This sort of surprised

reflection was very evident especially in the cases where we showed the video during the interview when visitors were already describing their experience of the exhibition.

We recorded the interviews using a mobile recording device. Unfortunately, because of the huge echoes in the lobby of the Ateneum Café the audio data cannot be used completely. What we have used for this chapter are instead the copious notes that we took during each of the interviews. These notes we also used to let interviewees understand our interest on their opinions. As we took notes, we highlighted words and aspects about the exhibition that the interviews brought up. We let visitors observe how we penned and circled words on their interview notes as an invitation to expand their discussion on specific elements. Highlighting and circling words seemed to work as a means for taking the discourse in a specific direction. We found this method helpful for two reasons. First, this technique helped the flow of the discussion with passionate people and supported the discussion with more introvert people – for instance, the teenaged girl was helped by the notes to take the discussion further than mere answers to the questions. The second reason for writing and circling words is that we think it is useful for interviewees to recognize the interviewer's involvement. In this case, the interviewees not only used the notes as cues to clarify or emphasize what they were saying, but the notes also enabled further reflection. In this way, we think that the notetaking and highlighting helped the interviewer to encourage the reflective and sense-making processes of the interviews, as explained by Pink (2001).

Watching the video seems to have mainly stimulated descriptions of Sibelius in terms of symbols, re-interpretation of his personality, and reflection on what the visitors already knew about the artist. However, the young violinist did not really appreciate the characterization of Sibelius' life in the video, lamenting the discrepancy between the national image of Sibelius, and the revised music and images, which, he said, 'did not fit together'. In sharp contrast, the other interviewees described the reinterpretation of Sibelius' life through a new reading key, in terms of challenges. Their description focused on Sibelius' charismatic nature rather than on his professional abilities. For instance, before watching the video, the two sisters were telling us what they knew academically about the composer, using words such as 'music' and 'composition' quite often and referring to the feeling the composition gives to them. However, having watched the video, and even though we had ended the interview, they were eager to re-calibrate their description of the composer with words such as 'controversial' and 'respect' ending by saying 'He wanted to be the best, he represented himself'.

Watching the video during the interview underlined a difference between plain descriptions of the artist and an interpretative approach for describing the *soul* of the composer. The other visitors who watched the video before the interview took an interpretative and exploratory approach to their description from the beginning of the interview, as visitors after having watched the video at the end of the interviews did. For instance, one of the visitors who had visited the exhibition before the interview concluded our discussion with a deep question about artists' lives – 'how do artists get through suffering?'.

According to some of the visitors' descriptions, the video was an unexpected and 'surprising' way to interpret Sibelius: a way to look at the composer in a new light, while considering at the same time the 'music', the 'person', and the 'colours' of his life. Similarly, the interviewed visitors underlined how Sibelius' music is still contemporary because he mixed the new and modern with the traditional, together with nature and the landscape of the surrounding country. Because of this ability of the composer, an interviewee remarked, it is possible to bring his music into our time.

Following the discussions of those who watched the video before or during the interview, and those who watched it after, we understood that the video had provided an opportunity for visitors to look at Sibelius' life through new eyes. Perhaps this was not so much because of what the video actually included, but more because it provided time and occasion for the visitors to reflect about the composer on their own terms.

Conclusion

Today, new media are used to enhance museum exhibitions and improve visitor engagement through their many different formats and genres. The introduction of such expressive artefacts in museums supports and carries information through new channels, changing relationships between the actors and enabling a relational form of communication. Altogether, new media bring innovative practices and reconfigure the existing ones (Bolter & Grusin 2000). Hence, visitors can utilize the introduction of new media to engage in a new understanding of the contents of the exhibition. As we noticed through our experience at the museum, media provide visitors with the opportunity to adopt a reflective perspective and therefore to consider the subject matter in a new light.

The project discussed in these pages had the intention to go beyond the traditionally established and iconic figure of Sibelius in order to engage and stimulate visitors to challenge such stereotypes. Using the video panorama as the introduction to the exhibition on 'Sibelius and the Art world', might have helped to enhance visitors' awareness and understanding of old and new contexts. By adopting media such as the video panorama and the music remix *Pieni Valosinfonia*, the communicative role of museums must be considered. If museums are supposed to play a generative role in providing new ways of interpreting information, it suggests an understanding of designing media for engaging visitors in a communicative interaction network. This entails providing the possibility to encounter links and find connections between the content of the media and the surrounding inputs from the exhibition as a whole. In this respect, media can play a role of communicating information that might be hidden below the surface, or un-described aspects of the exhibition that are not readily apparent, thus providing visitors with a new point of view.

Our experience with interviewing the visitors made us aware of an important feature of the video panorama: the opportunity to develop a new reading key. In this respect,

interviewed visitors developed their discussion through aspects of Sibelius' biography mainly hidden behind the main scene. Visitors contributed to the discussion about the video combining and reframing previous knowledge with new information and details. For example, because of the video, visitors reconsidered the strong influence of mundane activities and experiences on Sibelius' compositions. This seems to suggest that media communication can afford encounters with both mainstream information and the veiled and off-stage aspects of an exhibition.

In relation to the interpretative process, new media can support and motivate the reconfiguration of the meaning of exhibitions. From our project it seems that new media have the potential for redistributing information through new channels and through these channels to touch upon new and less apparent aspects of exhibited topics. Additionally, new media can also be considered as an invitation to enhance visitors' understanding of subjects, by offering opportunities to look at the information from other perspectives.

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‘Let’s Marathon!’

The Design of a Cultural Intervention for the Re-Use of Audiovisual Archives

Mariana Salgado

Introduction

Virtual archives and online portals are currently changing the relation between the keepers and users of audiovisual heritage, by challenging the role of the archivist as the authority on the knowledge a collection represents (Noodegraaf 2011). In this chapter, I focus on the knowledge we produce while we creatively reuse archive material. The knowledge I refer to concerns the ways enthusiastic video makers retrieve and use audiovisual material for their creations, not the ways the archivist or the historian finds and classifies material. This approach suggests new strategies for contextualizing the audiovisual archives, expanding their relevance and currency. I propose hackathons and marathons¹ as new strategies for re-contextualizing audiovisual archives. In this chapter hackathons and marathons are in addition design (in a wider sense) interventions with intercultural potential.

Museums and archives have started to explore different strategies for user engagement, participation, and openness. In some cases, archivists and archival institutions take part in, or even initiate, participatory projects. For example, ‘Waisda?’ was a game that was initiated by The Netherland Institute of Sound and Vision, a cultural archive and museum. The game motivates users to add metadata to the archival collection (Oomen & Aroyo 2011). However, such projects are isolated cases and are not part of the core activities of the archival institutions.

Isto Huvila (2008) describes a participatory archive as one that has decentralized curation, radical user-orientation, and contextualization of both records and the entire archival process. Decentralized curation happens when the curatorial responsibilities are shared between archivists and the participants of the archive. Radical user orientation is the result of making the usability and findability of resources a priority. The contextualization should acknowledge the importance of the practices of originators, curators and users (Huvila 2008).

There is already a strong liaison between archives and media scholars; however, more rapport is required between archives and remix communities. Such commu-

Salgado, Mariana (2018). ‘Let’s Marathon!’ The Design of a Cultural Intervention for the Re-Use of Audiovisual Archives in Dagny Stuedahl & Vitus Vestergaard (eds.) *Media Innovations and Design in Cultural Institutions*. Göteborg: Nordicom.

nities include amateur video makers who are eager to tell stories by re-using audiovisual archives. Strategy-wise then, we are looking toward an approach that is neutral regarding content and at the same time committed to openness, availability, and user-orientation of archive material (Menne-Haritz 2001). Participatory archive practices exist; however, they are neither widespread nor legitimated. Facilitating the creative re-use of archival material is a participatory endeavour that has the potential to enrich existing practices, especially for those archives that want to develop their online presence, as well as to give media researchers the chance to study knowledge produced through use. Video tools are already widely-spread and increasingly user-friendly, which makes it possible to be more inclusive in planning and implementing experimental practices and interventions.

In this chapter, I analyse the case of the *Video Poetry Marathon* (VPM) that took place in Helsinki on 7 February, 2015. The aim of this event was to re-use and re-contextualize archival material in a creative and empowering process of cultural hybridization. During the VPM the activity was to re-use audiovisual archive material and create video poems: short videos illustrating a poem. Video poems are a form of video art that mixes text, music, sounds and images. By analysing the design and facilitation of the VPM, I aspire to answer the following research question: How can collaborative methods such as hackathons and marathons be used to design digital tools for cultural exchange and innovation in archives?

The case: *Video Poetry Marathon*

During the course of a day, sixteen people – seven writers and nine video makers – realized a pre-defined task: the making of a video poem. The aim was to explore the re-use of audiovisual archives in multidisciplinary and cross-cultural teams and develop ideas for the creation of online tools for editing and publishing videos. Insights regarding the re-using of archive materials were compiled in order to make recommendations for interaction designers in the context of the EUscreenXL project (2013–2016). This European project aimed at producing a Pan-European audiovisual archive with content material from public organizations, national institutions, regional archives and university collections. In the design case described here, the design team, of which I was a member, investigated concepts relevant for the development of new online tools for re-using audiovisual archives. I planned and facilitated this event with help from a writer from Siivunalo, and a video expert. The latter supported the VPM participants in making their videos, in understanding current practices of video making, and in contextualizing their work within archived audiovisual-content. For my research within the EUscreenXL project it was important to investigate the process of generating new audiovisual-content by re-using archive materials, and of making this new content available for re-use.

Other factors that made this event special included the following: (1) writers were protagonists as the event intended to make video poems based on their work; (2) the format of video poems was unfamiliar to the participating video makers; (3) the participants had never before been in hackathons, nor were they familiar with this type of event; (4) the participating writers and video makers did not know each other before the event and the teams formed spontaneously on the spot; and (5) participants were mostly immigrants living in Helsinki.

Designing the Video Poetry Marathon

The VPM was one track of a larger event called *Hack your Heritage! – Hack4fi* (Avo-inGLAM 2015), which aimed at re-using Finnish archive materials recently released with Creative Commons licences or were part of the commons. Making video poems by re-using audiovisual archive footage from Finland seemed to be an excellent idea because it could frame the participants' work as participatory activism and add a new dimension to their work. I consider such activism relevant in this discussion because, contrary to copyright limitations, it encourages '[...] the pulses and flows that give publics vitality' (Harold 2009: 137). Marttila and Hyypä (2014a, 2014b) assert that copyright limitations restrict content availability and, as a consequence, design possibilities. They also claim that designers need to engage with legal frameworks for regulating content enrichment and re-use. In this context, intellectual property activists follow two models: some pirate corporate intellectual property to make a case for deregulation, and others adhere to the Creative Commons sharing model that tries to support people in the use of licences (Harold 2009). The VPM tried to follow the second model, in which participants used material released with Creative Commons licences and used these licences to publish their own creation.

The VPM was organized in collaboration with Sivuväli, a group of writers who write in languages other than Finnish or Swedish.² This group organized festivals and concerts and supported the creation and sustainability of their ensemble since 2013. Roxana Crisólogo, one of the founding writers of the group recruited the poets for VPM. She invited each poet in person. Her selection criteria were that they had to live within or near the Helsinki Metropolitan Area, and that she had had positive experience with them in earlier events. It was not easy to gather seven poets as we could not offer them financial compensation.

To recruit the video makers, VPM was advertised through many channels and in various ways: posters, mailing lists of people who have participated in video courses at the University, and posts to Facebook groups for immigrants living in Helsinki. The Hack4fi website called for participation, and organizers of the Hackathon used their own media channels to promote it. In addition, I wrote several emails to people I knew and invited them to take part. We were looking for enthusiastic video makers with basic video skills. Eventually, most of the participants were personal acquaintances.

Facilitating the marathon

On the day of the VPM, participants were given information about the day's programme, the Sivualo group, video poems, the reasons behind the event, the re-use of audiovisual archive material, and publishing under Creative Commons licences. In addition, they received a brief introduction to the content of the two archives that they could use.

They then briefly introduced themselves. There were sixteen participants in the marathon, from twelve different countries. All the teams formed during the day were cross-cultural and multinational. Each poet displayed one translated poem. Each video maker picked one poem that resonated to her/him, and together with the author of the poem formed a group. Participants' wishes were respected. For example, one preferred to assist with sound instead of making a video, while two video makers selected the same poem and worked jointly.

When the teams were ready, they could copy the AV files that were on a hard disk. The high-resolution videos came from Catalanian Television (part of EUscreenXL project) and The Society of Swedish Literature in Finland.³ Furthermore, participants could browse online archives and download from them. We provided the list available online from the Commons' free media resources of the Wikimedia Foundation (2015). Each of the archives in this list had a different search engine, most did not provide still-image browsing, and covered a great variety of content from many different periods.

Participants brought their own computers, on which they had installed video-editing software. They worked with different programmes, such as Magix Movie Edit Pro and Final Cut Pro. During the day, participants faced many technical problems, and needed assistance with making decisions in the creation of the videos or in achieving a certain goal. We, the facilitators, set up a YouTube channel titled *Video Poetry Marathon* (2015) and gave the passwords to all participants so they could upload their videos. Participants were free to take breaks whenever they wished and had lunch together. The whole event lasted nine hours.

One hour before the deadline, the participants and facilitators gathered to watch the works in progress and to discuss the experience and process of making these videos. Five videos were presented. One group showed sketches and explained their plans. At that moment, only one video was considered ready and was uploaded to the YouTube channel. The whole discussion during the presentation was recorded. Participants openly gave their opinions and shared thoughts about their collaboration. It was especially important that a video expert gave constructive feedback to each of the teams, most of which continued working on improving their creations.

The final presentation of the hackathon occurred the following day. Four groups from VPM made it to that day and presented their projects. Others finished their video for the Final Gala of the Hackathon that took place a month and a half after VPM.

Analysis

For this analysis, I reviewed the video poems, the diary I had kept during VPM, the audio recordings of one interview I conducted during the event, and the audio recording of the final presentation and discussion. The diary included feedback collected during many screenings of the video poems in the two months after the event. The audio recorded interview with one of the participants lasted half an hour. Other participants were too busy to be interviewed during the VPM. The interview questions were: What process does your team follow? What are your roles? Which archives are you using? Have you used these archives before? How did you find it to search into these archives? What do you think of the event?

In this analysis, I focus on four issues that were the most relevant in relation to facilitating the process of re-using audiovisual archives during the VPM: (1) the facilitation of creative re-use as a means for cultural integration and hybridization; (2) the development of media literacy in relation to archival material; (3) the development of media literacy in the collaborative process among artists; and (4) the legal re-use of archive material.

The facilitation of creative re-use as a means for cultural integration and hybridization

This chapter proposes that multicultural encounters could be a way to investigate new practices and formats of cultural interventions making use of archive materials. I argue that the inclusion of marginalized communities such as immigrants by participatory archives would have a genuinely positive social impact. In many cases, immigrants face numerous challenges in integrating into the host society, making new friends, finding employment, and learning the language. In Finland, as in many other countries, there is more unemployment in immigrant communities than among Finnish nationals. In addition, there seems to be no connection between educational background and unemployment as highly educated immigrants still face higher levels of unemployment. This is why cultural interventions that allow for cross-cultural encounters are increasingly useful in societies that become increasingly multicultural. Such encounters can be spontaneous but also facilitated. According to Navas (2012), marginalized people become productive even within their marginal spaces. For immigrants on their path to integration providing spaces and opportunities for creative expression and cultural hybridization opens up opportunities. Archives too, I argue, could see benefits from the re-use of their materials.

While there are many hackathons in which the participants come from different countries, organizers rarely focus on enabling multicultural encounters between the participants. In the case of the VPM, I purposely invited a cross-cultural group of participants in order to prove that re-using audiovisual archives could be a means towards cultural integration. We gathered participants from twelve nationalities, most

of them non-European immigrants living in Helsinki. In addition, because the starting point was poems from various origins, nationalities and experiences, the nature of the event was multicultural from the start. In this section, through a reflection on the multicultural aspect of this event, I answer the question of how the facilitation of creative re-use can function as a means for cultural integration and hybridization.

First, I review the video poems. Then I analyse the decision-making process behind the facilitation of these types of events. Poems reveal times of change, when certain things happen in our lives that influence our view of the world around us and of ourselves within it. Poems describe a turning point in life that produces change. In some cases, this turning point is the actual migration of the author. Poems arise from the personal experiences of authors living in a war, feeling alienated, with a family member in need of mental support. Poems reveal the intimate spaces of the authors and their realities, their origins, where they are, and where they wish to go, not only in geographical terms but also in relation to their emotional territories.

As these poems reveal, hackathons could open what Bhabha (2004) describes as the hybridity of culture beyond multicultural exoticism or cultural diversity. These initiatives that explore cultural hybridity promote the integration of migrants and natives and give voice and agency to marginalized communities by offering spaces to create and/or explore the hybridity of culture. Hackathons as places for starting long-term relationships (Briscoe & Mulligan 2014) could also encourage the continuity of cultural hybridity.

In the media, migrants have been stereotyped, racialized, criminalized, objectified and subjected to hate speech (Paulissen 2014). It wouldn't be surprising then if migrants would mistrust and abstain from media events. However, maybe because hackathons are in the media fringes, many migrant artists, designers, and developers support them. Therefore, events that welcome migrants' multifaceted narratives may bring alternative views on their identities and a richness to the perceptions of their lives. Participation in media production projects by people who have been excluded can often transform their self-perception, building confidence, a sense of self-worth, and a social voice (Dowmunt, Dunford & Hemert 2007). As a design-researcher involved in the cultural production of these events, I cannot overlook the inclusion of immigrants as an approach towards opening up new mainstream formats such as hackathons. Neither can I avoid the political agenda that underlies these cultural productions. Shilton and Srinivasan (2007) state that by broadening their traditional tools to actively engage marginalized communities in the preservation process, archivists can preserve local knowledge and create representative, empowering archives. Societies decide what to remember and what to forget, which is why the inclusion of marginalized communities, such as immigrants, should not come as an afterthought but be embedded in the facilitation practices in relation to the creative re-use and the contextualization of the archives.

Development of media literacy in relation to archival material

In the previous section, I presented the ways collaborative design methods, such as the VPM, could support cultural integration and provide counter-narratives to the current immigration politics. This section focuses on understanding what participants actually created in the VPM.

The videos our participants created dealt with travels, life changes, immigration, and mental and emotional strain. They did not try to take the viewer back to the original footage, and they did not hide the creative work of remixing archive material. The pre-existing context of the footage gave way to the new narration. These digital narratives can then represent a national archive even if an immigrant produced the original poem or story (see Image 1). Working with material from archives that represented different cultures in itself supported cultural understanding because many topics were common to different cultures. When dealing with national collections, as in the case of participants reusing Finnish collections, immigrants and their quest for identity could be the key to understanding local culture and identity.



Image 1. Video poem

Screenshot of one of the video poems in which Finnish landscape is used to visualize a story that happened in Burma.

These video poems are representative of the memories of the artists, taking shape from the combination of multicultural instances: the poem, the footage, the music, and the artistic work that combined them all. These inspirations had multiple origins. In the case of the poem *Infinito*, for example, the writer was from Peru, the video maker from Australia and the footage from the Netherlands, USA and Finland.

On one hand, archives could see these works as an interpretation of their own archival material and, on the other, they could host them as part of their collection. Most importantly, the hosting of these works enriches the collection of the archives with international and artistic insights that could not otherwise have been part of the archive. This process of artistic contextualization is fundamental to the archives. For example, the video poem based on Tanya Tynjelä's poem *Law 0*, contextualized footage from the archives by giving new meaning to the images from an entertainment park (Durall 2015).



Image 2. Law 0

Image from Law 0 showing an amusement park at dark. The sky is lit up by fireworks.

Law 0

Receiving the Nobel Prize only made his schizophrenia worse

Life was causing him so much pain

The autopsy said: death by overdose of bio-modified benzodiazepine

They shoot the horses, don't they?

(Translation by Tanya Tynjelä)

The video makers read the poems, like the one above, and looked for material that was visually effective, aesthetically attractive and gave their creations the right atmosphere. They selected the footage not in relation to the original but mostly in relation to their own interest or feelings towards the images. Our video makers re-contextualized the original clips into new creations disregarding historical accuracy; unlike researchers of the past interacting with archives. In our VPM, it became apparent that *searchability* and easy retrieval in archives are key aspects towards creative re-use.

Archivists are used to organize archival records according to geographical origin, which stipulates that records produced by the same administrative body should be kept together (Cook 1997). This way, documents are not only preserved but also useful for

researchers who deal with the meanings of these artefacts in the past. However, this method of organization is not relevant in facilitating creative re-use.

In the case of the VPM, participants did not have a certain image of a concrete object in mind but more an atmosphere that could be created using different means. Most of them explored the archives randomly. The footages they found they used in a metaphorical way in relation to the words in the poems. Our video makers did not try to use material that described exactly what the poem said; they used images to visualize them. If the aim were to better support the creative industry in their use of archive material, random searches and visual- and sound-oriented search (by colours, textures, soundscapes, music, rhythms, or drawings) would be useful. Tools that allow visual searches are already developed within European projects, such as Culture Cam (2015) allowing searches for colours and textures. Still, we have to wait until these tools are widely available and mature enough to be able to support creative re-use of audiovisual archives. In conclusion, archives involved in recognizing the needs and wishes of enthusiastic video makers should plan accordingly their presence, tools, and future strategies for archiving their collection and holdings online.

Development of media literacy in the collaborative process

This section describes the ways in which the artists developed their media literacy in the collaborative process that took place during the VPM. Hackathons by their nature include a multidisciplinary aspect as the participants have different backgrounds. However, in certain teams, participants might come from the same discipline. In the VPM, the multidisciplinary process was assured by including at least one video maker and one poet in each group. The flexibility and way of working was negotiated within the teams. This multidisciplinary teamwork could change the meaning that the writers gave to their narratives.

The poets were extremely open to edit and adjust their poems, giving video makers substantial freedom. In one video poem called *Infinito*, the video maker created a new poem combining two poems from the same author. In *Law 0* and in *X-Written* the team decided to create a new shorter poem by selecting fragments of the existing one. The author of *Is the time* said:

My poem had a different meaning when I wrote it than after making the video poem. This has now a subliminal message that is more positive. You can interpret the poem in many ways. But at the end we stay with the message that 'love can awake the world'. So, it was kind of turning the message of the original poem upside down.

Many of the video artists confessed that while they were curious about the poems when they chose them, they could not really understand them. One of the video makers discussed the importance of working with the poet who would then tell the video maker about the literary sources of her poem. After working all day with the poem, she could understand new dimensions that were hidden for her in the first reading

of the poem. The writer of the poem *Travel by train to find the faces from yesterday* narrated the story behind her poem:

I am from Mexico City and my mother is from Sonora. So, we often went by train to see my granny when I was a kid. I have a lot of memories from the window of that train. Some time ago we went for holidays to Croatia. We took a train from Montenegro to Belgrade. This is where the poem was born. It was a trip to the past.

In this case, the story behind the poem inspired the video makers to find the images and the tone of the video poem.

One of the poets mentioned that, for him, the event was a learning experience because, by witnessing the way the video maker worked, he not only learnt about the technical part of video-editing but also learnt about the process of creating a visual interpretation of a poem. He had created video poems before but had never used archive material. Instead his video poems consisted of video recordings of him reciting. The video maker introduced this writer to a new way of thinking of images in a poetic way, giving space for the creation of the artwork. Researchers in media literacy have identified a variety of approaches such as visual literacy, audiovisual literacy, critical literacy and print literacy (Freire & Macedo 1987). Here is a clear example of how participants in these events could develop media literacy. Media literacy is the ability to access, analyse, evaluate and create messages in a variety of forms (Aufderheide 1993). Livingstone (2004) sees literacy as a way of empowering people while benefitting from the use of information and communication technologies. Participants involved in the VPM advanced their media literacy by collaborating in the making of the video poems. Through this one-day event, they learnt about each other, gained insights on different visual and poetic languages, understood a new media form (poetry or video art) and grasped the creative process of a creator in another artistic field.

On the legal re-use of archive material

In the initial talk on the day of the VPM, I mentioned the importance of using archives respectfully and publishing under licences that could allow creative re-use by others. However, I noticed that one of the pitfalls of a one-day event was that it was too short to support participants in developing respectful practices. Some of the participants paid little attention to the importance of creating titles and adding the sources and titles of the archival materials used. This shortcoming should have called for reflection from the group and me as a facilitator. Participants were first-time users of archives and in order to understand the best practices of referring to original footage, they should have been provided with examples. Formal and proper referencing is not a straightforward task because as Harold (2009: 151) points out: 'artists wanting to incorporate fragments from existing culture into their own work must increasingly become amateur legal scholars in order to avoid the often costly penalties for ignorance.'

Another issue is the identification of archival fragments. In many cases, participants extracted only short clips from the original videos. Unfortunately, without a shared clip bin available that could facilitate remix, as Shaw and Schmitz (2006) propose, the identification of these fragments was and is quite difficult. In principle, using the licences correctly should allow fragments of videos to be traced back to the original pieces. For this to happen, video creators would have to be extremely vigilant in the way they refer to archival material and add titles to their videos. In practice, however, this process takes too much effort and, as a consequence, people don't bother to do it (Shaw & Schmitz 2006). Some of the participants in the VPM referred to the archive, but not to the name of the video. This makes it impossible to trace the original archival material. In addition, this is even more difficult with videos that have different versions uploaded under the same title. This is normal in remixing, as people collaboratively improve the original; however, not all of the versions are archived in a consistent way. As a result, many remixes have the same name, and it is hard to identify them.

Most people will not be critical about how they appropriate media, and emerging technologies make it easier to sample, take, borrow, or steal from pre-existing works, disregarding the history of a work (Navas 2012). 'I added the archive from where I took the footage; do you need something more there?' one video maker asked. This participant did not feel the need to be accurate and careful in the way he appropriated the footage; due credits seemed like a necessary evil imposed by the person facilitating the activity. A more thorough discussion about the correct use of licences would have been appropriate since most video makers paid little attention to this. Overall, the requirement to identify the videos and the archive in the titles at the end of the video-poems seemed tedious for most video makers. Only a few of them did it with care and copied all the details found about the footage. This resulted in lengthy credits – in some cases half the length of the video-poem – which may pose a problem if the creators want to send their video-poem to festivals where there are restrictions about the length of poems.

When enthusiastic video makers produce remixes, they are not possessive about their creations; they want to share their content and get others to remix it (Diakopoulos et al. 2007). This was also the case in our VPM: no participant opposed the suggested Creative Commons licence regarding their work. They used 'CC by', which allows others to re-use videos if the author is mentioned, to adapt the work to be shared, and it even allows for the commercial use of the work. We explained these conditions to our participants, but it is not clear if participants agreed with 'CC by' because they were not familiar with these licences and conditions, or if they were indeed eager to share their creations because this event motivated them. It is possible that creatively re-using existing footage encouraged our participants to also share their work with open licences, allowing for creative re-use. Considering that our poets as well as video makers constantly produced and publish materials, it would have been relevant to further investigate if their use of licences and their own understanding of the conditions and possibilities of licences had changed after this one-day experience.

Discussion

In this chapter, I analysed the model of a one-day VPM. A marathon that utilized a hands-on video editing approach while re-using audiovisual archives. The resulting eight videos can be seen on the YouTube channel.⁴ Other forms of collaboration, such as setting up an online platform with tools available for editing video, could also give media researchers and archivists the opportunity to observe and understand current collaborative practices related to the production and distribution of videos. However, the effort and resources to produce such online digital services are enormous in comparison to the organization of a one-day event.

Concerning our VPM, professionals in the creative industry have praised the video-poems for their high-aesthetic value and the metaphorical use of images that provide a harmonic counterpoint to the spoken narrative. Resulting from the collaboration are not only the video-poems but also the meaningful connections, learning, and networking that took place during the event. The learning process of making video-poems together in a multidisciplinary and cross-cultural environment was key in developing our participants' media literacy and shaping their experience.

During the final reflection of the day, most poets mentioned that working on the visuals of their poems was very enriching because their poems took other forms. A video-poem is an interpretation of a poem; in this case, made in collaboration with video makers. Video makers got inspired by poems and materials from the archives to create videos. None of the participants gave up, even when their project did not meet the deadline. In that sense, the project succeeded because the motivation for participation transcended the event, as participants worked long hours after the day of the marathon to be able to create a better result. Some of the video makers mentioned that it was useful to get to know what is available in the archives as this could be useful for future projects. They also mentioned that they could have devoted more time in searching the archives.

In conclusion, closer familiarity with the archives would have been beneficial in many ways. This lack of familiarity is the reason why this analysis concentrates on highlighting the ways in which audiovisual archives could develop facilitation processes for re-use and make use of the outcomes. Working together with users in the creation of these participatory archives by facilitating practices of re-use is one way to deepen the understanding of emerging user cultures and media practices. Archives could take the lead and perform a visible role supporting new media practices for the appropriation and re-use of materials to create digital storytelling, transmedia, and remixes. If remix practices continue to occur within an illegal and ambiguous framework, we provide fewer opportunities for dialogue and creative encounters between archives and video makers. To date, these two groups fight about the rights to the materials. Based on the lessons from our VPM, I propose that both groups should be on the same side rather than being competitors.

There are many benefits for the archives when they facilitate the creative re-use of their holdings in marathon-style events. Firstly, they could influence current remix practices by contributing to the design of new tools. Secondly, archives could contextualize their collections with metadata and artistic insights that otherwise would not have been part of their materials. Thirdly, archives better reach out to communities that are, or could be, interested in their materials and together co-design future digital services. Last but not least, archives should understand the challenges of legal re-use of audiovisual content and learn how to better communicate with different communities about their licences and conditions.

Conclusion

Academic discourse on audiovisual archives concentrates on the deep analysis of certain collections, their publishing policies (Kelibach 2011), and the need to enrich and contextualize these publications (De Neef 2012; Treleani & Mousou 2012). Media scholars have highlighted that it is in the missing materials of archives that meaning can be found (Robertson 2011; Mustata 2012). In this chapter, I argued that archivists, as well as media scholars studying archives' practices, will benefit by understanding knowledge-production through use by promoting creative re-use in collaboration with communities. In addition, archivists and media scholars in order to preserve and develop the archives could improve media practices and lead future archival strategies. If one of the aims of archives is to understand what people are doing with media, subcontracting video makers in order to creatively re-use their audiovisual material, seems counter-productive. Creating *together* is crucial so as to understand the implications for design and the creative industry: how to improve media retrieval, browsing, and authoring applications. Future directions for preserving, collecting, and publishing should be the output of this collaboration.

The creation of new video footage out of the combination of existing ones enables a deep interplay with the original materials and motivates creative practices that are complex and fertile for contextualization. The relative proportion of non-researchers among users of the archives is expected to increase in the future (Menne-Haritz 2001). Therefore, more research on these new practices and cultural interventions could lead to new types of archival strategies that better serve anticipated and unanticipated uses of the archives. Cultural interventions and hybridization could become the new strategies for contextualization of the audiovisual archives, and open a new path for media innovations in the sector of cultural heritage.

Kalantidou and Fry (2014: 1) introduce the idea that 'design needs to be recognized as the decision and direction embodied in all things humans deliberately bring into being, as they relationally constitute the made environments of our existence'. Thus, designing and facilitating the creative re-use of archival material is an opportunity for media scholars and archivists to create media environments that commit to the

memory of a wider and more inclusive public. As video tools get easier and friendlier for people to use, it is also possible to be more inclusive in planning cultural interventions and implementing new practices. Hence, including marginalized communities and comprehending amateur video makers would help participatory archives make a genuinely positive social impact.

Notes

1. While the majority of hackathons (etymol. hack+marathon) are focused on software development, some focus on generating concepts or preliminary ideas within a certain domain. These informal gatherings last between a day and a week, when participants get the opportunity of building relationships because of the prevailing collaborative ethos. There are many types of hackathons, some tech-centric and some focus-centric (concentrated on one topic). What all hackathons have in common is that they are output-oriented, inclusive, and value learning even from failure (Briscoe & Mulligan 2014). In addition, in the design field such events gain momentum by gathering together people from different backgrounds for a short and intense period of time to create different outcomes (e.g. prototypes or design concepts for new products or services). In the case I analyse in this chapter I purposefully use the abbreviation VPM that includes the term “marathon” to highlight the intensive nature of the event, and the fact that it resulted in new media not software.
2. Finnish and Swedish are the official languages in Finland.
3. One of the missed opportunities of the VPM was the lack of collaboration from the archival institutes. I had requested audiovisual materials from two Finnish archives. One of them made a copy for the marathon of high-resolution video footage while the other had no audiovisual materials to share for re-use but, instead, pointed to existing material of audio extracts that could be downloaded from the Internet.
4. See <https://www.youtube.com/channel/UCjKKJa9SM2BON9YLrRhdJMA>

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Design-Led Social Innovation for Youth Civic Organizations

Henry Mainsah

Introduction

Promoting cultural participation among youth is one of the key ways in which cultural institutions fulfil their societal role. Social media, ubiquitous computing, and mobile technologies have increasingly become a central part of social life and work practices for many people and shaped the way they engage as citizens. The ability of social media platforms to facilitate information sharing, collaboration, and socialization is increasingly being recognized by youth organizations as having potential for reshaping and reinvigorating citizenship among youth.

However, there has been a registered change in recent years in the ways young Europeans relate to cultural and political institutions. Youth are moving away from traditional engagement with mainstream politics, such as voting, membership in cultural institutions, petitioning representatives and the like. Young European citizens are increasingly developing a preference for intermittent, non-institutionalized, horizontal forms of engagement in issues that have relevance to their everyday lives (Marsh, O'Toole & Jones 2007; Amnå & Ekman 2014). These changes could be understood as being the result of the increasing individualization of Western societies that has been occurring within the backdrop of a breakdown of traditional social institutions (Giddens 1991; Castells 2010; Sloam 2014). Politically active youth are increasingly finding new ways to voice their opinions and seeking new channels and modes of expression to envision their views (see for example Loader et al. 2014). Loader and his colleagues (2014) have coined the phrase 'networked young citizens' to describe such youth. They describe networking young citizens as being far less inclined to become members of political or civic organizations such as parties or trade unions. They would rather engage in more project-oriented initiatives related to lifestyle politics. They are not dutiful but self-actualizing and enacted through a social media networked environment.

Cultural institutions that see social media as a platform for promoting cultural participation among youth often face significant challenges. When developing projects

to promote cultural participation and citizenship, they seldom fully understand and take into account the changing nature of civic identities among young people and the particularities of youth cultures in relation to social media. Designers and other makers of technology can play a significant role in rethinking how social media might be repurposed to align with the aspirations of the networked young citizens.

The aim of this chapter is to examine the role that design might play in proposing new ways through which cultural institutions could use social media to increase cultural participation by young people. I use examples drawn from a research project titled *DELTA* (a Norwegian term that means ‘participate’), where design students were invited to develop design concepts aimed at helping a local newspaper and a municipal council in the Norwegian town of Kongsvinger to create spaces for local youth citizenship through social media design. This occurred within the context of a master’s level course in interaction design on screen-based interactions. Through the design concepts, the students illustrated new ways in which social media might be designed for the newspaper and the council to engage youth. Based on this, I suggest that it is useful for social media projects developed by cultural institutions to promote youth citizenship to take into account both the changing nature of youth civic identities and their preferences and habits for socializing, collaborating, and interacting through social media. I demonstrate the ways in which design concepts produced by students embody negotiations between different institutional actors, values, interests, and investments with relation to civic social media in a local context. I argue that design provides a form of disruptive innovation that might encourage cultural institutions to develop a new understanding of the meaning of cultural citizenship.

Cultural citizenship

By framing two types of organizations – a local newspaper and the culture and youth activities department of a municipality – as cultural institutions, I wish to place emphasis on one of the social roles that they are perceived to have in a community. Public cultural institutions, one could say, serve the function of enhancing and developing cultural citizenship (Moe 2010).

The sociologist Nick Stevenson (1997: 42) suggests that cultural citizenship is realized when ‘society makes commonly available the semiotic material cultures necessary in order to make social life meaningful, critique practices of domination, and to allow for the recognition of difference under conditions of tolerance and mutual respect’. The desire for cultural institutions such as the news media and municipal bodies to encourage cultural participation among youth is grounded in how they perceive their societal role.

Findings from the Eurobarometer cross-national studies on cultural participation suggest that fewer Europeans are engaging in cultural activities (European Commission 2013). Cultural policy scholars Stevenson, Balling and Kann-Rasmussen (2017)

suggest that the perception of low cultural participation as a ‘problem’ is part of wider institutional discourses common to countries across Europe. I will further suggest that these discourses are a reflection of how the role and function of cultural institutions is understood.

One of these common discourses upon which the rhetoric of cultural participation is constructed is related to the discourse of social inclusion and cohesion. This is related to the perceived role that culture has in connecting people as communities. This discourse has gained particular emphasis in a context where multicultural and economic inequalities are increasing, raising concerns about the dissolution of common and shared local and national identities. This discourse suggests that the most likely people to be socially excluded were also most likely to be ‘culturally non-participant’ (Stevenson, Balling & Kann-Rasmussen 2017). Often included in this category are those from lower socio-economic backgrounds, immigrants, and young people. The non-participation of these groups is perceived as being synonymous with evidence of their exclusion. Characteristic of such discourses is the assumption that cultural participation is beneficial to both the individual and to the community in which they live. There is also an assumption that if the barriers that are impeding them from participating in cultural institutions are lifted, they would then naturally want to participate.

Youth and changing civic identities

Cultural citizenship is also closely linked to the organizations’ societal mission to serve democracy, local and national culture and the general public. For private business organizations, this is couched under the language of corporate responsibility, while, for public organizations, it is perceived as important to show a sense of responsibility towards society.

For cultural institutions affiliated to municipalities in Norway, the ability to include all segments of the population in social and cultural life is a central part of how they attain legitimacy. They need this legitimacy partly to fulfil their government mandate and partly to secure future membership. Recent state cultural policy has emphasized the prerogative of cultural organizations to be inclusive of new demographic groups. In 2011, the Norwegian Ministry of Culture presented a white paper with inclusion and participation as key themes, in which they defined one of the main policy goals to be to ‘strengthen inclusion and new voices in the cultural sector’ (Norwegian Ministry of Culture 2011-2012: 9).

The challenge that cultural institutions face is that the way they conceive cultural citizenship and valuable forms of cultural participation is at odds with the way contemporary youth articulate their civic identities. Youth’s understanding of citizenship and cultural participation is being shaped in a context where a widespread social shift away from formal institutions is taking place in many Western democracies. This

is symptomatic of an era of 'late modernity' in which individuals have lost faith in many of the institutions once charged with major social functions (Giddens 1991). Thus, while in modern society individual identity was intrinsically tied to major social institutions (churches, political parties, labour unions, community groups), in late modernity there is a trend towards increasing individualization, where young people are attentively forming their personal identities through social networks. This individualization is manifesting itself through the increasing notoriety of what has been termed as 'lifestyle politics' and 'identity politics' (Loader et al. 2014), signifying more personalized, independent, self-actualizing forms of political engagement and contexts for civic action.

Youth in particular are moving away from traditional engagement and participation in formal cultural and political institutions. Thus, many have observed that young Europeans today prefer forms of engagement that are short term, issue-based, have an informal character, and are organized in non-hierarchical networks (Marsh et al. 2007; Amnå & Ekman 2014). This, some argue, reflects the move away from a type of cultural citizenship that was decided and communicated to the masses in a top-down fashion by cultural institutions, to a type of citizenship where, to a greater degree, civic identities are given shape on the basis of the individual's local interests and private contexts (Loader & Mercea 2011). Young citizens living in the era of social media are increasingly comfortable with replacing old gatekeepers such as journalists, teachers, and officials with crowd-sourced information flows through Wikipedia, Facebook, LinkedIn, and Amazon. These shifts may help account for why many young people see an older civic regime based on membership organizations, public institutions, and officials as hierarchical and artificial. In such a context, the anarchy of the Internet and social media is particularly appealing. These media platforms offer relatively free spaces in which unrestricted creativity and self-forming networks can flourish (Coleman 2008). Such citizens see little need for participating in established state-owned and private institutions, they harbour a high mistrust of politicians and the mass media, prefer loose networks for social action, and communicate through digital media.

Given the increased preference among youth for rejecting membership of organizations in favour of participation in non-hierarchical networks, and self-actualizing forms of citizenship, how can traditional cultural institutions such as local newspapers and municipal bodies position themselves as custodians of youth engagement in civic arenas? How can they negotiate their own legitimacy as arenas that frame youth citizenship?

Cultural institutions in media and local government

The culture and youth activities department of the Kongsvinger municipal council had described the problem of low cultural participation as being particularly acute among young people. The council had a long history of developing initiatives to engage youth

in the political and social affairs of the town and, like other local political and cultural institutions, they had looked with optimism and hope at the potential of social media for engaging local youth. The council had previously developed a number of different initiatives for engaging youth through social media – strategies had involved attempts at engaging youth to participate in discussions on the council's Facebook pages and collaborating with popular young bloggers from the area. These initiatives had enjoyed only limited success. 'I would rather die than become friends with Kongsvinger Municipal Council on Facebook', a member of staff from the Kongsvinger municipal council was told in a conversation with young people. These initiatives had failed partly because the youth in the area considered such institutionalized forms of participation as inauthentic and irrelevant.

Skogerbø and Winsvold (2011) have suggested that, in Norway, there seems to be tendency towards revalorising local communities: a counter-urbanization in which local newspapers are playing a key role in preserving a sense of community. Local newspapers have traditionally played a key civic role in the communities they serve, providing critical information to citizens and serving as vital watchdogs of local government. Newspaper readership is an important means through which citizens articulate community participation and belonging (Hoffman & Eveland 2010). When inhabitants of a local town or region share the experience of reading the same local newspaper or comment on news stories on the newspaper's website, it serves to promote a sense of community belonging and civic participation (Shaker 2014). By being able to attract readers from all age groups, local newspapers fulfil a vital function as one of the institutions of local democracy. In addition, they provide arenas for public debate and interaction among local community members. However, in the case of the local newspaper discussed in this chapter, the challenge was that local youth expressed little interest in reading the local newspaper or posting comments on the newspaper's website. They were interested in what was going on locally but preferred social media such as Facebook as a source of local news. They considered the newspaper to be something their parents read, but not a medium that reflected their interests or preoccupations.

Civic social media and design

In recent years, several projects have aimed at exploring the potential of e-participation and e-deliberation environments. These projects have often been promoted by mainly local public institutions and adopt a top-down approach (De Cindio & Peraboni 2014). These initiatives aim to use technology to open channels for participation in the democratic process, enabling citizens to connect with each other and with elected representatives and local government. So, for example, there are a series of e-deliberation environments created with the goal of providing tools to support public debate among citizens and public bodies in order to find solutions to specific problems (see, for example, Coleman 2004; Loader 2007).

Besides traditional forms of political activism, there exist other forms of civic action performed by hackers, artists, designers, engineers, self-organized crafters, scientists and activists who redeploy and repurpose corporately produced content or create novel properties of their own, often outside the standard system of production and consumption. These groups use social media to exchange sewing patterns, technical data, circuit layouts, YouTube videos of technical tutorials, and guides to scientific experiments. We are seeing complementary realms of civic engagement being defined around issues such as food, gardening, climate change, citizen science, and activism.

Citizen action is becoming increasingly diverse, participatory, and located in unexpected places. One major challenge facing cultural institution such as local newspapers and municipal bodies is how to relate to these developing practices. These different forms of civic action (unstructured, grassroots, and voluntary versus structured and institutional) are characterised by different interactional models and tools. Thus, the question of how to reconcile the innovation approaches of grassroots ‘DIY citizens’ with the designed social media environments created by public institutions to support citizen participation is important. It is also important to consider what types of social media platforms and technologies local newspapers and local municipal bodies should develop in order to promote the types of civic action that reflect young people’s perspectives and aspirations.

Designers and other makers of technology can play a role in thinking how social media might be reframed and embedded to align with the aspirations of networked young citizens. Design approaches and interventions offer a valuable way of learning about, and informing the development of, youth civic spaces in social media in institutional settings. Design is about the conception of ideas, and developing their form, structure and function.

Designing typically involves different actors or stakeholders with different values and understandings of the world (Balsamo 2010). Changing understandings of social norms and youth identities offers opportunities for designers to rethink how social media might be reframed and embedded to align with the aspirations of networked young citizens. Design innovations in civic social media have moved away from the approach of providing an ‘anytime anywhere’ access approach to data, information and networks towards the integration of technologies into meaningful cultural practices contextualized in specific communities. Loader and Mercea (2011) argue that one impact of social media on democratic innovation has been its disruptive capacity for traditional political practices and institutions. One example of this disruption has been the blurring of the division between mainstream news media and citizen-user content generated as news. The concepts can also be seen as having potential as disruptive innovation (Christensen 1997; Dyer et al. 2011) or paradigm innovation (Francis & Bessant 2005), within the context of youth-related civic practices in relation to cultural institutions.

Designing for youth citizenship

In the rest of the chapter, I will present and discuss the two cases drawn from the *DELTA* project, where design students worked on developing design concepts for helping the cultural activities unit of the Kongsvinger municipality, and the local newspaper in Kongsvinger create spaces for youth citizenship through social media design. In the following I describe the design process that led to the two concepts the students developed and analyse the possible implications of implementing these concepts for reframing the organizations' role as civic actors.

Design students as cultural intermediaries

Cultural studies scholar Paul du Gay and his colleagues (2013) describe designers as cultural intermediaries. In the process of developing products and services, designers embody culture in the things they design. Designed artefacts are inscribed with meanings as well as uses and design produces meaning through the way it encodes artefacts and services with symbolic significance. In addition to creating services and artefacts with specific functions, 'design produces meaning through encoding artefacts with symbolic significance; it gives functional artefacts a symbolic form', as Paul du Gay and his colleagues point out (2013: 62). In the case of cultural institutions, through the choices made when designing social media, they implicitly inscribe these artefacts with particular meanings that might shape the way citizenship is practised. I will argue that, as young designers, the students that were part of this project were ideally positioned to serve as cultural intermediaries.

First, they were highly skilled users and makers of social media and, thus, were in a good position to critically evaluate the existing social media platforms of the media organizations and propose solutions for redeploying these to match the desired civic goals. Second, they belonged to the same demographic as the youth that the organizations were calling upon to participate in their social media platforms. One of the students had grown up in the town where the local newspaper was based and could therefore share insider knowledge of the youth experience of the area.

Thus, in addition to other young people consulted during the design process, the design students were ideally positioned to provide a youth perspective. They were inherently more familiar with the social media practices of their peers, and had an intimate understanding of networked culture and the civic practices of the young.

#aPepper

This case focused on the local newspaper in Kongsvinger first established in 1926 and with a circulation of about 16,000 copies at the time of writing. Although the newspaper attracted some young readers, youth in the area mostly resorted to Facebook as their main information and interaction medium. In addition, the only forms of interaction possible on the newspaper's website and Facebook page was reading the information

and writing comments. The newspaper had a youth news section that published news relevant to youth, run by a small editorial team headed by an older journalist and young assistants. In its desire to create new spaces for youth civic engagement, the newspaper sought ideas for attracting more active participation among young readers.

The *DELTA* project challenged a class of master's level interaction design students to develop design concepts for encouraging youth participation in local news arenas connected to the newspaper. The students received a brief in which they were asked to develop a concept for engaging youth in local news through the platform of the local newspaper. The task was to develop this concept through a prototype for digital interaction aimed at young people in the areas where the newspaper is distributed, but the prototype should also be applicable for other groups. The students were to make their design concepts compatible with smartphones, iPads and PCs.

After the first week of lectures the whole class went on an excursion to Kongsvinger, during which they were taken on a tour of the newspaper's offices and were introduced to the editorial staff. Through discussions with the newspaper staff they gained insight of the newspaper's operations, especially with regard to the production of news aimed at youth. At this point, the students were already thinking of the design challenges that might arise in developing concepts to encourage participation among young online-newspaper users.

After the tour, the students split into groups and conducted mini informal ethnographic fieldwork at different venues in the town centre where they got to practice some of the research methods on research and modes of inquiry they had been introduced to earlier. They strolled along the main streets at the town centre and did some short informal interviews with young people they found hanging around. In addition, the groups did some further research centred specifically on their chosen design concepts.

I particularly followed two students who had listened very closely to what the young people from the town had told them. These two decided to follow up the accounts by examining what had been posted on popular social networking sites such as Facebook, Instagram, and Twitter, and had hashtags that were directly related to the town and activities going on there. Within a week, they had found a considerable amount of online content about the area generated by local youth in the form of blog entries, pictures, videos, and information about local events and activities.

There was a general reaction of surprise when the two students presented the results of their online search to the rest of the class, as the local teens they had talked to described the town as 'boring' and 'dead,' giving the impression of not much around to do. As the students found out, the volume of online content about everyday activities posted by youth contrasted with a widespread belief among locals that the place offered little in the way of out-of-school activities. Was the problem that youth in the area did not know about all the activities their peers were participating in? Was it that they did not find these activities interesting or exciting enough?

Later in this chapter is a description of the design concept developed by the students to develop a prototype of an application for collecting, editing, and publishing

feeds from social media platforms. The main premise, from the students' perspective, was that the meaning of 'news' and what it means to be engaged in news needed re-framing. Their online research had revealed that the youth of the town were already actively participating in activities they considered as being relevant forms of civic engagement. They found masses of evidence of this through the videos and pictures posted by young people involved in sports and other cultural activities. The problem, according to the two students, was that this was not visible enough, as it only existed in the semi-private online social networks of Kongsvinger youth.

Thus, the students decided to develop a concept that proposed a means of making the social-media presence of the Kongsvinger youth more visible by adding the proposed application to the local newspaper. Making such an application a feature of the local newspaper represented a significant way of moving the voices of the local youth from the peripheries of semi-private online arenas to the centre. The idea behind the application, according to the students, was 'to use this content as news' – to make it possible to highlight, distribute, and profile this content in the local newspaper. Explaining the idea behind the application, the students said: 'We want the youth to be storytellers of issues that concern them – the things they did, are doing or will do [and] that they would like other people to know'.

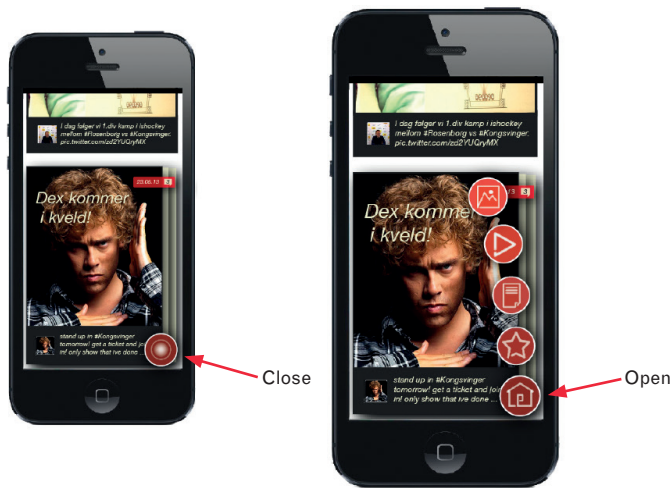


Image 1. Mobile app prototype

A screen grab from the students' keynote presentation showing the prototype of the mobile version of the application, with menu function icons in red.

A typical scenario would start with someone in Kongsvinger posting a picture, video, or written comment on any of the popular social media with the hashtag #aPepper. After that, an editorial team would collect all posts using this hashtag, such as Tweets or Instagram feeds and publish it in the newspaper.

1. Share it in FB (brag about it)



*FB!
and save
favourites!*

Image 2. Facebook sharing feature

A screen grab from the students' presentation showing the Facebook sharing feature of the app.

The editorial team would then proceed to select content daily and publish it on the application. This selected content would be published in a special column of the newspaper created especially for the app.

2. Landscapeview of most popular posts



*Most commented
in the last days!*

Image 3. Comment feature

One feature of the app was a graph where one could see the authors of the posts that had received the most comments.

The app would be designed so that users would be able to share content generated under the hashtag on social media such as Facebook. The app would make it possible for users to track postings to see those that receive the most comments.

For most Norwegian towns the size of Kongsvinger, the local newspaper constitutes a central arena for what might be considered the local public sphere. The teens that the students on the field trip talked to expressed little interest in reading the local newspaper or posting comments on the newspaper's website. They considered the newspaper to be something their parents read and did not reflect their interests and preoccupations. By introducing a service for highlighting the content produced by youth on social media in the newspaper, the creators of the concept saw this as a good way of making the youths' voices heard and giving them the feeling that their voices mattered, which could help attract young people to the newspaper's website to read, watch, and comment. The proposed concept could also help construct the newspaper as a new arena as a civic-engagement space where youths' voices could be heard.

After the course had finished, the two students were invited to present this concept to the staff of the research and development department of the company that owned the Kongsvinger newspaper and, a few months later, to present their projects at a national conference of newspapers that had young readers as its main theme.

#OurKongsvinger

The second case originated from the work of two students on a master's course in service design at the Oslo School of Architecture and Design. As part of their curriculum for the learning of co-design methods they were given a two-week long task to design tools for the culture and recreational activities department of the Kongsvinger municipal council to facilitate dialogue and communication between the municipality and local citizens, especially the youth.

These tools were particularly important for the municipal council because they were developing several projects aimed at building public meeting places for local inhabitants, for which they considered citizen participation to be key. Amongst these projects was an activity park – planned to serve all age groups, from children to the elderly – in the neighbourhood of Vennersberg.

In order for the locals to feel a greater sense of ownership, the group working on the project wanted to include local inhabitants as much as possible. Thus, the task we proposed to the students was to provide tools and methods that participants in projects such as this could use for involving locals throughout the project, especially in the idea-generation phase.

The teachers and the students began the week by going to Kongsvinger, where they held a workshop with a group of inhabitants. The participants were aged from 12 to 50 years. This was the third of a series of workshops that the *DELTA* project had organized in Kongsvinger and the workshop was a cultural mapping exercise to gain

insight into the participants' everyday outdoor social activities and the geographical locations in which they carried out these activities.

During the workshop, the participants were first asked to talk generally about the town from their personal experience. Afterwards, they were asked to draw on poster-size sheets of paper. For the council staff from the activity park project, the workshop served as a starting point for collecting ideas about the park and for recruiting future ambassadors and collaborators for the project. For the service design students, all of whom were in Kongsvinger for the first time, this was an opportunity to meet some of the local people. It was also an opportunity to understand the potential issues related to communication between the authorities and the different age groups from the local population. After the workshop, the participants gave the students a tour of the surrounding neighbourhood. The students were then divided into groups and each group was asked to develop a design concept that could help the council to promote citizen participation in local activities of benefit to the community.

In the following, I will present a design concept that one of the student groups developed, based on the idea of a tool designed to facilitate communication between local citizens and municipal authorities.



Image 4. Mobile mailbox

A picture of the mobile mailbox installation placed outside on the street.

Image 4 shows the picture of the prototype of the concept developed by the students: a 'mobile message box balloon monument' that aimed to serve as a tool for collecting feedback from the local population on propositions, ideas, or impending decisions by the municipal council. The tool could also be used by any other group, such as

youth organizations, sporting associations, or people working together, who wanted to consult the general public on any project they were working on.

The mobile message box balloon monument, as seen in the picture comprised a white cardboard with a small slot for posting pieces of paper, and a bright red balloon attached to the cardboard box. The students chose the colour red for the balloon to represent one of the colours of the official seal of the town council and because the brightness of the colour would catch the attention of passers-by. The balloon box would be placed in locations where there would be direct interaction with passers-by, so the municipal council could, for example, attach a message to the box, such as: 'The town authorities want your opinion on where we should build a new activity park.' Likewise, a local group of young skaters might post a message in reply to a request such as: 'We want your suggestions on what to name the newly built skate park in our neighbourhood.' People would be invited to respond either by posting a letter into the box or by posting a comment digitally on the box's profile page on social media. The students suggested the hashtag #OurKongsvinger.

The idea behind this concept could be likened to what one civic designer and organizer defined as 'civic hacking', which he defined as 'the act of quickly improving the processes and systems of local government with new tools or approaches, conducted with cities, by citizens, as an act of citizenship' (Levitas 2013).

In the next two sections, I will take up some key themes from the two design examples described above. In doing so, I wish to highlight the ways in which design can play a role in helping cultural institutions generate spaces for civic participation of youth through social media.

Disruptions

The design concept of a mobile app that highlights content posted by Kongsvinger youth on social media challenges the status of the newspaper as the sole curator of the content of youth civic engagement and the space where civic participation happens. The concept suggests a means of making the online presence of the youth visible in the institutionalized public sphere that the newspaper represents. It proposes a means of transposing the voices of the youth from the semi-public online social networks. The Kongsvinger youth that the design students spoke to during their field trip expressed little interest in reading the local newspaper or posting comments on the newspaper's website. They considered the newspaper to be something their parents read; something that did not reflect their interests and preoccupations. We can interpret the idea of introducing the app as a way of bringing to the fore the interest-driven participation of young people in peripheral spaces on social media. This could help attract the youth to the newspaper's website to read, watch, and comment, thus disrupting the idea of the newspaper as a space where only dutiful forms of citizenship happens.

One can also consider the second case as a form of disruptive innovation. The

hype around the civic potential of social media such as Facebook and Twitter has encouraged institutions of local democracy to see them as a magic solution for encouraging youth citizenship. As I have explained earlier, all previous attempts by the council to engage youth through social media had met with only slim success. The concept proposed by the students disrupted the idea of social media as exclusively digital. The mobile message box concept in this sense could be considered as an analogue form of social media. It would enable the sharing of information among Kongsvinger residents, facilitate co-operation during the execution of local projects, and thus facilitate collective action. Despite previous efforts having failed, the municipal officials we collaborated with in the project still held the firm belief that the best approach to reaching youth lay in the form of digital social media. The solution proposed was the creation of what in essence was a social medium. However, the social medium was not in the form expected by the municipality, which was that the concepts would be in the form of social media in digital form. Thus, the students disrupted the notion that civic engagement through social media could only happen in the digital realm.

Design as social negotiation

Media and cultural studies scholar Anne Balsamo (2011) describes designing as a process of ‘negotiated achievements’. She notes that design solutions are often the outcome of social interactions and a process of meaning-making and negotiation. Because the design process involves human actors representing different stakes and interests, designers play a valuable role in negotiating shared understandings and meanings. The designs proposed by the students in the two cases embodied this process of negotiation and meaning-making.

First, the designs embodied negotiations among stakeholders with different interests and perspectives. At one end of the spectrum we have the interests and perspectives of representatives of institutions, the municipal council and the newspaper, whose interest was in creating spaces for local citizenship where youth were invited to participate. At the other end we have the youth, who generally considered participation in spaces controlled by such institutional bodies as not relevant to them.

Second, the designs embodied negotiations between different models of citizenship. They represented negotiations between institutional and non-institutional, hierarchical and non-hierarchical, traditionally politically- and interest-driven forms of civic participation. The local newspaper’s participation in this project was premised on the basis that Kongsvinger youth needed to be more civically engaged and that the newspaper could provide a space for this engagement. For a small town like Kongsvinger, the local newspaper constituted an important part of the institutionalized public sphere, where local youth could read the news and post comments on the news stories. However, the design students found that the youth of Kongsvinger were

instead actively participating in sharing videos, posting blog entries, status updates and other information about sports, popular culture and other events and everyday life with their peers on social media. These types of online participation are typical of non-institutional and non-hierarchical online networks, where the issues are defined by youth themselves. These activities are what some authors have termed ‘interest driven’ and ‘friendship driven’ online participation (see, for example, Ito et al. 2009; Jenkins et al. 2009; Livingstone & Brake 2009). Kahne, Lee & Feezell (2013) argue that, although not focused on traditional politics, such activities could help youth develop valuable skills, agency, and norms for group action, which in turn could facilitate other kinds of civic participation.

Third, in the case of the newspaper, the designs also embodied negotiation between commercial and civic imperatives. For a business organization like the newspaper, it involved reconciling conflicting concerns: on one hand, there was the newspaper’s role as a constitutive part of the local public sphere, curating a space of democratic deliberation. On the other, there was the newspaper’s position as a commercial actor, with the ultimate aim of increasing readership and augmenting advertising revenue. The question at the centre was whether the design solutions proposed would position the youth as customers or as civic actors and whether these two are compatible.

In both cases, the design students served as cultural intermediaries in the sense that they materially reproduced and codified in their design concepts all these negotiations between diverging interests, values, and actors.

Conclusion

This chapter has attempted to examine the role design innovation can play in helping Norwegian-based cultural institutions to create spaces for civic engagement among youth through social media. In this chapter, I have shown how the process and the outcomes of designs for civic social media can embody negotiations between different civic actors, values, interests, and investments. I have also shown how the process of designing can open up a space where understandings of the meaning of civic engagement, forms of youth participation and social media can be renegotiated, revised, and re-inscribed in proposed technological solutions.

It is worthwhile to point out that the design concepts developed by students described above have not yet been implemented. Thus, it is difficult to assess the potential of such proposals as civic innovations with regard to these specific cultural institutions. In the case of the local newspaper, management was generally positive about the concepts and found the suggestions useful. However, they pointed out that in order to carry out the changes suggested by the students, they would have to engage in a complicated negotiation process with the organizational hierarchy. In the case of the municipal council, representatives expressed enthusiasm at the concept of the mobile message balloon and even invited the students to fully develop and implement the

concepts in Kongsvinger. Unfortunately, the students were not able to do this because of their tight course schedule.

Nevertheless, the changing preferences among youth may be seen as bringing forth a possible new conjuncture for civic practices in cultural institutions. In this conjuncture, civic and political organizations might be encouraged to engage youth in ways that are more sensitive to their needs. Young citizens desire new ways to voice their opinions and seek new channels and modes of expression to communicate their perspectives. Cultural institutions that are sensitive to these desires may have a greater chance of actually engaging networked young citizens.

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The Place in Our Hands

The Grassroots Making of Cultural Heritage

Ann Light

Introduction

Cultural heritage work can happen outside the traditional institutions and safe-keepers of culture. The *SPICE* project ran in four places in England where communities are collaborating to achieve social change to improve their environment. The project's goal was to investigate grassroots work on place and the nature of creativity in communities as they take cultural identity into their own hands.

The formal creative economy is well mapped and plays a significant part in Britain's profile. However, there has been less research into how informal cultural heritage practices shape the neighbourhood, how these practices preserve or identify cultural heritage, and how they creatively support the development of community. Indeed, these activities are more often overlooked than seen as a fertile bed for creativity and entrepreneurship.

We started the *SPICE* project to address this gap, using co-research principles to emphasize our interest in the co-construction of place. We then let interactions take their course, documenting activity and opinion. We were mindful of the mismatch that the American community designer Hester (1993) describes; that is, the potential discrepancy between a community's sense of what is culturally important and what the local planners consider as significant in the same location. The goal of our project was to learn together what our self-selected groups considered to be significant in their area and what they were doing about it. Given the DIY nature of our enquiry, we were also prepared to see the construction of cultural heritage through community activities (by contrast with its recognition and protection, which are more customary relations to objects, places and processes considered part of history).

In this chapter, I consider the sustainability of choices and the situated nature of the creativity we experienced. I will use the case study of a digital archive that featured in the project – a repository for local images of a northern village. In this way, the chapter will articulate some of the practical tensions to be encountered in making DIY cultural heritage work sustainable. The chapter then reflects on this place-shaping as a challenge for more formal cultural heritage institutions and municipal bodies.

Background to SPICE

SPICE (Stimulating Participation in the Informal Creative Economy) ran for a year in 2011, funded by the British Arts and Humanities Research Council as part of an intersection in the council's work between fostering Connected Communities and exploring the Creative Industries. The idea of the informal creative economy emerged in discussions about local place-oriented practices that are neither wholly commercial nor immune to the economic pressures on people and groups making change in twenty-first-century Britain. Thus, the project concerned itself with 'place-shaping', a recently-coined phrase (e.g. Lyons 2007), and the politics of identity. As Silverman and Ruggles (2007: 3) point out: '[H]eritage is [...] intertwined with identity and territory, where individuals and communities are often in competition or outright conflict. [...] [A]t stake is the question of who defines cultural heritage and who should control stewardship and the benefits of cultural heritage.'

For the research team, the term 'place-shaping' acknowledged the relations between activity, history, geography and politics. It put us in mind of political geographer Massey's insights that space is the product of interrelations; it is 'constituted through interactions, from the immensity of the global to the intimately tiny' (Massey 2005: 9). Following this, space is always 'in the process of being made. It is never finished; never closed', meaning that we might 'imagine space as a simultaneity of stories-so-far' (2005: 9). While 'place' is usually seen as a more phenomenological or lived encounter with geography (e.g. Tuan 1977), it is apparent here that Massey does not treat space as mere Euclidean dimensions. For the descriptions of place-shaping that I am using in this chapter, I borrow her sense of co-constructed and political space, the space through which such shaping of place happens.

There are different ways that place can be shaped. Much of the place-making literature comes out of a planning tradition and takes a literal approach to 'making' – the design or modification of built environment (see Palermo & Ponzini 2015, who review much of this writing). But the people in this chapter do not have the power to make their place in this literal way. Instead they have the potential for influence.

Consequently, their making is largely the imaginative work of recognizing what is valuable and how things might be enhanced or protected, then taking action to make that happen. They are unusually capable of performing the recognition that Hester talks of when he identifies four stages of becoming aware of sites of local significance: threat, legitimization, collective awareness and consecration (1993). In an ad-hoc way they are designing for the change they want to see (Light & Miskelly 2008), siting their activities at points that they have the vision to recognize as locally significant in history, geography and culture, and able to become more so.

To sharpen the understanding of place-shaping, I borrow from the French anthropologist Marc Augé a neat definition of places being shaped. He talks of 'anthropological place', which is 'established and symbolized' and holds within it 'the possibility of the journeys made in it, the discourses uttered in it and the language characterizing

it' (Augé 1995: 81). These are constructions that are meaningful to people as places, and Augé alludes to how they are constructed: they are established and symbolized. They are not only built. And, returning to Massey, I note that, though a place

... may have a character of its own, it is absolutely not a seamless, coherent identity, a single sense of place which everyone shares. It could hardly be less so. [...] If it is now recognized that people have multiple identities then the same point can be made in relation to places. (Massey 1994: 153)

Our criteria for choosing our spaces of operation were simple: we wanted to span the geography and economic profile of England and understand how such places might influence local sustainability. But we also had the goal of starting the research quickly and competently and this implied that our destinations had to be areas that we knew fairly well. After some mapping of intersections between the lie of the country and our personal connections, the research group agreed to work in London, Oxford, Sheffield and East Cleveland. In other words, our spaces were already spaces of connection as much as location.

The areas where fieldwork was conducted

The research group wanted to span the geography and economic profile of England and understand how such places might influence local sustainability. After some mapping of intersections between the lie of the country and personal connections, the research group agreed to work in London, Oxford, Sheffield and East Cleveland.

- **London:** a globally influential city of 8 million people where every nation and type of person can be found, where some of the world's biggest financial deals are done, a mixed economy flourishes, and affluence and poverty coexist in neighbouring streets.
- **Oxford:** a smaller city on the north-western edges of the well-to-do south-east of England functioning as a major tourist destination and given a high profile by its university and associated historic colleges. The colleges own much of the centre of the town and dominate the local political scene.
- **Sheffield:** one of England's larger cities (600,000 people), set among hills in the centre-north of the country and split on lines of class, with bigger, older houses to the west. Another area where the economy was largely dependent on steel, it is reinventing itself after the closure of the major works.
- **East Cleveland:** a rural area of north-eastern England with many villages housing ex-steel workers, ex-miners and their families, extending to the coast. Historically, the dominance and, then, the collapse of heavy industry has left the region beleaguered.

In order to emphasise the cultural inheritance that each place entails, participants were moved between the regions. By bringing people to encounter the places they were hearing about, we changed the role of place in the sessions from a given quality to a co-created phenomenon; from a backdrop to an emergent property of activities.

Who we would work with in each area was less easily defined, but again related to what we knew of an area and what local people knew of us. Undoubtedly, trust (even

at one or two degrees of separation) influenced people's willingness to participate. We kept open the definitions of 'informal', 'creative' and 'economy' but qualified the practices that interested us as relating to cultural heritage. In this, the research group was supported by the European Convention definition of cultural heritage as 'resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions'; including 'all aspects of the environment resulting from the interaction between people and places through time' (Council of Europe 2005).

This definition plays up the importance of cultural heritage to people on the ground, rather than the institutional keepers of the material culture that has often come to represent it. Cultural heritage work can make a contribution to community cohesion; the Heritage Lottery Fund review, for example, notes that 'The historic environment seems to create a positive sense of place amongst its inhabitants' (Maeer et al. 2016: 19). Yet most guidance does not specify who should be active in determining heritage, whether it is communities themselves or whether it is sufficient for institutions to value communities' cultures by providing access to facilities to encounter it. Our interest was strongly with people making cultural heritage for themselves on their own terms.

Active or passive, attending to cultural heritage is clearly a component of social living and even a way of tackling social exclusion (see Perkin 2010). But, adopting our definition, it is also the source of a great many fringe activities (such as blogging about local activities, running themed walks or community gardening), which can be seen to constitute a kind of informal creative economy around the more formal heritage undertakings of major historical and cultural organizations. These 'homespun' activities can add considerably to the charm of visitors' experience of, and locals' sense of connection to, place. These activities do not only build social cohesion but may also contribute to the local economy (Stern & Seifert 2007). Indeed, this kind of engagement has been recently fuelled by the rise of social media and can promote digital as well as social inclusion. YouTube hosts videos marketing the rebirth of local produce festivals, while Facebook announces campaigns to protect the local environment. There is some evidence that these less formal activities can act as a launch pad for a new wave of creative practitioners, some of whom build social enterprises or businesses; others of whom feed existing institutions (Williams 2005). And the economies in evidence include time, enthusiasm and even bartered goods, as well as ones in which money has changed hands.

The period of study coincided with the appearance of a strong community-based Do-It-Yourself (DIY) trend, 'the Maker movement' (e.g. Gauntlett 2011; Anderson 2012), with its own emphasis on community construction, sustainable practices and creative uses of technology. This has focused on DIY digital initiatives, older craft-style activities and the emerging dedicated 'spaces' to support these, such as hackerspaces and makerspaces (Smith & Light 2017). Could we see the work we were doing in this light too? A critical difference was our focus on working on place and environment and participants' goals of having impact in the community by shaping place, rather

than teaching and learning about crafts and tools. The actions we describe in this piece are closer to citizen innovation (Light 2014), where the focus of the activity is locale-wide and based in relation to the civic and social infrastructures of the area. Yet, an interest in artisan practices also speaks to appropriation of cultural heritage, so it is perhaps useful to situate our activities in this constructionist framing. Place-making is also a creative practice.

Informed by these thoughts, a group of three academics and two independent community partners produced a plan for four ‘encounter’ workshops over the course of a year, one in each region. At each, we would invite people from different areas to meet each other with a view to sharing practices. We presented the concept of the ‘informal creative economy’ to groupings of people taking initiative in the areas we had chosen and invited them to become stakeholders in the research. Our goal was to let regional differences have maximum play in the way that we worked. Having secured considerable interest from local people who identified with our term, we handed over the design of the workshops to a local organizing committee in each region.

Wakkary and Maestri (2007) attribute ‘resourcefulness’, the creative re-use of artefacts and the physical surroundings, as a building block for everyday design. And Light and Miskelly (2008) discuss the work of designing one’s environment from the grassroots perspective and conclude that obstacles to the flow of designing, such as funding difficulties, local apathy and changing conditions, become part of the design challenge, so that the process as well as the outcome is constantly renegotiated. We wanted to make a project design that allowed maximum flexibility for each group to negotiate process. The project can therefore be seen as an example of how social activists could co-research the design of future social and physical landscapes, drawing on their knowledge of the past, the area and what practices work to draw in others.

Introducing the workshops

The workshops took place in four distinctive, widely-flung English locations (London, Oxford, Sheffield and East Cleveland) bringing different geographies, histories and economies together. We sited activities in warm, well-resourced places that were chosen for their relevance to the host’s work and shared heritage. They included a housing association’s activity room; a former mine manager’s house that had recently become a new enterprise’s meeting room; a café next to a disputed piece of land; and, the ‘community’ lab of a grassroots technology project.

Participants were mostly enterprising individuals or those representing community ventures with little formal organization but with strong local networks. Participants identified as social entrepreneurs, artists, photographers, poets, trainers, local authority staff responsible for the cultural sector, retirees, small businesses and members of the voluntary sector. Their activities involved ‘place-shaping’ activities, such as guided walks, making hyper-local sites, campaigning for the regeneration or protection of local

resources and community-generated tourism: activities not formally related to cultural heritage through any cultural institution and outside the main cultural industries' economy. Yet, every activity reflected the definition given earlier, in that the focus was on collective resources. Collectively we established a series of principles by which we would run events to let local differences surface. These included that workshops would:

- run locally, planned by an organizer on the ground and their helpers
- learn from the last workshop, but not stress consistency or comparability
- offer value to the participants, not just produce research findings

For each workshop, we invited people from the other three locations to visit, to give the occasion for the visitors to make a journey across country – bringing a sense of transferring out of region and encountering new circumstances. Most had never visited the locations to which they were being taken – and certainly never seen the activities that were being described – so the groups incorporated more detailed outdoor visits and 'sight-seeing' in each workshop as we progressed.

Three visitors came from each of the other locations to each workshop, to join hosts where the particular workshop was taking place. As well as the local organizing committee, other local people with a stake chose to join in, so numbers reached about 20–25 at each event. To make the most of getting people together, each event ran over a night, starting at lunchtime on the first day and finishing at about three o'clock on the second afternoon, in time to ensure everyone could get home again. As is common with these hybrid research occasions, much of the bonding work was done outside the official workshop times, at supper or with drinks in hand.

At each event, hosts presented examples of their activities and discussed practices with the other practitioners, who provided feedback. The co-research aspects found multiple outlets, with more-or-less pragmatic outcomes:

- 1) People discussed how their place-shaping activities could be made more sustainable – either financially or in terms of social support, drawing on their own experience to help others.
- 2) People explored the relationship between different agencies in an area (such as government, local government, third- and voluntary sectors) and how the profile of a region plays out in the degree of public sector support for grassroots activity.
- 3) People reviewed aspects of their work that might be considered creative and how creativity related to cultural heritage and the local economies round it.
- 4) Relatedly, they also considered what the 'informal' might mean in terms of economics, sustainability and creative practices.

This produced clusters of engagement around practices, places and money, and some discussion of their intersection. For instance, a librarian on the point of retirement in East Cleveland had been building a digital archive of historical photos for a nearby

community. He had been receiving, digitizing and posting photos at no cost during his spare time while working for the library. But the transition from work to retirement had caused him to re-evaluate who was receiving the value from his archiving work and he discussed the possibility of different business models with the panel of visitors from other parts of the country. We will return to his story below.

Learning about an area, either through visiting or through showing it to visitors (and thereby seeing its potential with fresh eyes), worked well in complement to these 'peer surgeries' where hosts and guests exchanged ideas.

At the first workshop, the visitors were inspired by a film presentation made in the old virtual reality world *Second Life* of the local jetty in Skinningrove, a village situated on a major coastal path along the North Sea in the north-east. Our hosts in East Cleveland were intent on driving real-world regeneration of the jetty by showing what it could become, using the potential of *Second Life* to act as a prototyping tool. The coastal path is well used by tourists, but nothing in the village of Skinningrove encourages them to stop and spend money. The rebuilding of the jetty would cost millions of pounds, since it is a long concrete jetty sticking out into the sea and was badly damaged during World War II. In the re-creation, it is re-imagined with new features, such as a bandstand and a dock for pleasure boats, as part of turning it back into a resource for the community and tourists. The campaign has been running for over ten years and largely succeeded in its goals when, in March 2015, funding was announced to rebuild it (Robson 2015), but at the time of the workshop, in 2011, it was still regarded as a dream.

After a presentation about the jetty, where its future was envisaged, the visitors asked to walk along the real jetty to experience it for themselves as a place. In this way, participants challenged the abstraction of the material they were hearing about and reinstated it as a lived phenomenon. They spent lunchtime making videos on the jetty with the local councillor leading the campaign, which they brought back to the group to discuss. This began a theme about the value of experiencing place first-hand.

The next three workshops were then designed to include more dynamic elements, to orient and extend the experiential elements of the workshops. We joined a group that takes visitors to see London's city centre through the eyes of the homeless. In Sheffield, a walk with the council's public art officer showed how redevelopment paid tribute to the industries that had once made the city rich, and two artists illustrated their plans for a guided historical walk with poetry and visual art along the river. In Oxford, an author of local history books described how the ex-working class suburb in which we stood had been a persistent nuisance to respectable life, while activists took us past the closed boatyard that they were campaigning to save.

In Oxford, at the last of the workshops, we were housed on boats and spent the evening picnicking in a river meadow only accessible by watercraft. Being on a boat (on which some of us slept) was again a means of giving insight into relations with the local environment, in this case, land, water and how people had made the waterways their home.

The disputed Oxford boatyard is boarded up, with neither boats nor users, because, for nearly ten years, it has been the centre of a conflict between developers (who wish to put up flats in this last remaining corridor to the edge of the river) and the local community (who oppose their plans). To our hosts, who were part of an activist group that was lifted bodily out of the boatyard at the point of its closure, it remains a noteworthy place, albeit one of conflicted ownership, hidden behind large boards.

They evoked this, and how the boatyard could function again or exist as a place in others' experience, using film and discussion, but also by showing the canal, the river and introducing us to boater clientele. This also introduced ideas of the different economies that operate locally, such as the economies of trust and barter that run among the riverside dwellers and the labour of maintaining boats for love, as well as living space. Visitors learnt how their hosts felt the boatyard's significance, noting how slowly the boats can travel and what this then means for the boaters who live on the river, who have to travel for three weeks for the annual overhaul necessary to keep their boat afloat because they cannot use a local facility.

We also met a range of boat-dwellers, whose lifestyle is threatened by this lack of amenities. They are unloved by the city council but contributing to the city by giving a picturesque ambiance to that part of town, recognized in works such as Phillip Pullman's *Dark Materials* trilogy. Not many residents and few tourists come to understand these issues directly. This points to an intrinsic ambiguity in the campaign, which is ostensibly about a piece of land but is actually about people's lives and livelihoods. We saw the similar concern for land as enabler of place and livelihood in the story of the jetty, and, throughout the project, place was closely linked to social and economic sustainability.

Again, since the project, the campaigners have made progress. The campaigners have persuaded the council to hold out for a scheme that includes a boatyard. The owners of the land have now committed to reinstate it in their plan for riverside apartments – with an Italian-style piazza giving public access to the water (Fantato 2014).

A case study of digital heritage

Thus, a key focus for the groups in coming together was transition: making the change you want to see before something unseats you from your goals. The informal creative economy is precarious and volatile, whether experienced as an activist or entrepreneur. Several shifts took place during the course of the year-long project, as might be expected in groups managing uncertainties over which they have little say. Every shift – in personal status, political development or opportunity for progress – changed people's relationship to place and, with it, their feelings about their environment, their group allegiances and, ultimately, how they perceived themselves and were perceived.

As described, the two major campaigns that ran through the project have now been largely successful, making the change the campaigners worked for. Some people were able to see the appearance of new authority and stability in doing the work they cared

about. But some of the tales were about decreasing sustainability, where burn-out and lack of volunteer effort, loss of access to small pots of funding and the need to get a 'proper' job all reduced people's effectiveness at engaging with the heritage issues that were, nonetheless, close to their hearts. The advent of the digital was impacting as well, such as on the life of one photographer who could no longer turn his back catalogue of photographs into a livelihood.

We now return to the librarian, mentioned at the start of the chapter, who was archiving local pictures for the community using new digital means. He was, you will recall, thinking of seeking payment to continue creating the village's digital resource out of people's old photos, but to do so, he needed to work out who would get value from the activity.

The local archive of pictures he was creating had become well known as a community resource, with hundreds of photos available online. This led to a change in his relationship with the community, running alongside a change in his professional circumstances as he faced retirement. He began with a trickle of photos but, now, people were unearthing whole collections. The ex-librarian, as archivist, had boxes containing hundreds of local photos handed to him with the expectation that he would be grateful for the additions, digitize them and add them to the collection. It became a local way of dealing with the photos left after someone's death. This volume of material, of course, represented a volume of work – especially as not all photos were labelled.

There is also the small, but significant, cost of keeping the technical side of the archive running and the back-up needed to be responsible for it. While social media tools help with all of this, even knowing the best combinations for safe, effective, cheap archiving takes research. There is effort needed to keep abreast with developments once such awareness is no longer part of one's job. So, even if one has more time to devote to it, the cost in time and money looks different to a retired person.

The librarian's section of the East Cleveland workshop focused on what might be a reasonable way of resourcing the continuation and expansion of the archive. Locals mostly attach value to it because it is a free resource that gives them a sense of their history, but it is of little practical value to them. Many local people do not use the archive, even though they are proud of it. They may be taking photos to the archive to please its founder, who loves the locality, or to do something useful with a form of outmoded media that would otherwise go to waste. They may be motivated by the age of the images or what is captured in them, but they may not know or recall much about the content of the pictures. None of these motivations make this a service that people would want to pay for – either to see their photos uploaded or to use the system to view others. Only those in a position of greater overview, such as the ex-librarian, see the value that giving a sense of history and building an idea of place offers, beyond the comfort of access to one's old pictures.

At the local workshop, having established these parameters, the group talked about sponsorship. If it is not possible to use a subscription model or to ask for payment for a service offered by this private collection – and our host rules these out – might

taking advertising on the site work? Could a more formal institution be brought in and some kind of grant secured? Would this be a good way of thinking too about legacy issues? In this way, the design of livelihoods was negotiated as part of considering how the service contributed in terms of cultural heritage and its potential longevity.

In speculating on possible future activities including a formal institution, we also had to recognize the magnitude of what that transition could involve: transfer of editorial control, merger with other collections, lack of situated knowledge, loss of local ownership (perhaps with an attendant loss of goodwill in donating and editing), and a change of its value in generating local participation. Without confident economic support, the archive might not thrive in more formal hands, especially if its presence as an on-the-ground resource could not be maintained. There are many examples of collections languishing once out of their founder's hands (for example reported in Maciejewska & Graczyk 2013). It is a useful exercise to imagine this transition, to see the value of hyper-local engagement and to acknowledge the change in function as well as in status in any transition from informal to formal institutional structure. While it may be a source of pride for visitors to see their archive on museum webpages, it may not be the co-creation of place that taking redundant pictures to the librarian once was. As Light and Miskelly (2015) note in writing about another project, local cultures that emphasize shared resources – and shared making and supporting of shared resources – are qualitatively different from those where the infrastructure is beyond the reach of local people. But, as always, it needs vision and championship to get these transitions underway.

Again, there is a success story to report. Participation in the *SPICE* project did not solve the issue of how to manage the future of the archive, but it did help the custodian see the value he was providing and allow him to judge the value that this held for him as his life changed. It became apparent that his project needed heirs to help out, rather than absorption into a bigger frame, because part of the merit of the pictures was not so much in their content but in the act of preserving them. The archive is still running well, having grown considerably. It is now supported by three people, including the retired librarian, in a new home away from the library. And it has been successful in winning sponsorship to keep it running from a local branch of a major supermarket.

It is noticeable that all the successful projects described here found ways to bring money (at differing scales) into the neighbourhood to make the changes they had identified. It took the work of multiple agencies to bring off local goals, but, in each case, the force of local commitment determined the direction travelled.

Learning from the workshops

Given the varying schedules and agendas across our workshops and the modest numbers involved, it is not appropriate to generalize our findings. It was not, for instance, participation in the workshops that led to these multiple successes. Even if

reflecting together changed the course of action in some way, it would be impossible to disentangle this tiny thread of influence from the bigger weave of the campaigners' hard work over many years. It might be fairer to say that the people who participated in the workshops were particularly disposed to seek out networks, learn as much as possible and use it well.

So, what follows here is indicative learning that came out of our encounters, some of which concerns working together and some of which attends more to the themes of cultural heritage and informal creative economies.

There was a general tendency to reflect more lucidly on activities through comparison with someone else's and the same could also be said of perspectives on place. The workshops offered a stimulus for creative reflection by connecting practitioners engaged in similar work and giving them the opportunity to study each other's contexts and ambitions.

A meeting of interests

Empathy for others' situations was a discernible outcome of meeting this way. It is hard to appreciate others' circumstances and the mere act of going to see someone else's territory raised informative similarities and differences and led to expressions of fellow feeling over ambitions and struggles. For instance, the visitors from East Cleveland, up in the north, were at pains to offer support to the Oxford boatyard campaigners on hearing of their efforts, assuring them that if they had seen anything about the campaign they would surely have joined forces. The next presentation by the Oxford group concerned the national media coverage that the campaign had received, leading the visitors to reflect, with chagrin, that they had probably seen those news sources with no interest in the campaign until they knew the stakeholders. Being together created solidarity. Our next project looked at whether empathy could be created by using podcasts of local activities and sharing them. It showed that little interest could be generated where there was no existing stake in others' work.

Creativity as product and process

The session in Sheffield addressed the themes of creativity and (in)formality particularly, and an analysis of audio recordings compared discussions here with other comments collected across the workshops. Following exercises to talk about these aspects, we used a simple coding scheme to identify passages of talk that gave accounts of process, how the speakers identified themselves and their practice and how others contributed to that identification. In looking at these, we can learn more about how cultural heritage is being constructed by local movements and how it shifts in and out of relations with bigger and more visible social, cultural and economic entities.

Participants described creativity in two dominant ways in the Sheffield workshop, with a further articulation coming through our discussions about place-shaping at a more abstract level.

The first understanding of creativity in the group was quite a traditional one: as the product of one's labour and making something original. This included artworks, photographs and books associated with the creator's environment. The digital archive existed in this space, in making a new resource. The group hoping to rebuild the jetty identified with this form of creativity too, in that they were designing a new feature in the landscape and building in *Second Life* to show their plans to others. This was the 'product' view. (Interestingly, despite their clever use of *Second Life* as a prototyping tool, they did not see the adoption of that process as part of their creative achievement.)

The second form appeared in the work of people who did not associate their output as creative but felt they conducted their business creatively. One participant had set up a business recycling building waste and architectural salvage, employing young people with a difficult past, which he also saw as recycling. Another had set up a social enterprise using the former mine manager's house for exercise classes, school trips and residential workshops. Both had used the cultural resources around them with ingenuity to contribute to the regeneration of the area and build their own businesses and, in a region with little employment, to create employment opportunities for others. The Oxford boatyard campaign identified with this kind of ingenuity, since they were always devising tactics to stay one step ahead of the council and property developers with whom they were in tension. This was a more process-related view of creativity.

In the meeting of the two forms of creativity, creative practitioners of the more conventional type found encouragement to think about how to make their practices sustainable. The group organizing tours of London to meet (and be guided by the perspective of) homeless people living rough in the centre is a difficult one to categorize, seemingly containing elements of both, as well as some careful thinking in terms of the ethics of the situation. In being creative economically, they provided money to a very-hard-to-reach group who sit outside the British social and economic safety net by being 'of no fixed abode', but the teams have to be very transparent in their dealings so as not to appear exploitative.

Last, bringing all the participants in the workshops together, we identified another sort of making, with no discernible output in the immediate moment but with an energy that acted to cohere participants from very different places and walks of life. Everyone at the four events was motivated to engage with *place* in a constructive fashion and to enrich the environment in which they live for themselves and others. When Lyons wrote his report on the changing role of local government, he defined place-shaping as 'the creative use of powers and influence to promote the general well-being of a community and its citizens' (Lyons 2007:3). Although he was talking about the role of the public sector, we can see something of this creativity in the activities of our co-researchers. They were imagining how things could be different, discerning features that could be made significant, and invoking an enhanced sense of place in their imagination and ambitions. At another level, they were motivated to make these changes a physical reality and were enlisting others in their pursuit of their goal. This creative thinking about place does not map directly onto their creativity of process or

product. But the force of our co-researchers' visions was helping to constitute place for themselves and others.

In considering these approaches, we are reminded of design thinkers Wakkary and Maestri's exploration of creativity as resourcefulness, the building block for everyday design (2007), and Light's citizen innovation (2014), where people decide to design their own solutions to the energy crisis.

Informal economies

We had promoted the workshops as addressing the 'informal creative economy'. So we expected to attract people at the borders of formal institutions, or outside them. There are many economies that might be relevant here: Cahn's core economy – which values the work of making society, such as domestic and unpaid labour, and can be seen in time-banking, where people trade in hours not money (2009) or the sharing economies that Benkler discusses where alternatives to formal currency drive production and innovation (2004). In British political parlance, the 'informal economy' is one in which you do not declare your work and you do not pay taxes. We meant something different in *SPICE*, something that acknowledged Cahn, Benkler and social resource management. Informal economies, therefore, appeared in several guises.

Those in employment with a formal structure, such as working for a voluntary or public sector organization, identified informality in their style of engagement with others, bringing about social change by balancing organizational objectives with local community interests, and being flexible in these dynamics. This allowed for creativity and open interpretations of what cultural heritage might be and could become. Here, the project impacted by showing people in the public sector a broad range of local activities that had not been formerly understood as cultural heritage work.

By contrast, people working freelance tended to have more options in organizing their cultural heritage work, sometimes blurring the line between professional and activist status. Other groups with a similarly ambiguous status were retiring or retired people, who might be professionals in the field but no longer paid, such as our librarian-turned-archivist. Consequently, we were working with many people who were not formally engaged in making a living through their relationship with cultural heritage. Here the emphasis on neighbourhood networks and connections with other groups was strongest. The groups cohered for the purposes they had commonly identified, such as saving the boatyard or rebuilding the jetty. They could be called upon to attend meetings and their impact on their locality could be profound, but, as organizations, they had no formal constitution.

Last, there were those who existed casually at the fringes of the commercial economy, occasionally benefitting from the sale of handmade books about the region or guided walks. This lifestyle was so informal as to be without contracts: they might have acquired their relationship with heritage as a by-product of making-do. This group, which included some boaters and some homeless people, was involved in cultural

heritage (in a highly informal way), yet was also part of what others perceived to be 'colourful', such as part of the heritage in Oxford to be preserved. The Oxford contingent, including boaters, did not regard their collaborators like this when they argued for a way of life, but in invoking their history and their inclusion in literature (such as Phillip Pullman's works) they looked to cultural heritage as a means of enlisting support. This pointed to a different ambiguity – asking us who the subjects of cultural heritage might be. When we shape place, how are we defining ourselves and/or others? And how might we be sensitive to the multiple definitions needed?

Conclusion

The story of the archive offers the prospect that value may come from focused collective activity related to place rather than preservation of materials for their own sake. At a time when 'making' is high on the agenda and spaces to encourage 'making' are popping up in cities, sponsored by industry, local government, universities and smaller DIY subscription groups, it is interesting to look more broadly and ask how we make space for ourselves in an increasingly privatized and mediatized world.

Hyperlocal activity on a manageable scale is one answer. Extended campaigning to create belief in a local vision is another. In my definition of space, I turned to Massey to show that it is a political concept. *To make space for ourselves* carries a double meaning – a sense of the place-shaping at local level that has been described here but also, perhaps, the need to claim space for community interests back from developers and governments with other plans. The latter definition is particularly relevant to the two southern cities, where land is expensive and community activity comes in spite of formal development plans and sometimes in resistance to them. By contrast, in the northern examples, community initiatives supported regeneration or flourished in the neglect that lack of funding or vision had created.

There is no one place to be claimed – for each of us there is an act of symbolic construction to recognize the points that matter to us and these will change as our interests and needs do. Yet, this project shows that by understanding cultural heritage as a Do-It-Yourself phenomenon, in which groups of people organize around place for social, cultural, environmental, economic and political ends, we can give a rich account of the interrelations 'from the global to the intimately tiny' of which Massey speaks (2005: 9). I have mentioned the journeys made as part of the project, the discourses and language characterizing it, how place was recognized and established. These are also artisan practices; these are also DIY-making.

In conclusion, we are left with a number of questions. How can cultural heritage be something that anyone can construct locally and potentially use as a livelihood? How does such DIY place-shaping activity relate to other forms of construction, such as exploiting local history for commercial gain? Although the activities of the Skinningrove jetty group are not aimed at direct profit, the estimated figures for re-

development are in the same league as those of the theme park developer and they envisage pleasure boats docking at the jetty as part of turning it back into a resource for the community. Will it make a profound difference that the ideas and effort came from local campaigners? Of course it will, but it would be naïve to ignore the splits that run through most neighbourhoods, with redevelopment causing some of the most intense differences in opinion.

The jetty, still unusable (as it will be for a while), is a public resource in the imagination that everyone has access to. It is a part of the place because, like the land around it, people feel at home with it and it meets the earlier definition that, ‘inherited from the past, [... it is] a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions’. In this respect, it is much like the boatyard. It does not fully exist, but the actions of the group defending and promoting it have caused it to be a highly significant, if out-of-bounds, place. People are being creative with their environments, both in what they are seeking to do and in the act of imagining possibilities. And we might also ask, conversely, whether particular environments cultivate creativity, and, if so, of what kind. People are mobile, but it is not possible to take the place you love out of its local jurisdiction. You can only work to change the prevailing attitudes and the potential of its future.

Through their precarious yet ambitious attempts to make this engagement count, either with big schemes or little interventions, everyone in *SPICE* was forging links between their actions, the history of the area and a wider economic narrative. What such an analysis draws attention to is the way that informal networks, appropriated tools such as digital media, and social and physical structures interrelate to produce the places described above, ‘constituted through interactions’ where space is always ‘in the process of being made’ (Massey 2005: 9). It shows some of the challenges, but also some of the opportunities for those people who stay light of foot.

SPICE was intended as a co-research opportunity, and one offering an opening to people who are not normally called on to reflect on their practice. But it could also be seen as an incubator, a small test-bed for different forms of social and civil engagement in the fabric of the places that people live in and care about. As an approach, it produced dense material for study and showed the importance of providing experience of place directly and reflectively in the design of encounters. It also used contrasts in space and place more abstractly to reveal its nature to visitors. It showed us some of the ambiguities that exist if we consider cultural heritage, creativity and the economy from a grassroots perspective, how not only livelihoods but identities depend on such efforts. If we consider it using Massey’s insights, we might regard the project as space in itself, as a structure made from encounters that are simultaneously about space (space to breathe, space to flourish, space for social justice) and constitutive of it.

This work is not finished. We know that changes in the legislation of the country, the distribution of the means of production, the economic viability of certain actions and concern about environmental issues, to name only a few of the factors that are ever in flux, mean that much will have changed for our evolving entrepreneurs even

since this last account here. But we leave their stories now, recognizing that there will always be a 'simultaneity of stories-so-far' (Massey 2005: 9) in any story about any place-shaping and any engagement in cultural heritage.

Coda

When I first presented these ideas to a meeting of formal cultural heritage organizations, some of the museum professionals looked doubtful at this co-option of cultural heritage. Others questioned me about what they could introduce into their museum to connect with these developments and the people leading them. Yet others told me about the displays they had mounted of local archaeological finds.

I pointed out that our events, situated at the places that the groups felt best showed off their initiatives, had involved staff from local government innovation and culture departments. These staff had attended because they were keen to understand how such work could be fostered. They had stepped out of their institutions and joined in. If you take your staff badge off, you become just another citizen interested in the place in which you live, I pointed out. But none of people I was addressing looked convinced.

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Having traditionally been institutions mainly concerned with knowledge preservation and presentation, cultural institutions are increasingly trying to enable audience participation and co-production. A major explanation behind this shift is the possibilities (and demands) brought about by new technology. Media innovations, thus, affect not only the ways in which objects and stories are being shared and displayed, they also have bearing on the relations between cultural institutions and their audiences.

This book is structured in three parts. The first part focuses on *collaborative design and media innovation in museums*. Here, collaborative design methods are discussed as vehicles for innovation in a museum setting. The chapters in the second part reflect upon *media making and meaning making*. Here, it is demonstrated how various techniques can be used to contextualize and re-contextualize archival material to motivate new interpretations, engagement and cultural understanding. Finally, the third part has its focus on *civic engagement and local communities*. In this part, focus is primarily on work and efforts carried out by local communities outside of the traditional institutions.

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