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Collaborative Approaches to Heritage: Museums on Web 2.0 Platforms

Konstantina Skoulika
116678007

Prof. Dr. Asu Aksoy

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Kültür Mirasını Birlikte Ele Almak: Web 2.0 Platformlarında Müzeler

Konstantina Skoulika
116678007

Thesis Supervisor: Prof. Dr. Altan Asu Robins
İstanbul Bilgi University

Jury Member: Dr. Öğr. Üyesi Esra Yıldız
İstanbul Bilgi University

Jury Member: Assoc. Prof. Kadriye Tezcan
Yıldız Teknik Üniversitesi

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ABSTRACT

The purpose of my research is to understand whether Web 2.0 collaborative platforms are able to fulfill new museology's quest for the centrality of the audience in the museum scape, by allowing and encouraging existing and potential audiences to participate in processes of heritage documentation, through co-creation and contribution of tangible and intangible heritage material. In order to give an answer to my main question, a multiple case study desk research of relevant museum projects was employed, in order to detect similarities and common challenges among the current practices and to evaluate the extent that those platforms empower the users.The results are in a great extent positive; despite that, and taking into account that digital collaborative platforms are a new medium in the museum scape, certain aspects of their functions can be ameliorated: among those, we can find issues of sustainability; real impact on the actual museum records; the capacity granted to audiences to negotiate and exchange information.

ÖZET

Araştırmamın amacı, Web 2.0 işbirlikçi platformlarının, mevcut ve potansiyel izleyicilerin miras dokümantasyon süreçlerine eşlik ederek katılımlarını mümkün kılmalarını sağlayarak ve teşvik ederek, yeni müzeciliğin müze kitlesinin merkezindeki arayışını yerine getirip getirmediğini anlamaktır. Maddi ve maddi olmayan miras içeriklerin oluşturulması ve katkısı. Ana soruma cevap vermek için, mevcut uygulamalar arasındaki benzerlik ve ortak zorlukları tespit etmek ve bu platformların kullanıcıları güçlendirme derecesini değerlendirmek amacıyla, ilgili müze projeleri ile ilgili çok sayıda örnek çalışmanın araştırması yapılmıştır.Sonuçlar büyük ölçüde olumlu; buna rağmen, dijital işbirlikçi platformların müze panoramasında yeni bir araç olduğu göz önüne alındığında, işlevlerinin bazı yönleri iyileştirilebilir: bunlar arasında sürdürülebilirlikle ilgili sorunlar bulabiliriz; gerçek müze kayıtları üzerindeki gerçek etki; bilgi alışverişinde ve müzakerelerde ziyaretçilere verilen yer ve kapasite .

Contents

Introduction

In the late '80s, new museology challenged the role and the mission of museums within society (Vergo 1989); opposing to the long-held belief that museums' mission is the preservation and display of artefacts, new museologists counter-proposed that audiences should be the point of reference of museum activity and suggested that objects have nothing to say if separated from their original cultural contexts. The dual character of their critique essentially brings together two inseparable issues: on one hand, the display of artefacts accompanied by a label merely indicating technical details about the viewed bores, intimidates, or even agitates audiences, as the objects become irrelevant to lived experience; at the same time, the focus on educating the public, without taking into account their own friction with heritage material, deprives the museum from including authentic accounts of their artefacts' original uses, downplays their social stories, and often presents narratives that little have to do with the reality. As such, new museology's approach towards museum practices focuses on spotting the balance between two issues whose connection is multi-layered, and subsequently asks: should the museum be object-driven or audience-driven?

Based therefore on the premise that the ultimate museum mission is to represent and serve its community, new museology sought to make audiences active interpreters of the museum displays and stakeholders of a shared authority with the museum (Vergo 1989, Walsh 1992, Crew and Sims 1991, Hooper-Greenhill 2000). In this context, museums in the late 20th century, attempted to reposition themselves as social actors with agendas that aimed to a thoughtful representation of diverse cultures and realities, through the inclusion of various voices in the museum scape.

Towards this end, audience participation in heritage construction became a buzzword for the museum sector, and fairly so, as it sets the basics for a democratized heritage, collaboratively shaped by those who experience it. This endeavor of inclusion and multivocality is thought to be facilitated by the introduction of technology in our lives, whose stormy effect also alters the ways we consume and experience culture. Web 2.0 gives rise to a participatory culture in all public domains, and it, not only, challenges museum practice, but also it offers unprecedented opportunities for the dissemination of and involvement in cultural heritage. Its participatory affordances allow greater

interaction between institutions and citizens, and provide spaces where those can open up conversations and co-construct knowledge. Illustrative of that is the quote that social media mark a "transition from Acropolis — that inaccessible treasury on the fortified hill — to Agora, a marketplace of ideas offering space for conversation, a forum for civic engagement and debate, and opportunity for a variety of encounters" (Proctor 2010:36).

However, this radical reposition of the stakeholder/user as co-creator in the heritage process does not come without a price: museums, traditionally associated with the accuracy of the content they provide, are afraid of what this shared ownership might mean for the quality of their content. As such, and despite the opportunities granted, museum communication still builds on a traditional model of authoritative fact transmission and refrains from meaningfully involving the public (Russo and Watkins 2006:27; Russo, Watkins, Kelly and Chan 2006:1). Social media, despite the opportunities they offer for greater participation and involvement of amateurs, are used more to promote museum programs, as traditional Web 1.0 platforms did, or to engage the audience in superficial participatory practices, and less to give space to institution-led participatory initiatives (Vermeeren, Calvi and Sabiescu 2018, Stuedahl 2011:3).

Additionally, as engaging the audiences through participation has become a matter of relevance for the sector, many institutions take up the challenge to find out that audiences do not respond adequately to their call. Joy Palmer (2009), in this context poses the – rhetorical – question "if we build it, will they come?", referring to issues of engagement of crowds in participatory practices. Extending his argument, we might as well wonder why communities would/should engage in museum initiatives, when so many grass-root platforms can satisfy the need to participate to the documentation of heritage without the restrictions institutional platforms pose.

Based on the above, the thesis seeks to showcase key projects that utilize digital tools to encourage the participation of visitors and non-visitors alike in order to co-create narratives and cultural content with the museum. In that scope, several case studies have been studied and six of them were subsequently selected to provide an overview of participatory practices, key themes that cut across them, as well as the challenges such projects pose.

1.1. Research Questions and Objectives

The study aims at understanding the extend that new museology and its post-theories affect the character of digital participatory practices in museums. As such the theory of new museology is presented as the theoretical context and point of reference; through that lens, I attempt to define the effect of digital tools as facilitators of the museum mission towards multivocality and audience-centeredness. I therefore assume that audience participation through Web 2.0 platforms is able to:

- maximize the involvement of the user in the museum
- recontextualize objects through their digital introduction in their original contexts by allowing personal interpretations and source community interpretations to take place, and lastly,
- facilitate the sharing of authority between the audience and the museum.

The above assumptions set the lens of the study case research, which will seek to answer the following question, through a series of sub-questions:

Question:

Do digital tools fulfill new museology's quest for the centrality of the audience, as it occurs through the sharing the responsibility of heritage interpretation and documentation with communities?

Sub-questions:

- How are users enabled to contribute and/or co-produce (calling this 'contribution work') content?
- How do museums utilize digital platforms to empower, and therefore, share their authority?
- How do objects change context in the digital realm?
- How are users encouraged to engage in intra-user communications and negotiations regarding the contribution work for the heritage in question?

My proposition is that digital tools, because of their participatory components, are able to affect the museum's content and turn heritage into a process whose end product is

always reshaped and renegotiated by the audience, resulting thus in multivocality and greater relevance of the museum in the stakeholder's life. Regarding it in such a context, museums, and the digital spaces they set up, can comprise contact zones where the audiences' interests and concerns are expressed and valued by the museum through their contextualization in heritage, to provide meaningful connections between past and present, heritage and everyday experience. In short, this proposition is articulated as it follows:

"The implementation of digital tools in the heritage domain assists the introduction of multivocal perspectives and is able create platforms where diverse voices can be projected *and* heard".

1.2. Research Background

An ever-growing body of literature has theorized on the effects of digital applications in the museum scape; such works revolve around issues of increased access and dissemination of cultural content, or, more relevant to this thesis, issues of audience/user participation through technology. The latter are often centered around digital application in museums' physical spaces as a means to capitalize on interactivity in order to further engage the audience; examples of that can be found in Nina Simon's Participatory Museum (2010), where among others she elaborates on the ways technologies can assist the museum in engaging the audiences by allowing to draw their own meanings from the collections and displays; Sara Radice's PhD thesis (2014) draws a wide array of digital applications utilized both within and beyond institutional walls, and created by both institutional entities or grass-root initiatives, with the purpose of engaging the audience in multicultural dialogues; Giaccardi's *Heritage and Social Media* (2012) draws on the opportunities presented by social media to engage the audiences in negotiations and meaning-making through their contact with and participation to heritage content; similarly, Angelina Russo (2006, 2008, 2012, 2017) through various contributions to journals and edited volumes attempts to frame audience participation and co-creation with social media. It is evident that the bibliography regarding the topic is not only ample, but ever-growing too. I would like through the thesis to continue this tradition on theorizing on digital audience participation, emphasizing in the aspect of knowledge co-construction and

contextualization of cultural content through the perspectives of the audiences. Furthermore, through this study I narrow down the wide concept that lies between the link of social media and heritage, in a research and discussion that evolves around museums specifically, and projects that are held only digitally and therefore count on users' active participation.

1.3. Research Methodology

The methodology adopted to get an insight in how museum use participatory designs to enhance digital experiences of interaction with users and museum audiences is the case study desk research with secondary and primary sources, as those occur from the observation of the digital platforms and the references to related reports released by the institutions, if available. There is no specific time period that the case studies come from, but rather, those are selected on a basis of providing diverse -but not exhaustive- examples of user participation, of digital tools that facilitate this participation, and of outreach methods; they also feature instances of authority exercise on the part of museums as to how they allow the audience to participate in the co-construction of heritage and as to whether they control the inputs, if they do. The case study method is chosen, as it "attempts, on one hand, to arrive at a comprehensive understanding of the event under study but at the same time to develop more general theoretical statements about regularities in the observed phenomena" (Fidel, 1984:274)- drawing common patterns from the case studies, I hope to give an overview of successful participatory projects and how those are set and implemented, as well as the common challenges they pose.

More specifically, the thesis' design is that of a multiple case study research, employed in order to highlight the similarities and differences across the cases, as those manifest through the platforms, tools, and organizational intentions among the participatory projects. In doing so, it seeks to confirm whether digital tools can indeed be of help in diversifying heritage, as this is produced and communicated by museums.

The case studies are selected on the grounds of:

1. A museum develops, organizes, or further supports the audience participation project through digital means.

2. The participation occurs on a physical level (for instance through workshops aiming to familiarize the participants with the digital tools used), but is disseminated online *or* completely occurs online, without offline interactions.
3. The participatory projects are related to cultural heritage, tangible or intangible. Apart from cases focusing on the interpretation and documentation of existing heritage, there is also inclusion of cases where audiences create heritage material (for instance, through storytelling practices), acting thus as co-creators.
4. The projects capitalize on the audience's ability to assume the roles of co-curator and/or co-creator of heritage content.

Furthermore, the thesis does not examine mobile applications, QR codes or any application that extends within the museum and or it is set as a means to complement the exhibition through interactives, or any application related to virtual reality and smart objects. This is partly explained by the tendency and wish to feature projects that are based exclusively on the user-friendly and non-expert opportunities for participation that digital tools offer, and not to elaborate on applications and projects that are impossible to be realized by the majority of museums, especially those that deal with limited funds and low budgets. Last, but not least, it is important to clarify that the research is not dealing with specific instances of audience centrality as those occur from the projects and highlighted by their specific traits; what it aspires to do, instead, is to look at the ways digital platforms upgrade the position of the users to active stakeholders and interpreters.

1.4. The projects studied

Six projects were chosen as the focus of the study, all of which come from different museum types, utilize different methods of eliciting user generated content, and, in some cases, are the product of collaboration between several institutions.

The Virtual Shtetl is led by the Museum of the History of Polish Jews, to which it was handed over after its completion by the Jewish Historical Institute Association, and it is a database which invites users from all around the world to contribute their knowledge regarding the life of Polish Jews.

Culture Shock! is the joined effort of Tyne & Wear Archives & Museums. It is a co-creation project, which aims to recontextualize objects of the museums' collections through the lens of the audience, by exploring the practice of digital storytelling.

The Faces of the First World War was run by the Imperial War Museum with the opportunity offered by the Great War's centenary and aims at gathering information as provided by the audience to reconstruct the lives of the WWI veterans.

Art Maps is a project led by Tate and attempts to contextualize paintings by pinpointing the location of the landscape that inspired them in a participatory map, and by providing tools for the viewers to note their personal connections to the art works.

Lastly, the projects *Tag! You're It!* and *Freeze Tag!,* organized by the Brooklyn Museum capitalizes on its constituents to tag the museum's online collection, and contribute to the creation of an online database comprised of everyday terms and descriptions.

1.5. Limitations

The case studies, as indicated in further detail in the Research Methodology section, have been selected based on specific criteria: projects taking place in digital platforms and organized by museums are two of the main preconditions for the selection. Taking into account that although the literature has ample examples to offer when it comes to research projects organized by universities and other institutions, the options when it comes to museums appear to be scarcer (Russo and Watkins 2006, p.27; Russo, Watkins, Kelly and Chan 2006, p.1) and are usually the products of bigger institutions. This inevitably poses some limitations in terms of the options opening up when it comes to the selection of the case studies, whereas the lack of audience reports in the majority of cases hinders a better insight in such initiatives. Despite these shortcomings —and in an extent, due to them—, I find it important to explore the ways museums, outside the limits of research efforts, utilize participatory platforms to allow the audiences to get meaningfully involved in their collections and elaborate on their choices and challenges while doing so.

Secondly, the fact that participatory digital strategies in the museum sector are of a limited extent also means that it is usually bigger institutions that take up such

challenges. Their profile renders it often difficult to create a communication with the projects' management teams and gather data regarding their experience in the implementation of the projects. Consequently, some additional elements that could shed further light on the projects go uninvestigated. On the other hand, other projects organized by smaller scale museums that may have embarked on similar journeys, often go undocumented, and therefore we do not have an overview of projects as organized by smaller institutions. However, the projects selected do not pose unrealistic expectations in terms of budget -although they do require a dedicated team- and therefore this point appears to be of a lesser significance.

Last but not least, as the methodology employed it that of the multiple case study research, the thesis does not attempt to generalize on all participatory projects realized by museums, but rather highlights some common areas among them, which are likely to be encountered in other initiatives too.

2. Theoretical Framework

Exploring any issue related to the extent that social media can fulfil the contemporary museum's mission towards a multivocal heritage wouldn't be fertile, if we don't first look into the ways this mission was articulated, and under which circumstances digital participation takes place today. This chapter is dedicated to the transition from the modernist museum to the re-invented museum—terms that will be elaborated further on—and the mapping of the practices and concerns that digital participatory heritage has given rise to. As such, I will start by exploring the theory of new museology, a doctrine that challenged the ways museums carried themselves in their societal context; the shape of the theory as it evolved; and issues related to participatory practices that emerged as a result of the academic critique and the new media environment we found ourselves into as we entered the 21st century.

Part 1

2.1. New museology: objects or audiences?

Museums, as any other public institution, are born out of a social need and change according to the transformation of those needs in a changing environment. In the context of locating new media in the museum scape, it is worthy to see what kind of changes in museum attitude new technologies can assist by going back to the debates regarding their mission. This first chapter traces back the critique posed by the movement of new museology to eventually define the theoretical mandates of the 're-invented' museum (Anderson 2012).

Today's museums are the product of the 19th century modernist institution and the discourses regarding their identity and raison d'être in a great extent feed from their earlier practices and their remnants. Those museums had an "encyclopedic, universalist, and democratic" character (Phillips 2005:84) and their mission was to conduct research and educate their constituents (Phillips 2005); they were expected to achieve that by classifying their collections based on the scientific dictates of the period and by welcoming the public (Smith 1989:8). As such, the modernist museum based

its activity on the preservation and display of collections and its approach towards artefacts was based on what Steven Conn calls an "epistemology of objects", suggesting that objects had the power to reveal their character by just being viewed (Conn 2013). The above give insight in an idealism regarding the role of the museum, which also echoes in the words of Henry Cole in a report regarding the South Kensington museum:

"The museum is intended to be used, and to the utmost extend consistent with the preservation of the articles; and not only used physically, but to be taken about and lectured upon. For my own part, I venture to think that unless museums and galleries are made subservient to the purposes of education, they dwindle into very sleepy and useless institutions" (Cole as cited in Smith 1989:8).

However successful this model was for the 19th century, the 20th century introduces new demands, although the museum practices remain, essentially, the same. While museums used to be connected to university departments and be informed by diverse disciplines, gradually this interdependency loosens and museum practitioners reside to practices that over the years turn obsolete (Phillips 2005:84). Despite the modernist museum's commitment to the mission of edification, the museum of the 20th century becomes isolated from its communities and instead projects and looks to validate selected social norms (McTavish, 2003:97) and the social relations these master themes reinforce. The need to shift this situation manifests in the mid-20th century; in the '60s, the rise of the civil right movements and their demand for greater social relevance of public institutions also brought the museums in the spotlight of a critique which was centered on demanding a more active and socially accountable role for the institutions. A result of that need was, among others, the creation of the eco-museum in 1971 (Babić 2009), whose mission was to preserve and develop local identities, involve the population in the making of heritage, and contradict hegemonic narratives that celebrate public figures and neglect everyday people and their culture (Walsh 1992). We, therefore, notice a turn in the way the museum carries itself and its mission; local history prevails, the community is involved in the way heritage is made, and the present is connected to the past in an effort to create a sense of identity and empowerment (Walsh 1992). In 1985, the journal of the International Council of Museums, "nervously" writes about a new museology in France, "a movement of criticism and reform incorporating new developments in the social and human sciences with the aim of revitalizing techniques

of display, exhibition and communication and ultimately altering the traditional relationships between the institution and the public" (Starn 2005:71).

The above frictions create the ground for an articulated theory regarding museum practice, and in 1989, Peter Vergo attempts to define a new movement through his book '*The New Museology'*. The book is the result of a "widespread dissatisfaction" (1989:3) with the modernist museum's mission and functions, and Vergo offers that the biggest problem is that the modernist museum is "too much about 'museums' methods and too little about the purposes of the museums" and suggests a more humanistic discipline governing museum practice (Vergo 1989:3). The book's contributors highlight the main areas of concern, which come to be the objects and the ways those are dealt with within the museum, the relevance of the museum to their communities, and the increasing resemblance of the institutions to businesses; in short, new museology focuses on "the social, political, and economic environment of the museum" (Stam, 1993: 268). The point of interest in this thesis lies not on the economic-business aspect of new museology's critique, but on the social and political components, which are manifested through the way museums approach their collections and their public.

2.1.1. The objects and their contexts

One of the most prominent critiques on the modernist museum was centered on the way it communicated its objects, the "*Politics and Poetics"* of museum display, as Smithsonian Institute's volume regarding the matter indicates through its name (Karp and Lavine, 1991). The 'poetics' signify the narratives surrounding the objects, as those are constructed by the museum, while the 'politics' refer to the political context and the political implications of the displays (Weil 1990:61), especially when the objects concerned are acquired from colonized cultures. When it comes to displaying such objects, the modernist museum often does so by stripping them off their original context and re-contextualizing them under typical western taxonomies (Walsh, 1992). However, objects are "reticent", Vergo suggests, and as they cannot reveal their character by simply being viewed (Vergo, 1989:41, Weil, 1990), their re-contextualization within the museum distorts their meaning, value (Stam 1993, Smith 1989), and authenticity (Crew and Sims 1991:163). Inevitably, they are degraded to

"auratic objects", artifacts whose most prominent characteristic is their aesthetic quality (Walsh 1992:35). Displays of that kind, deny a consideration of cultural difference, and therefore "prevent us from hearing the objects' multiple voices" (Crew and Sims, 1991:160), and deprive the object from its "social past" (Crew and Sims 1991:163). Furthermore, and since the auratic object is primarily an object that is supposed to please the eye, only special artefacts are chosen; that way, the stories of ordinary people remain untold (Walsh, 1992:36), and it becomes impossible to achieve a fair share of social representation for diverse cultures (Witcomb, 2003:128). Rejecting the idea that the mere existence of objects could enlighten the public about other cultures, new museologists thus conclude that museums cannot only provide a space for the display of objects, but they should also tell the stories behind those objects too.

2.1.2. Audiences and communities

Objects and their display triggered many debates among the new museologists, but the social relevance of the museum was even more contested; the museum was re-approached as a social institution that must serve its public through educational and cultural programs, a communicator of value, stimulation, and empowerment (Weil, 1990), and a space to foster dialogue (Gaither 1992:60). Crucial on that thesis is the positioning of the museum as a segment of civil society and, in this wavelength, its capacity, within this framework, to shape and normalize ideas (Coffee 2006), or according to Karp, its ability to "assert about what is peripheral and central, valued and useless, essential or marginal" (1992:4). Having this authority, museums can either marginalize or center communities, by choosing what is included in the museum and what isn't. However, as today's societies become increasingly aware of their own pluralism, a lot of previously muted groups reject their status as given by museums — or other actors—and demand their own voices to be heard (Gaither 1992).

According to new museologists, the key to approach the communities is for the museum to step down of its ivory tower and involve the public in producing their own meanings out of museum displays or in producing their own displays altogether as a means to promote an understanding of their past (Walsh 1992). In that wavelength, Gaither, for instance, presents the work done in a collection of African-American documents and

artefacts: the museum's approach was people-oriented, and the local community provided the objects that would be exhibited, along with their interpretations; through that, everyday people were invited to record a history that is not only focused on great figures, but on everyday practices to eventually construct a social history (Gaither 1992). Such new readings of heritage practice are also supported by Merriman, who suggested that audience research endeavors were still in an infantile stage, but developing them was an imperative for those museums that wished to be enlightened about what the audience expects, brings along, and gets from the exhibition (Merriman 1989).

Similar views are expressed by Baxendall, when he suggests that in every exhibition, there are three active actors; the artefact's producer, the curator, and the visitor. Based on that, the visitors' interpretative abilities should not be downplayed, but instead the curator should refrain from offering patronizing facts, and instead provide stimuli and "pregnant cultural fact(s)" from which the audience can draw their own meanings (Baxendall 1991:41). Museum visitors, thus, were thereon viewed as active parts of the exhibition, and were counted on to negotiate the meanings of the viewed in a reciprocal exchange with the museum (Macdonald 2006:362, Walsh 1992). In that context, displays should provide an 'intrinsic' and 'extrinsic' motivation to museum goers, where 'intrinsic' signifies, among others, the attachment of personal meaning on the display (Screven 1986:113, as cited in Walsh 1992:171).

We therefore see that, through new museology, the museum's authority is challenged and curatorial power is sought to be redistributed, "education is placed over research, engagement over official narratives, and multivocality over connoisseurship" (Boast 2011:64; Phillips 2005), and the ways in which museums replay hegemonic discourses and representations are explored. Where new museology tried to identify the ways hegemonic narratives are being reproduced in the museum, a second wave of the practice emerges in the '00s, described by Macdonald as the second wave of new museology (Macdonald 2006:1), the scope of which also centers on the objects, audiences, and the corporate dimension museum activity takes. The difference between the two waves lies on the ground of practical implementation: whereas new museology was mostly about starting a discussion on issues or cultural representation and institutional isolation of a platform that is essentially destined to serve the public, the second wave of new museology seeks to re-define the role of the museum, while

building on the research base of museum studies and connecting it with other disciplines.

2.2. Moving towards: new museology comes of age

- The acknowledgement that reality, truth, and knowledge depend on the perspective, and because of that the power of representing others is questioned,
- The fact that objects have a subjective nature and need to be properly interpreted in order to be appreciated
- The perception of the museum as a social and public place and
- The shift of power balance between audiences and experts,
- The recognition of the importance of intangible heritage (Radice 2014:80, 81), and
- The emergence of social history in the museum scape, as proposed by the eco-museum (Walsh 1992)

The points above briefly summarize new museology's contribution towards a new museum practice. As indicated in the previous chapter, the second wave of new museology maintains the role of the visitor as the focus of the discourse, but adopts more tangible methods to highlight the audience's centrality, and further elaborates on the theoretical components of the movement, while trying to combine theory and practice. Audiences and displays as the focus of museum activity become interrelated topics, since we acknowledge that objects take up their meanings from those who view them; in this context, the value of the museum lies not on displaying collections, but on being able to communicate those collections to its communities, as a means to help them develop an understanding of their past. Perhaps the most important contribution, as the theories and practice evolve and merge, is this invitation to the visitor to make her own meanings from the displays and the development of the methods that render this possible. Through that, museums aspire to become participatory, on the grounds of sharing responsibility in the knowledge construction with their constituents, whereas interpreting the displays with the audiences' experiences in mind comes to be a focal point of museum curatorial practice. In this part, I will start by elaborating on interpretation, used by museums

as a means to allow the audience personalize the heritage content, and will move to the general framework that allows such acts, that of participation.

2.2.2. Sharing Curatorial Authority through Interpretation

Academics and practitioners alike look to shed light on what interpretation really is, and the abundance of those definitions eventually allow us to compile an informed notion of the principles that successful interpretative methods are based on. According to Tilden, interpretation is:

"an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information" (Tilden 1997:8).

The Association for Heritage Interpretation in the U.K. uses a simplified, but equally dense and insightful account: "Interpretation is the art of helping people explore and appreciate our world", whereas the Failte Ireland museum defines it as:

"Bringing the past to life so that it resonates with visitors, and gets them thinking and talking is the role of interpretation. It is a communication process that links factual information to the immediate, firsthand experience of the place and to the contemporary lives of visitors. It sheds light on the present and gives meaning to the past. It links us to the stories of the generations who were here before us. These are the rewards that heritage sites can offer visitors, and interpretation delivers them." (Failte Ireland 2012:10)

Defined as such, interpretation has some basic principles:

1. Any interpretation that does not somehow relate what is being displayed within the experience of the visitor will be sterile;

2. Information, as such, is not interpretation. Interpretation is revelation based upon information;

3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural;

4. The chief aim of interpretation is not instruction, but provocation;

5. Interpretation should aim to present a whole rather than a part;

6. Interpretation addressed to children should follow a fundamentally different approach.

(Tilden, 1997:9)

The definitions and the basic principles show that interpretation is about bringing heritage and collections closer to those who view them, by communicating them in relevant contexts and by forging links between the past and the present, the specific experience and the universal. Interpretation, that way, puts forward a constructivist approach to heritage, where the visitor is considered an active meaning maker of the museum's content. In contrary to the modernist museums' linear transmission of information, through the act of interpretation, the museum recognizes that the visitor already has experiences, and is able to make connections and draw meanings out of heritage content; that way, the communication between the museum and the audience becomes an exchange between two equal parties (Hooper-Greenhill 2000). In that line of argument, McLean adds that museums need to approach their visitors as "partners in a generative learning process" (McLean 2011:72) where both the experts and the audiences learn in reciprocity. Heritage, thus, evolves and becomes the result of a meaning negotiation between the audience and the museum, in order to shape a more dynamic context of display, and a versatile reading of heritage material deprived from master narratives. In this effort towards greater involvement of the public in the museum, visitor studies also developed and highlighted the new ways museum visitors are approached by the museum, as well as the experiences museum goers get from their visit. Acknowledging the past inadequacies in profiling the audience, visitor studies proceeded to work not only on the demographics that visit the museum, but also on a qualitative approach that sought to understand how the audience decode and make meaning out of their visiting experience (Hooper-Greenhill 2007).

Another aspect of the importance of interpretation is given by James Clifford and his theory of 'contact zones', which is based on a collaboration and a re-distribution of authority between the museum and the community (1997). Mary Louise Pratt came up with the term to refer to the intercultural and transcultural communication taking place in her class with the chance offered by a lesson that aspired to touch upon several

aspects of American matrimony. In her analysis, she spoke about the conflicts, the instances of convergence and the creation of safe places within the classroom environment when students of diverse backgrounds offered their own perspectives on certain events and claimed that the classroom came to be a 'contact zone', where multiple perspectives met and conversed (1991). Clifford, later on, expanded the term and adapted it to museum practice to suggest that by including origin communities' interpretations of colonized artefacts, the museum creates a reciprocal relationship with different groups, contextualises the objects, and becomes itself a contact zone where meaningful, transcultural communication can take place (Clifford, 1997).

In the same wavelength, Witcomb introduces another key concept in the renewed relationship between museum and museum-goer and the greater involvement of the latter in the meaning-making process. Elaborating on interactivity in exhibitions, she defines its concept and the complexions that arise. Interactivity in a museum exhibition, she clarifies, is not the mere use of interactives, mechanical devices that allow a kinesthetic approach towards the exhibits (Witcomb 2007). On the contrary, interactivity is a process that provokes the museum goer to give her own meanings to the viewed. Assigning a constructivist character to interactivity, she speaks of "dialogic interactivity", a method that "poses questions, suggestions, rather than fixed narratives in the authoritative voice of the museum" and therefore encourages an interaction that is not centered on being physically, but emotionally active and stimulated (Witcomb 2003:159).

The above indicate the turn in museum practice to either personalize exhibitions in order to further engage audiences or to involve the community in the co-construction of heritage knowledge and enhance our understanding of the past, whatever our expert status is. This approach towards heritage marks a greater shift towards the active participation of the public in the museum, as well as the shift of heritage from a product, to a process which involves the audience's active involvement (Radice 2004). This new notion of heritage as a concept in on-going formation and as a matter of constant reshaping is also acknowledged by Langlais, who argues that through the audience's participation heritage "is always changing and remains alive" (2005).

There is, thus, a turn towards a new accepted museum type, one that Gail Anderson defines as the 're-invented' museum, and for which she provides a general tool of identification:

On an institutional level, the re-invented museum has social responsibility and counts on civic engagement. As such, it is audience focused, it seeks a broad representation of its constituents and offers multiple viewpoints of heritage, while its function is that of a facilitator, rather than this of an authoritative source.

On a communication level, the museum is accessible, it welcomes differences, it is dialogue-driven and provides interactive choices, while it goes beyond the linear transmission of information and instead initiates a two-way communication based on an exchange of knowledge (Anderson 2004:2).

2.2.3. Participation

As it has been mentioned in the introduction of this chapter, museums attempted to establish greater relevance between their offerings and the public by personalizing and sharing the responsibility of interpreting their displays. Contributing in the interpretation of heritage material however is only an aspect of inviting the public to participate in the museum sphere; in contrary, participation takes up many forms and related undertakings are by no means an innovation owed to museums exclusively. More specifically, participatory designs gain more ground in different aspects of civil society; in Gaventa and Cornwall (2001), we see the advancing importance of participation in relation to governmental social policies and social care as a means to exercise power and influence by marginalized groups in critical issues. Policies that approach the public as simple consumers and users fail to exercise their mission in an accountable, responsive, democratic, and transparent way, whereas participation of users in committees was seen as a means to better understand their needs and perspectives, while it was also seen as a way for the users themselves to develop their own identities and voices (Barns 1999 in Gaventa and Cornwall 2001). The writers suggest a move from the approach towards the public as "users and choosers" towards a model of "makers and shapers". The importance of such initiatives lies on the fact that "they are tools that can be used to address particular institutional aspirations to be

relevant, multi-vocal, dynamic, responsive, community spaces" (Simon 2010:9). Following this shift, museums also are increasingly asking their constituents to take part in the shaping of heritage and this turn in mentality is only partially the result of their own initiative. More specifically, inviting the participation of non-experts in expert fields and decision-making processes can also be seen as a result of Web 2.0 technologies and the emergence of a participatory culture, not only in the cultural domain, but in every strand of public life. Participatory culture, then, is defined as one that:

"has relatively low barriers to artistic expression and civic engagement, provides strong support for creating and sharing one's creations with others, and provides some type of informal mentorship whereby what is known by the most experienced is passed along to novice, the members believe that their contributions matter and they feel some degree of social connection with one another (at the least they care what other people think about what they have created). Not every member must contribute, but all must believe they are free to contribute when ready and that what they contribute will be appropriately valued." (Jenkins 2006).

Participatory culture then, interrelated with the rise of the Web 2.0 platforms, due to the user-centered character those are based on, informs museum practices in a novice way, as Nina Simon's book 'The Participatory Museum' indicates. Particularly, Simon analyses the participation models social media platforms are based on and looks to extend their architecture in physical museum settings, in a quest to further involve the audience through participatory practices. Here, I will attempt the opposite, by mapping participatory practices as implemented in real museum environments, the way Simon drew them, and then extending them to virtual and digital settings to elaborate on digital participation as initiated by museums. Before exploring this further, however, it is useful to determine what participation means in the particular context of this thesis.

2.2.3.1. Clarifications on the concept of participation and the importance of involving the audience

According to Bunning et al., in the U.K. the concept of participation simply signifies the act of being able to go to the museum, and instead the term *collaboration* is used as a signifier of the audiences' involvement in the museum and the subsequent authority redistribution between experts and non-experts this entails (Bunning et al. 2015). However, collaboration itself can be problematic as a term since it focuses on different aspects of the process, and more specifically it revolves around the power handover mentioned above, without caring for a well-designed outcome in the end that really reflects the community's intentions and therefore results in dissatisfaction when the audience's contributions do not reach the exhibitions (Lynch and Alberti, 2010). However, for participation to be successful both aspects are important: the process and the final product of the collaboration as showcased in the museum space and which should echo this process of audience involvement. Furthermore, collaboration as a term synonymous to audience's participation in the museum can falsely lead us to exclude projects that are based on short term audience involvement, as the word generally signifies long term relationships. Satwicz and Morissey replace the too specific term 'collaboration' and its broad counterpart 'participation' with 'public curation' which aims to include participatory designs, user generated and user driven content, as well as all the ways that non-experts can get involved in "in shaping museum products (e.g., exhibitions, websites, archives, programs, media), and processes (e.g., design, evaluation, research, public discourse), and experiences" (Satwicz and Morrissey 2011:196).

Relevant to the above are the terms designing for participation and participatory design, each of them favoring either the process or the platform of the exhibition; participatory design implies a process where the final product is the outcome of community collaboration, after this community has been invited by the museums and in such cases, the final exhibition can have a traditional lay-out; in design for participation, however, the process through which the exhibition is developed might be traditional with the curatorial staff working alone towards its realization, but the exhibition itself isn't, as it invites the audience to contribute to the museum, and interact with the exhibits and the fellow visitors. Finally, it is worthy to note that the two of them are not mutually exclusive and, in fact, complement each other (Simon 2009).

2.2.3.2. Models of Participation

As we saw, there is a certain confusion when it comes to describing participation in the museum sphere, which mostly owes to the diffusion of the used terms. Participation in expert fields largely comes from scientific practices of involving the public in scientific research projects and from development studies which seek to involve citizens in decision making processes (Cornwall 2008, Shirk et al 2012). The term "participation" describes a broad range of approaches employed to engage individuals and communities, with each approach often related to different intentions and results (Shirk et al. 2012:29). However, high quality participation can be found in any project regardless the degree of participation it grants —as this is determined by issues of how long the relationship lasts, what kind of input the participants have, their power over the project, and the size and demographics of the participating group— as long as it correspond to the needs and interests of the public (Shirk et al. 2012). Participation in museums occurs in five models, organized here in a progressive order of involvement, as proposed by Simon (2010):

Collaborating and Co-creating projects: collaborative programs mark a deep engagement between museum and visitor, as the two groups work together to create new exhibitions, programs, and exhibits. In collaborative programs, the participants act as consultants to the projects, whereas in co-creating projects, they have a greater control over the final product of the exhibition.

Contributing: contributing is the most common form of participatory exhibition design, where the audience gives objects, photos, memories and stories, and lastly comments on the exhibits, often on the basis of personal reflections. Contributing projects can also involve a greater number of participants, as the staff's involvement decreases.

Hosting: hosting refers to organizing events that normally are outside the scope of the museum, as a means to increase the audience's engagement with the institution; that way, the museum turns into a hosting facility that provides a space -and sometimes some minimal assistance- and the audiences have the freedom to organize events and projects, as long as they don't violate the institutions basic rules of conduct.

However, often this classification can create confusions in the process of identifying museum projects: the concepts of collaboration and contribution can lead to either co-created, co-curated, or contributed content, with the only variable changing being the duration of the relationship between the museum and its constituents. For that reason,

a classification that would work better in the context of this thesis is the creation of two categories, identified as collaboration and contribution, that lead to either co-created material, or co-curated material, with their position in either category implying the different nature of relationships that exist between the audience and the museum. In the second part of the Theoretical Framework, I will revisit those models as encountered through a digital perspective in order to exactly map the affordances and specific characteristics of digital participation.

Part 2

2.3. Cyber museology and the rise of Digital Heritage

A last component of Anderson's definition in regards to the communication model the re-invented museum adheres to, is the adoption of digital tools as means to stay up to date and enhance engagement: the re-invented museum is thus presented as "virtual" instead of "analogue" (Anderson 2004:2). Following the shift of their, emerging especially, audiences to digital learners who interact and socialize through the Web, museums are not only approached as re-invented, but several of them strive to be and are acknowledged as 'media' museums. The media museum, according to Russo (2012), is the result of the rise of digital technologies and it owes its development to the mass digitization of content, as well as the rise of social networking sites and social media. Within this framework, museum practice sets aside its educational character and moves towards experimenting with participation and knowledge exchange, shifting further the relationship between museum and audience, as the latter obtains the ability "to build and widely disseminate knowledge, content and conversations across multiple platforms within the museum sector" (Russo 2012:148).

The 'media museum' as a term is interconnected and cannot but accompany that of 'cybermuseology'; cybermuseology came to be an umbrella term that encompasses the theorization and the technical discussions of museums going digital (Leshchenko 2015), and developed from exploring the use of technologies within the museum to developing new methods of communications for the audience outside the bricks and mortar institutions, through digital participation (Leshchenko 2015). As such, Leshchenko proposes the definitions of cybermuseology as: "an area of museological

discussions about changes, problems and challenges in the relationship between museum and its visitors caused by implementation of digital technologies" (2015:240), whereas Langlais, in the context of interpretation and intangible heritage, notes that cybermuseology focuses on the production and dissemination of knowledge, rather than objects, and utilizes the interactional features that computer technologies have introduced as a means to spread, expand, and negotiate this knowledge" (Langlais 2005:77).

Digital cultural heritage, contextualized here as what emerges from and is studied by cybermuseology —among others—, is information either created and spread digitally, or digitized and subsequently disseminated digitally (UNESCO, 2003); as such, digital cultural heritage is first and foremost occupied by issues of accessibility to and preservation of cultural content. However, as in the last years the web technologies have developed dramatically with the rise of Web 2.0 and participatory culture becomes embedded in the way consumers/audiences approach culture, the very field of digital cultural heritage has evolved to include not only concerns regarding access and preservation, but is also read as a means to enhance audience participation and engagement in culture— seeking, ultimately, to redefine the communication model between museums and users through the web and the social interactions this is built on (Stuedahl 2009). In that context, digital cultural heritage brings in the foreground renewed practices of community representation and artefact interpretation, introduces greater dialogical interactivity between user and heritage content, and enhances the ways through which power redistribution between the museum and the user can be achieved (Cameron and Kenderdine 2007:2).

However, stating that digital cultural heritage is a field emerging and theorized by cybermuseology can create misconceptions regarding the actors involved in the field. More specifically, digital cultural heritage might be an area of study for museologists, but the abundance of digital cultural projects realized by other entities showcase that museums are by no means the exclusive gatekeepers of digital heritage, or of conventional heritage, as a matter of fact. Initiatives such as that of City of Memory[1], the Google Art and Culture Project, or Europeana bring in the foreground a wide array

[1] For further information on the projects and platforms, refer to: https://docubase.mit.edu/project/city-of-memory/, https://artsandculture.google.com/, https://www.europeana.eu/portal/en.

of actors in the cultural field and challenge the position of museums within it—making it, thus, imperative for the latter to enter discourses regarding their sustainability and the new roles they must assume in the changing—digital and actual— setting.

In order to eventually determine the fulfillment of the new museological doctrine in digital participatory projects, and explore the link between them, in the chapter that follows, I will examine the value of digital heritage as encountered through its interactional features and in relation to users' empowerment and objects' interpretation in digital realms.

2.3.1. The value of digital heritage through its participatory features

As it becomes evident from the previous chapters, museums have to adapt not only to changing community and institutional demands, but also to a changing environment of media, which are not only valuable for a new approach towards the dissemination of culture, but have taken by storm the ways we learn and socialize. On an initial level, online museum's collections can work either as 'shop windows' (King et al 2016:76) that have the potential to bring more visitors in the museum, as complimentary to the museum visit, or as a means to further disseminate cultural content. However, digitization and the subsequent increased access to collections can adhere to traditional museum standards of authoritative information transmission, whereas digital tools can, more importantly, mark a shift between the user as a passive recipient to a user who can create, curate, share and even modify content (Russo 2012). As the value and mission of today's museums is mostly centered around providing experiences and granting representation to diversified audiences, digital technologies enable to a maximum extend a supremacy of the audience through participatory practices and a representation of various voices.

2.3.1.2. Empowering communities through shared authority

Before I proceed to issues specifically related to the empowerment of communities through digital platforms, it would be useful to determine exactly what we mean when referring to terms as broad as 'community' and 'empowerment'. In this chapter, I find

that there is no reason to approach the differences between online/virtual communities and physical communities, and therefore I will approach both as one entity that is sought to be represented in the museum, and in extension, in its digital platforms. According to UNESCO, then, communities are "groups of people who have shared history, shared experience, shared practice, shared knowledge, shared values, and shared aesthetics", whereas the World Health Organization adds the elements of a shared identity, interests, and concerns and clarified that for a group of people to be considered a community, shared spatiality is not a variable (World Health Organization 2010).

Empowerment, on the other hand, is related to communities gaining control over their lives, and having a say on shaping the decisions that affect them. It signifies a work in process, rather than a purpose, during which communities and individuals build their capacity to speak up, participate in decision making, develop hubs of influence, and create affiliations with institutions and other individuals/communities. In this wavelength, community empowerment implies a re-negotiation of power through involvement and active participation in the public sphere in order to gain more control (World Health Organization 2010). Every discussion, thus, related to the social role of museums is centered around how those can work towards empowering their communities by making them stakeholders in the co-construction of heritage, and consequently, by letting go of the exclusive authorship of cultural heritage, manifested in the ways this is represented in museums through narratives and curatorship choices on inclusion and exclusion. As such, community empowerment can be considered and acted upon by museums through the three elements that make it possible: the (community's) ability to set goals and pursue them, the provision of means that enhance the ability to exercise choice, and the existence of outcomes as results of this choice (Kabeer, 1999). In this framework, Web 2.0 tools can assist the process of empowering communities by providing the resources that enable the public to exercise choice and claim of a more dynamic representation of itself, and museums independently can create the infrastructures to host the outcomes of community participation and thus recognize them as active stakeholders and meaning makers. In a more tangible context, community empowerment through digital tools can occur as a result of the emergence of a social history in contrast to a hegemonic one, the increased visibility of diverse representations, the initiation of a more direct connection between the museum and the

community, and the re-construction of memory in collaboration with communities and users.

According to Simon, the Web 2.0 offers a space where communities can come together and individually or collaboratively create content, rather than consume it (Simon 2007:259). This element introduces a grass-root, democratic approach towards heritage, since people have the ability to create and share content, and consequently the potential to exercise agency by providing their own insights and contributions. Indeed, as lay persons are enabled to contribute to knowledge construction, authoritative takes on history can be dismissed in favor of a social, democratized history, as digital heritage applications make the processes of both collecting and presenting material more democratic, and the audience is asked to consider what is worthy to be preserved, acting as co-curators of digital heritage projects (Giaccardi 2012). On the same wavelength, the uses of web 2.0 by museums allow diversified interpretative methods and the creation of user-generated content based on the audience's experiences, decentralizing the museum's authority (Shahani, Economou & Nikonanou 2008); different histories and historical truths are thus revealed, democratizing the production of historical knowledge (Cook et al 2012).

Nancy Proctor, as noted in the Introduction of this thesis as well, has paralleled the activity of museums in the digital world of participation to a swift from the Acropolis (2010), the sacred place of authority, to the Agora, where responsibility over the content and the representation of shared cultural assets is co-owned by everybody. In this context, by allowing the public to contribute stories, artefacts, and knowledge to the museum, the latter becomes less of an elitist institution and more of a familiar space – a virtual space in this instance- where audiences can proclaim 'Hey! That's mine!', as Gaither (1992) argues, and feelings of intimidation or indifference are left aside.

The ubiquitous nature of Web 2.0 allows intercultural dialogues to be developed and new ways of collaborating with diversified audiences (Allen and Lupo 2012). Especially when it comes to previously colonized or marginalized cultures, the willingness of museums to share authority paired with the active participation Web 2.0 tools offer allow diverse groups to claim ownership and power over representations of their cultures and re-claim their identities. A project able to illustrate that, is for instance, the Digital Talking Objects realized by the British Museum, during which

source communities were asked to share their own thoughts on objects that came from their culture and were shared digitally through the museum's digitized collections (Hogsden and Poulter 2012).

Regarding the re-construction of memory, Silberman and Purser advocate that from time immemorial, the memory construction was based on the transmission of heritage knowledge from authors to audiences, without the latter having an acknowledged involvement to it, but only a participation built on the margins, through gossip and rumors, which was "frowned upon by the institutions of the state and its educational system, but enormously important in constructing unofficial communities of sympathy" (Silberman and Purse 2012:15). This notion towards the hegemonic nature of memory communication is challenged through participatory projects that seek to bring together and build on the collective memory of audiences. Another key aspect in locating the importance of Web 2.0 platforms in relation to community empowerment, is their function as platforms of participation for the formation of collective memory and social history, as they gather the voices of a plural public in an interactive practice of "remembering together" (Simon 2012). Memory is "central to our sense of self and to our everyday" (Hoven, Sas, Whittaker 2012) and through this spectrum, remembering together and co-constructing our part is essential in understanding it and claiming ownership over its representation. As opposed to cultural memory, that is memory constructed by experts and is hierarchical in nature, web 2.0 tools facilitate the prevalence and narration of collective memory, "the memory of a concrete group that roots its identity also in its memories of a shared past to which the group ascribes significance, not only giving sense to the present and open to the future, but also allowing the construction of differences between us/them" (Bertoletti 2011:4).

Furthermore, since our memories are not formulated by our direct experience of events, but rather, they are the product of a social process, collective memory is formed by our exchanges with others, and therefore it is not a process of preserving, but a process of constructing the past with others in the present (Halbwachs and Coser 1992). Given the social character of the Web and the social aspects of memory formation, social media present the opportunity for larger groups of people regardless their location, to participate in the formation of memory, and most importantly of a memory that gets informed by the present and focuses on social accounts, rather than on master narratives, and is based on a process rather than on a fixed product presented by

institutions. Indeed, according to Bartoletti, users are not only engaged in social functions and communication, but also to constructions of memory through the usage of social networks and other platforms that allow grassroot participation. The web thus constitutes a place of remembering together through reciprocity and it has become a place for "ritual commemoration", which does not always reflect institutional agendas, but is also elaborated on a grass-root level, and therefore expresses counter-narratives (Bartoletti 2011). In this light, digital technologies give the opportunity to build on collective memory form the information contributed by users and experts making thus the reflection of the past a dynamic process and giving rise to what Samuel calls a "theatre of memory" (Samuel 1996) in digital platforms where the community can interact with the past and each other, reflect on it, celebrate and commemorate (Silberman and Purser 2012).

2.3.1.4. Objects in the digital realm

The digitization of objects, although paired with theories regarding the democratization of museum collections, mostly has to do with access and does not capitalize on the real possibilities digital objects can afford in terms of sharing curatorial authority and enriching the context of actual displays by inviting communities to ponder on them and interpret them. Numerous initiatives, coming both from academia and museums, showcase that objects can engage communities meaningfully, by getting, at the same time, informed by their accounts. However, as digitization efforts on the part of museums get more and more intensive, many consider digital objects to be lesser in comparison to the experience their physical artefacts instigate and distortions of the original's authenticity (Cameron 2008); in this line of critique what is often overseen is the ability of digital objects to create different experiences on a digital environment that their physical counterparts cannot offer.

According to Cameron, "museums have strived to create a world of factual objects almost completely separate from human concerns, desires and conflicts, using systems of classification, acquisition, and documentation procedures" (Cameron 2008:229). This factuality of the object which counts on its ability to tell stories on its own means has been rejected, and the object's bold, enclosed character becomes flexible with the assistance and the potential opportunities that lie in the use of web 2.0 technologies

(Srinivasan et al. 2009). As such, Shrinivasan offers the first advocacy in favor of the digital object, and projects its ability to be "mutable", in comparison to the ever-static character of the physical artefact, as it can be modified and edited (2010). In parallel, and explanatory of that is the theory of object-oriented democracies, developed by Latour (2011), and adapted in the museum context by Fiona Cameron. According to Cameron, physical objects, due to their materiality and their location, are presented as matter of facts, whereas digital objects and collections are open for negotiations, as they enter networks and within those networks, they encounter broader ideological contexts and various users with different agendas. Taking into account that often collections and museums move within the framework of political tensions and biases, digital objects and the meanings that get ascribed to them can challenge traditional perspectives. Through the introduction of digital objects then collections have the chance to enter "open-ended networks of meanings" and objects are able to map out public spaces beyond the museum (Latour 2011 as cited in Cameron 2008).

Additionally, digital objects can freely circulate and therefore be approached by diverse audiences, who can negotiate their meanings beyond the institutional control of the museum. This is the very core of every argument in favor of digital objects, as the participation of marginalized, or spatially distributed, communities can lead to the museum getting informed of the several meanings that object has from the perspective of diverse encounters and the communities owning up to objects that belong to their cultural heritage (Shrinivasan 2010). This particularly hits home with non-western objects acquired by western museums: in such cases, through digitization, those artefacts are not anymore bound by their physical nature, but instead can travel unbound, offering in a way, a "digital repatriation" (Hogsden and Poulter 2012). On that wavelength, several projects attempt to bring objects back to their communities of origin, even in a digital form which allow the members of source communities to contribute descriptive information on their accounts and to influence the way they are represented in their respective host institutions (Shrinivasan 2010), creating, as a result, contact zones where communities can renegotiate the meaning of the artefacts.

The transformative abilities the web offers in our views towards heritage is further discussed by Hogsden and Poulter, who elaborate on the different uses of objects once they enter the digital realm. Following Boast's critique in regards to contact zones (Boast 2011), the writers argue that contact zones can take place outside the museum

in a way that really decentralizes the museum's authority. Whereas within the museum the outreach and direct contact with communities is limited, and the museum's authority pertains, the objects once freed in the digital world can enjoy a second life that informs their physical equivalent too, enable a meaningful dialogue with diverse communities, and extend the contact zone beyond the museum resulting in a user determined experience. Digital objects can receive multiple meanings and eventually transmit them to their physical equivalences, since their circulation on the web engages them with diverse, maybe marginalized, communities and encourages them to take ownership of their objects (Hogsden and Poulter 2012). Digital objects, in this light, "can offer a means for extending these objects into diverse knowledge settings, not simply as representations, not simply as illustrations, but as actors with social lives" (Srinivasan, R. et al., 2010).

2.4. The models of digital participation to heritage

Digital participation to heritage is often associated with content contribution; however, as Flynn suggests, the notion that someone can only participate to digital heritage by uploading content has changed and users increasingly get involved in activities of editing, adding to, and commenting on information created by others, enabling thus greater levels of participation and intra-user influence (Flynn 2010). The roles of the audience in digital heritage appear to be wider and basically build on the architecture of physical participation in the museum space: co-creators, collaborators, co-curators, contributors, are all roles that digital technologies grant to their users and multiple institutions capitalize on web's user generated content features and crowdsourcing platforms to enrich the engagement of existing and potential audiences. In this chapter, I will elaborate further on the roles users are called to assume in participatory projects, as those are indicated by museum projects.

Collaborative digital initiatives involve participants and source communities in a lasting relationship with the museum; the museum in such cases often offers digital and face to face workshops to create connections with the communities, scaffold the participatory experience for the participants, and set the basis for quality collaborative outcomes. Such an example is provided by the digital museum initiative organized by two universities (University of Cambridge and UCLA) and the A:shiwi A:wan Museum and Heritage Center, with the purpose of comparing descriptions of museum objects

between the universities and source communities to create a collaborative catalogue of diverse accounts (Srinivasan et al. 2010, AMNH 2018 and Ashiwi Museum 2018). Another example of collaborative museum practice is that of the Children's Museum in Indianapolis and its project *Children's Museum Blog Ambassadors*[2] in the framework of which families blog and comment on the museum's programs and exhibitions (Byrd-McDevitt 2018).

Click! A crowd-curated exhibition, organized by the Brooklyn Museum[3], illustrates an instance of co-curation: the audience is asked to login to the museum's platform and choose the photos that best represent Brooklyn as they know it. Such projects that are based on a two-way relationship of equal control over the display of the collection, and often its interpretation, are identified as projects of co-curation (Fouseki and Vacharopoulou 2012). Fouseki and Vacharopoulou also note that often the term co-curation is used as a synonym to the similar term co-creation, which however refers to projects that allow a greater freedom to the audience and result to new heritage content, even if that is inspired by existing materials. In such instances, Digital Cultural Communication is also used to signal projects in which the institutions use digital platforms and workshops to help the audiences create new works (Russo and Watkins 2007:149). On a similar note, co-creation initiatives can also have a physical start and then develop online, as the case of Science Museum: Community-in-Residence illustrates (Mutibwa, Hess, and Jackson 2018). In the project, the museum opened its storage rooms to a group of science aficionados, a community already engaged in the museum, and asked them to select objects that caught their attention and later upload on blogs and twitter their stories as inspired by those previously hidden collections.

Contributory projects are the most common: they are usually associated to crowdsourcing initiatives and count on the museum's constituents to upload information, add or edit content, as well as submit pictures, videos, and stories. Contributory projects are often wikis that employ the knowledge of amateurs to deal with information of specified nature; examples of such practices are the projects Virtual Shtetl[4], which asks its users to contribute artefacts, stories, visual material, and

[2] More information about the program can be found at https://www.childrensmuseum.org/blog/ blog-ambassadors
[3] References and information about the project can be found in the section dedicated to Case Studies.
[4] Further information and references regarding the Virtual Shtetl can be found in the Case Studies section of the thesis.

knowledge on their databases. Another contributory project, is the *World Beach Project*[5], organized by the V&A, for the realization of which the museum asked its online audience, independently or with others, to submit photos of artwork made with pebbles from beaches all around the world.

2.5. Platforms of digital participation

Museums started exploring the internet in the mid '90s, with some of them attempting to establish a web presence through museum websites; however, those websites, although displayed digitally, would only provide factual information about the museum, such as details on upcoming exhibitions and opening hours (Jones 2007:21). Those limits towards a more sophisticated digital presence were naturally posed by the very nature of the web, as it was then. Web 1.0 was a static display of information connected with hyperlinks, whereas Web 2.0 introduces participation and is based on content generated and upload by users. Therefore, where Web 1.0 viewed users as content consumers, Web 2.0 places them on the seat of creator (Jenkins 2006:3). It is, thus, defined as "a platform whereby content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participatory and collaborative fashion" (Kaplan & Haenlein 2010), granting thus better experiences as the numbers of the users increase (O'Reilly 2006).

The breadth of terms- and their interchangeability- used to describe Web 2.0 platforms often makes it hard to move beyond the question 'how do digital tools assist the museums in their mission towards inclusion and multivocality', as for different platforms, different terms of interactions are established and different filters determine the impact of the users on the museum. For that reason, I will first attempt to diffuse the terms that are related to Web 2.0 platforms, by illustrating the ways they are employed in museums. According to Russo, Watkins, Kelly, and Chan (2006), "social media can be defined broadly as those that facilitate online communication, networking, and/or collaboration", while the terms social software, social networking and Web 2.0 can also be used to define platforms that allow related functions on the part of the user. Before we continue, it is worthy to take a look at the specific characteristics of Web 2.0

[5] Further information on the World Beach Project can be found at V&A's website: http://www.vam.ac.uk/content/articles/w/world-beach-project/

platforms to further understand the ways expectations on participation are pronounced when it comes to museums:

- Users are central and their profile display personal information and interests. The profiles are manipulated by the users, who choose what can be viewed and by whom in their profile.
- The social component governs the online space, as users are able to connect between them, create lists of friends and enter communities of interest (usually referred to as *groups*). Furthermore, users have the opportunity to communicate in privacy.
- Users express themselves through the platforms, as they are able to post comments and contribute content of any sort.
- The platforms are often interlinked allowing different content types to be displayed on them (Cormode and Krishnamurthy 2008, Boyd and Ellison 2008).

Boyd and Ellison also distinguish between the often interchangeably used terms 'social network sites' and 'social networking sites', indicating that the difference between the two lies on scope and emphasis: whereas 'networking' implies that through the site connections among strangers are initiated, 'network' implies that users use the service to enhance their relationship with their already existing network (Boyd and Ellison 2008). Similar to that distinction, is that offered by Michael Wu (2010). According to this latter classification, social network/networking sites are the ones that are based on existing relationships, whereas the term community networks are based on the interaction among communities of interest. Based on that, Facebook, Linkedin, and Twitter are social networks, whereas Flickr, YouTube, and Wikipedia are community networks. Kaplan and Haenlein (2010) elaborate on the same distinction by providing a categorization of social media sites based on their architecture and functions. In this framework they draw a line between social networking sites (e.g., Facebook and MySpace) and content communities (e.g., YouTube and Flickr), with the first group requiring a high level of self-presentation and self-disclosure—and therefore labeled as social networking sites— and the latter requiring less self-presentation and self-disclosure—and called therefore content communities. Based on that classification, the platforms that are based on high levels of self-presentation and self-disclosure are not going to explored, as they are mainly used by museums in order to promote their projects, and therefore have more to do with generating traffic.

2.5.1. Social networking sites and Content sharing sites

Based on the distinction made in the first part of this chapter, social networking sites that are of interest when it comes to museums and the contributory work those encourage, are not the self-exposure platforms, but sites that focus on content. Blogs, podcasts, and content sharing platforms have been used by numerous institutions, allowing various degrees of participation. Kidd has proceeded to frame museums' activities in those networks and has identified three prominent frames of use, those being marketing, inclusivity, and collaboration (2011), with the two latter being the focus of this chapter.

Watkins and Russo (2007) provide examples from the Museum of Modern Art in New York, which opened a competition for video clips that could illustrate the songs of the Band the *Residents*. The participants' clips were posted on YouTube and the museum invited the public to vote their favorites, creating that way a community art project by capitalizing on existing heritage to create new. On the same frequency, the National Library of Australia and Yahoo! have collaboratively developed *Click and Flick*, a platform where individuals submit pictures to create a narrative on contemporary life in Australia. Flickr has been used by various institutions: among them, Tate Britain, in its How We Are: Photographing Britain exhibition, asked the audience to participate by encouraging users to publish pictures on the respective Flickr group, with the aim of illustrating portraits, sceneries, and custom of Britain. The pictures could be found online and in the gallery (Mancini and Carreras, 2010).

As it has been discussed before, social networking sites, despite the opportunities they offer in intra-user sociality, have not been exploited by museums, and have mostly been used as means to promote exhibitions, workshops, and other events. However, when it comes to understanding the benefits they offer in comparison to museum platforms, they present some compelling advantages. One of the most important is that they offer a pool of already engaged users, increasing therefore the exposure of the project to new audiences and eradicating any worries in terms of user login processes platform layout; they present an interesting point of departure for rookies that wish to explore further the possibilities of digital participation; the museum can loosen its authority, since the

platforms work outside the narrow framework of the museum, and engage more freely with constituents in conversations, and create a more ubiquitous presence (Liew, 2014).

2.5.2. Museum websites

At a first level, museum websites can be distinguished, in terms of the content they provide into:

- the Brochure museum, which provides factual information,
- the Content museum, which has a focus on collections and does not appear to be non-expert friendly,
- the Learning museum, which focuses on contextualizing exhibits,
- and the Virtual museum, which is usually the result of cooperation between several museums that decide to digitize their collections and create a 'museum without walls' (Nicholls et al 2012).

The latter category can be further subdivided, in order to acquire a full picture of museum websites. Based on that, virtual museums can be:

- real museums on digital: sites that appear as digital transpositions of collections present in the real museums and that directly borrow structure and content;
- virtual museums: sites that collect digital resources of different thematic scopes, disengaged from real museums, accessible only through the use of telematic tools;
- virtual museums with real collections: they are virtually built spaces where the works that are presented are existing and reproduced to be consulted. (Panciroli et al 2017).

However, virtual collections do not necessarily guarantee interaction between users and the heritage content, and therefore are not necessarily identified as promoting participation through Web 2.0. On the other hand, it is the presence of Web 2.0 tools that can move a virtual museum from being a point of mere access to heritage, to being the product of collaboration and shared authority between the public and the museum. Some of those tools have been identified by Lopez et al in an extensive list, of which I will only present here the functions that engage the users in collaboratively producing and interacting with comment, as well as between them.

- Free forums where users are allowed to freely post-comments.
- Forums requiring the museum moderator's approval before posting.
- Blogs.
- Tools to upload material to the museum website (texts, images, podcasts, and videos).
- Wikis.
- Commenting tools, in which comments are accessible to other users
- Tagging tools accessible from the museum website, in which users can see their tags as well as those made by other users.
- Tools for spontaneous creation, simulation, or experimentation in collaboration with other users.
- Buttons to add and link museum resources to the users' personal archives in sharing sites (López et al 2010:239).

For instance, the Powerhouse Museum has experimented with social tagging and blogposts within its website. The blogposts feature articles written by the museum staff and the users have the opportunity to leave comments and discuss the article further, while they are also able to connect the content to social media platforms, such as Facebook and Twitter[6]. The Art Gallery of New South Wales, and numerous other museums, give users the chance to create and curate their own personal collections of museum paintings and objects[7]. Fora can be found in the Musical Instrument Museum of Markneukirchen[8], where moderators approve content and users have to register. In a similar way, museums create wikis to allow curators and users alike complement the information on objects of their collection: the Object Wiki (Science Museum. London) is an example of such a tool and practice. In the context of history museums, the Minnesota History Center has introduced the MN150 Wiki as part of a project aiming to highlight the events that have shaped Minnesota; to realize the exhibition, curators did not rely on their own perceptions of what has contributed to the modern picture of the state, but instead crowdsourced the topics (Bowen 2008, Simon 2011). Both of these two museum wikis are relatively successful amongst the very few examples in existence

[6] A sample can be found at https://maas.museum/inside-the-collection/2018/08/15/shifting-the-balance/.
[7] To navigate the platform, refer to https://www.artgallery.nsw.gov.au/artsets/.
[8] Further information on the forum can be found at https://www.museum-markneukirchen .de/forum/index.php.

(Bowen, 2008). V&A museum's website 'Every Object tells a story' gives a different take on participatory websites, as the users are asked to upload personal objects and describe the history behind them (Shahani, Economou & Nikonanou 2008).

2.5.3. Participatory archives

The web has also altered the way we access and process archives, as those have gone digital and become the product of collaborative work, as in many instances they invite citizen archivists to contribute, edit, and complement relevant information and collaboratively re-construct historical narratives. According to Theimer, a participatory archive is "an organization, site or collection in which people other than archives professionals contribute knowledge or resources, resulting in increased understanding about archival materials, usually in an online environment", or according to Isto Huvila, one that "implements decentralized curation, radical user orientation, and contextualization of both records and the entire archival process" (Huvila 2008:15, 2011). As such, the nature of traditional archives changes and those become open, transparent, user-centered, versatile and ever-evolving (Bosch 2018:8). Numerous participatory archives use already existing platforms to engage with users and accept contributions, often through content sharing sites like Flickr: those increase the traffic of visits as they rely on already existing pools of audience, and also demand little institutional control in comparison to own platforms. However, and taking into account that hosting in third platforms often signifies sacrifices in terms of absorbing the information in the actual records (Liew 2014), and risking losing the contributed content, as third-party platforms take their own decisions (Bosch 2018:12), many museums choose the development of their own platforms, and attempt to own up to the responsibilities and complications this may mean in terms of authority and control of the content.

2.6. Typologies of Contributory Work

Participation in digital settings is generally taking place through user generated content and crowdsourcing initiatives. User-generated content (UGC) refers to any digital content that is created and shared by users on the web: comments under a YouTube

video, or the video itself as longs as it is produced by individual users, rather than institutional entities, can be identified as UGC.

Digital storytelling is one of the many forms user generated content can take: in such projects, the institution asks its constituents to offer representations of themselves and the world around them (Kidd 2011) using as a medium a video consisting of pictures and a voice over narration accompanying it. The resulting videos are usually three minutes personal movies, conceived and laid out by the individual, without institutional interventions (Watkins and Russo 2009), while the genre in general "has its roots in community arts and oral history; it stretches from pre-literacy cultural traditions" (Meadows 2003). Through those projects, the users and participants not only develop an awareness regarding media technologies through the workshops (Klaebe et al 2006), but, above all, the personal stories created place in the focus the personal experiences of the participants and consequently create a sense of significance (Nielsen 2005 in Burgess 2007). Furthermore, the oral history and social history element of storytelling promotes the personal experience over hegemonic narratives, and therefore encourages communities to re-approach and project their identities through their own lens (Pitt 1998 in Williams 2003).

Crowdsourcing, on the other hand, refers to specific requests by the part of institutions for specific contributions made by amateurs in the creation and development of an archive or a collection (Owens 2013): in this case, a series of tags in a museum's online collection, or the collection of photos that submit to specific guidelines set by institutions and given to them fall under this category. The very term crowdsourcing was coined by Jeff Howe and Mark Robinson in 2006, and it is approached as "the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call" (Howe 2008). According to Ridge, however, crowdsourcing is not a means to get the work done, but rather it is an opportunity to bring the community closer to the museum and create meaningful connections, benefiting not only the institutions but also the audience (Ridge 2014). On that premise, and to diffuse the association between labor and crowdsourcing, in certain fields the contributors are approached as citizen scientists or citizen historians (Ridge 2014), and as such they are valued as equal partners in the co-construction of knowledge. On the same grounds, Owens clarifies that crowdsourcing is not outsourcing, which as a word is inevitably related to the

business world and the concept of labor, but rather an invitation to amateurs to participate in the museum (Owens 2013).

However, this association between crowdsourcing and free labor applies mostly to certain crowdsourced tasks, such as those of transcriptions, translations, and editing of information, on which this thesis is not going to elaborate. Yet again, crowdsourced tasks can appear to be take many more forms, and often seem to adopt the freer context of user generated content, while conforming to general guidelines: for instance, the World Beach Project, carried out by Victoria and Albert Museum[9], is a crowdsourced project in the sense that the users receive very specific guidelines on how to perform the task; despite that, the contributions are based on imagination, rather than repetitive tasks. To elaborate further on the potential tasks set by a crowdsourcing project, those can be categorized as:

- Offering qualitative contributions: crowdsourcing projects often ask for the submission of content, which can be stories, interpretations, videos that mash up content provided by the museum in new imaginative ways, etc., and usually lead to co-created projects.
- Providing supplementary and contextual information: in such cases, the users are asked to complement institutional knowledge by contributing information and filling in the gaps of historical knowledge through personal experiences and evidence. An example of such an approach can be provided by the project Children of the Lodz Ghetto, where users are asked to identify and tell the stories of the children residing in the ghetto during the WWII[i].
- Categorizing and voting: categorizing refers to attaching tags on content, and is also known as social tagging or folksonomies. Voting, on the other hand, often leads to co-curation projects: an example is offered by MoMa and the residents exhibition, where users had to vote on YouTube their favorite videos made also by users (Walker 2016).
- Contextualizing: contextualization activities aim at enriching the context of the heritage material by connecting it to other concepts, adding thus value to it.

[9] For further information on the project, refer to http://www.vam.ac.uk/content/articles/w/world-beach-project/.

- Georeferencing refers to processes of enriching maps with additional information of any kind (Dunn and Hedge 2014).

An example of the ways crowdsourcing can be implemented in practice is social tagging, also known as folksonomies: in such projects, the audience is called to tag content according to their vernacular terms, making it thus easier for heritage content to be retrieved by audiences (Tzanetos, Koutsomitropoulos, Christodoulou 2011), since the specialist terms that museum practitioners often use are more of a professional jargon that the audience wouldn't come up with when searching for information or artefacts (Trant 2006b:1). Similarly, the audience can contribute descriptions, which wouldn't have been thought by experts, extending thus the understanding of the museum regarding the ways the audience perceives its collections, and in some cases supplementing its official records with audience sourced tags. As such, social tagging attempts to minimize the semantic gap between the user and the institution (Cairns 2013:114) and in contrast to taxonomies, their expert-produced counterparts, are personal, contextualized in everyday concepts, and signify a decentralized understanding of museum collections (Cairns 2013:114). However, and in contrast to the insights regarding how the audience interprets museum collections, often tagging is based not on the user's perspective, but the on predetermined categories, without allowing the user to draw her own vocabulary from the viewed (Dunn and Hedge 2014).

Participatory GIS (geographic information system) maps, or PGIS (participatory geographic information system), are another popular form crowdsourcing can take, and can also be encountered under the terms cultural mapping, community-based mapping, and counter-mapping (Crawhall 2009), or as collaborative experiential mapping (Nardi 2014). As a crowdsourcing method, participatory mapping is considered to be revolutionary, as its data are submitted by the public and its focus is on how people experience a place, basing its insights on a bottom-up, multivocal, and social approach, as opposed to conventional maps with the top-down approach and indifference towards the multifaceted human dimension (Vajjhala 2005). Regarding expert GIS mapping as an expression of power, as it is based on quantitative data, participatory mapping looks into redistributing this power by placing the control of the content on the users, who are able to give an account of heritage as experienced by people; participatory GIS maps are therefore informed by everyday life, and are able to create a sense of place and belonging to the contributing community (Nardi 2014), creating, ultimately, "an

intersection between official and vernacular cultures" (Johnson 2002, 294 as cited in Nardi 2014).

2.7. Dealing with shared authority in participatory projects

In the very core of every conversation regarding museums, communities, and the benefits digital tools can afford to experiencing cultural heritage lies the issue of authority between the experts and the public (MacArthur 2007:59), as museums are called to re-approach their expertise, as they are defining their relationships with the audiences and witness their shift from passive consumers to co-creators of heritage content and the "mutualization" of knowledge as Cairns (2013) argues. Shared authority, a term coined by Michael Frisch in the context of oral histories, refers to knowledge being co-constructed with the public and merges the perspectives of experts and non-experts. As Filene, Koloski, and Adair point out, "having worked for a generation to tell stories that de-center elites, museums now are de-centering elite storytellers, too" (2011:11). However, and despite the fact that museums have exercised shared authority even before new museology challenged their ways of working, according to McLean, museums still function on the basis of transmitting information in a one-way communication model, and curators still see themselves as the authorities within the museum, the only ones with the expertise to judge and ascribe meanings (McLean 2011:70, Coffee 2006:435). Some of the reasons of this challenge towards expertise is elaborated by Lichtenstein (2009), who identifies that the questioning of expertise in museums is based on class and power: in his study, bloggers perceived experts as elitists who cannot be trusted and lack independence, whereas they are not the only ones with valuable knowledge and therefore their views should not outweigh lay persons.

According to Schweibenz, the challenge for museums is "to find a way to exercise authority and control over content without losing their status as trustworthy institutions and to open up for social media and user participation in order to attract new audiences and maintain existing ones" (2011:1). As participation is the most prominent attribute of the Web 2.0, and as museums are increasingly counting on a dynamic digital presence, issues of authority become especially prevalent, and the spectrum moves between the wish to feature user generated content and the fear that this content might not be appropriate. Trust, in this context, becomes a multifaceted issue that has to do

not only with the museum being willing to share ownership of the heritage discourses, but furthermore a reciprocal action with the museum sharing authority, and the audiences maintaining their trust towards the museum and the accuracy of their narratives; as many are afraid that the overwhelm of amateur-produced content will make it arduous to reach accurate, expert interpretations and information, and indeed, as information overflows the web, it is resonant to have sources that hold their credibility. This thorny balance is attempted to be resolved, theoretically, with two notions, this of radical trust and open authority, which is elaborated below.

This issue of authority and participation attempts to be resolved by the idea of radical trust, which as defined by Trant consists of the points below:

"Trust is built on identity; identity requires identification... Trust is also built upon assumptions that behaviour will be appropriate. Assessments of trust require a history of an individual's actions - linking their trace with a distinct identity… Personalization could be a great way for libraries, archives and museums to build connections between collections and individuals, and between people and collecting institutions... Once again, though, we need to realise that we're creating an on-line space that doesn't share all the characteristics of our past space, on-line or on-site" (Trant 2006c).

The challenge for museums then lies on finding the right balance between encouraging user participation and ensuring accuracy of the information as a result of effective institutional control:

"This dilemma lingers on and the difficult task of the museum is to strike a balance between a certain degree of trust in the users and a certain amount of control that is low enough to stimulate user participation while it is high enough to permit the institution to maintain the responsibility for the quality of its content. To rely solely on community control might be too daring for an institution such as a museum whose reputation is based on public trust" (Schweibenz 2011:7)

For many, sharing authority is synonymous to devaluing their roles as curators, or sacrificing the museums' accuracy in favor of the audience's involvement. However, despite the fact that seemingly the demands of a culture that is based on participation may challenge the museums' authority, in reality, it only creates new and different situations in which authoritative expertise could be channeled through. In that framework, Lori Byrd Phillips uses the term 'open authority', based on which

institutional expertise and authority should be used to facilitate and validate users' contributions on participatory platforms. The term 'open authority' thus is used to describe the merging between institutional expertise with the experiences and insights of communities, showing that openness and expertise are not mutually exclusive, but rather that authority can be leveraged to work in favor of openness (Phillips 2014).

3. Case Studies

This chapter presents six selected case studies in order to give an insight into the ways participatory digital projects attempt to make the audiences co-construct heritage material and interpret heritage through new lenses, by employing user-generated content of all sorts. The analysis includes general information about the project, the project's description in relation to the processes of collecting user-generated and crowdsourced content, the institutional filters implemented by the museum(s) on the content, as well as the ways the institution engages the community in participation. The information derives from observation of the platforms and from secondary sources related to them.

Regarding the criteria governing the selection of the case studies, those have been already set in the Introductory section, on a preliminary basis. However, and under the light of the Theoretical Framework, I would like to restate them in this part of the thesis. As such then, the case studies have been selected on the grounds of employing web platforms to realize participatory projects related to heritage; all of them are the products of museum initiatives, whereas some of them are resulting from the collaboration of museums with other entities; the most important pre-condition that allows their selection, however, is the fact that they allow users to be involved in practices of co-curation and co-creation of heritage material, as well as their capacity to become platforms where objects and personal experiences are contextualized in relation to heritage.

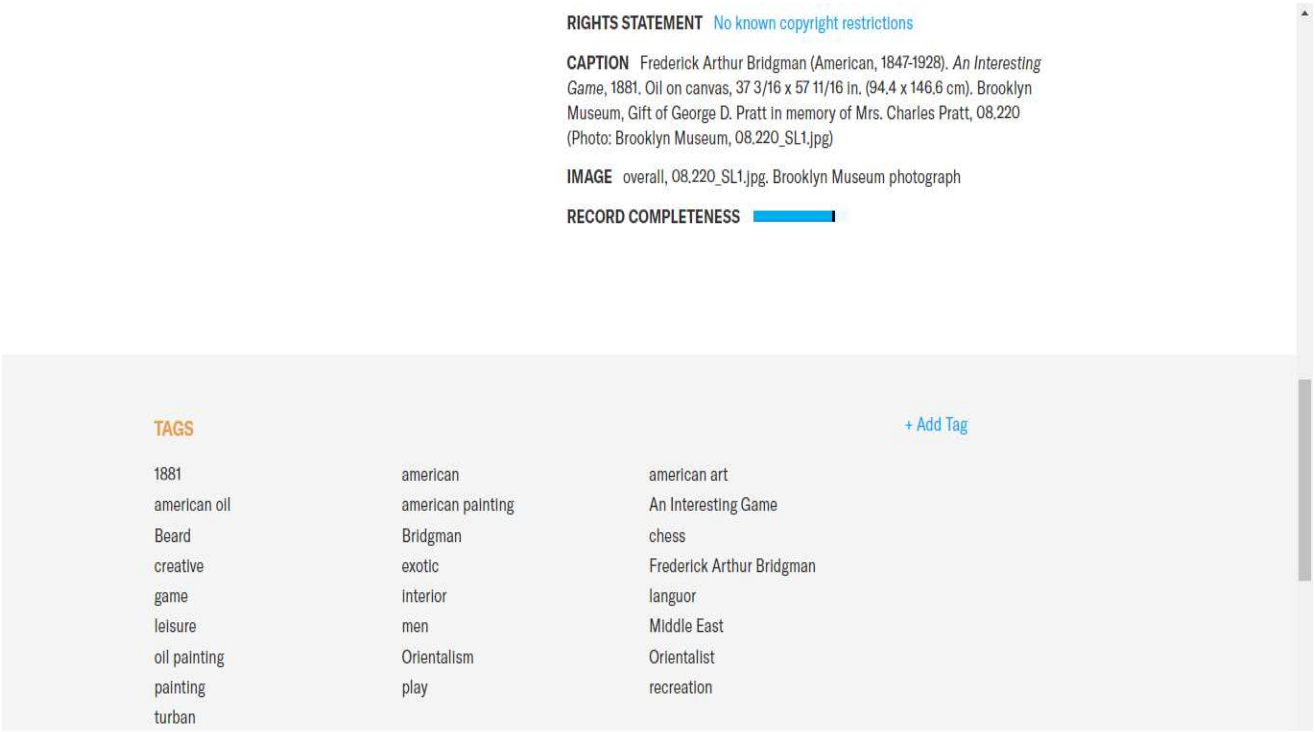
3.1. Tag! You're it! and Freeze Tag!

2008-2014, Brooklyn Museum

Inspired by Google and its image labeler function (which, through a game, allows users to tag images in order to advance google results and their relevance), the Brooklyn Museum launched the game *Tag! You're It!,* with the purpose of creating an information database made of vernacular tags. The game could be played on the museum's website and would allow registered users to provide tags to digital objects and compete with other through the platform's grading system, the tag-o-meter

(Bernstein 2008). On the other hand, and to avoid irrelevant contributions, the museum also introduced the game *Freeze Tag!*, which aimed at giving the users the option of deactivating random tags, provided that once a user would deactivate a contribution, two more users would validate her choice. Once the tag was frozen, it could only be retrieved if three users would validate the tag anew (Bernstein 2009).

The two games were a part of the social component of the platform, the so-called *Posse*: through this social interface, users were able to have an overview of all the artworks they have tagged, favorited, or commented on displayed on their profile, as well as on the museum's online collection, and see the respective activities as performed by other users, too.



Despite the termination of the project, users are still able to tag the museum's collection and the tags gathered by the game are displayed below the artworks. Source: Brooklyn Museum Website (https://www.brooklynmuseum.org/opencollection/objects/231).

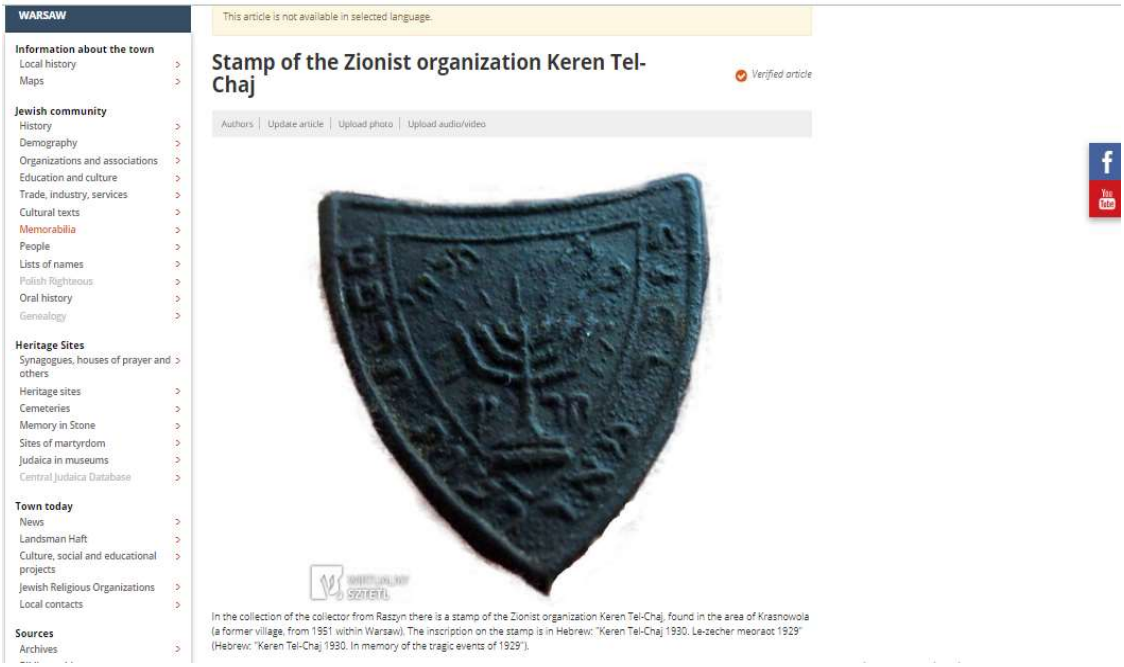
Although the museum staff was initially positive about the participation levels, in 2014 the project was terminated due to inadequate contributions, which counted to 1100 users in a period of six years; yet again, those users contributed 230,186 tags in the museums' online records (Bernstein 2014) , and would visit both the game platform and the actual

objects' pages (as the one shown above), proving that the game was not the decisive element to make the project work.

3.2. Virtual Shtetl

2009 to date, Museum of the History of Polish Jews in collaboration with other institutions. Established by the Jewish Historical Institute Association, the Virtual Shtetl was donated in 2012 to the Museum of the History of Polish Jews. The virtual museum and archive is based on the convergence of several cultural heritage institutions, as well as research centers and universities. Shtetl in Yiddish means a little town or village, and the project documents the history of Jews living in Poland by giving accounts of the places where Jews coexisted with other minorities, biographies of the communities, and any other information related to the life of Jewish people in Poland. The project is a community-driven web platform that feeds from contributions of the participating institutions and the registered users and it therefore acts as a contributory database for anybody who is interested in Polish-Jewish history. Attempting to disseminate knowledge about the Polish Jews, the project addresses them in the framework of an 'imagined community', as narratives related to their presence in Poland are in a great extent constructed by others and formed in the years that followed the Holocaust. Bielawski, the project's coordinator, reports that many elements and aspects of Jewish people who lived in Poland remains untold: *"We usually don't associate Jews with farmers, but Jewish farmers existed and founded their colonies, such the Kolonia Izaaka, or Palestyna [Palestine] near Sokółka"* (Gliński

2013).



The portal offers a 'Memorabilia' section, where users can upload their own objects to shed light to the ways Polish Jews lived before the Holocaust.

The platform, which practically functions as Wikipedia, hosts plugin Facebook features (recommendation buttons and the comments section), and Google maps, through which users can locate memories and accounts. In the sense that the project's platform has the basic behavior of a wiki page, the users must register to be able to upload information. From then onwards, users can vote stories, objects, and accounts of every short, creating, thus, a collection of favorites. When it comes to contributing, the Facebook comments enable discussions, while the users can also create, edit and correct contents, tag articles, add photos and videos. The users can also contribute objects and memorabilia, while there is an option to state on whose behalf the user performs this action, acknowledging the inevitable participation gap and digital divide between younger and older users. The feature '*People who like this town*' enables the users to find people with similar searches and interests, and therefore connect with them. The museum has also announced the launch of a forum where the users will be able to open up conversations in a freer fashion, but at the time of writing, this is yet to be realized.

At the same time, various projects are run through the *Virtual Shtetl*. *Memory on Stone* is one of them, and through that users are asked to photograph undocumented Jewish gravestones and cemeteries and upload them on the site, creating an online

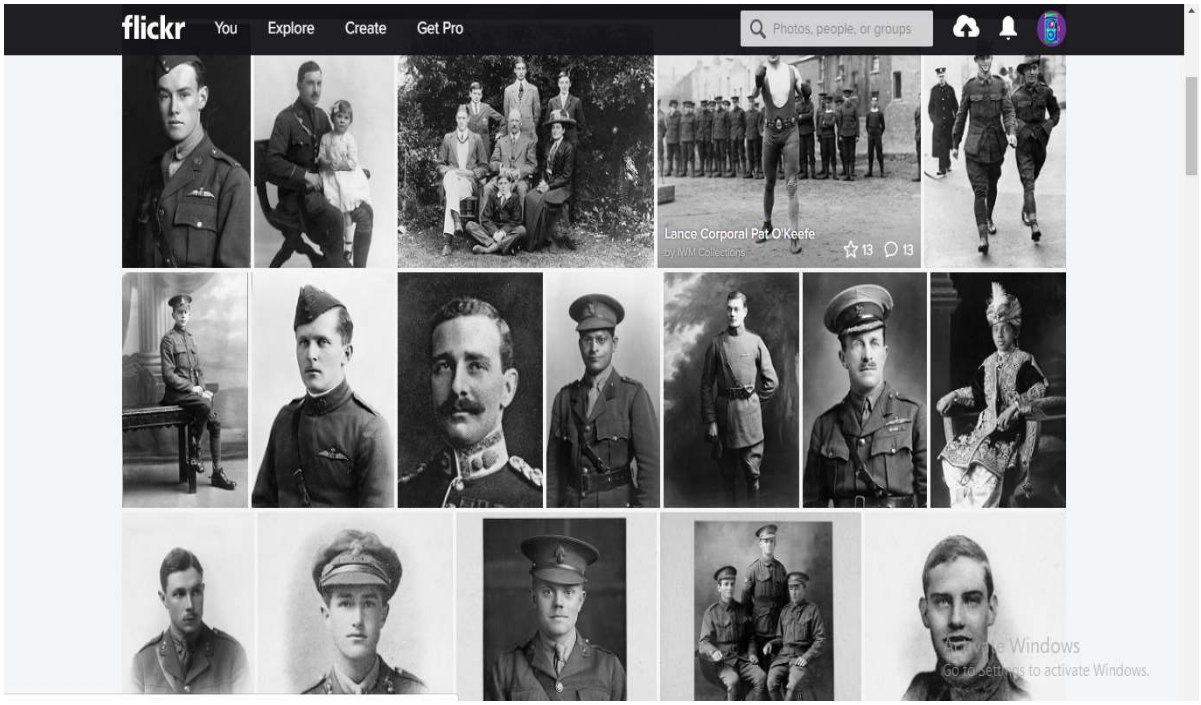
database. *School Friends, Acquaintances from Neighborhood* addresses students, who are asked to conduct interviews with elders, whereas with *Young History Explorers*, young people use videos to document the Jewish heritage as encountered in their hometowns and send their findings (interviews, photographs of cemeteries, historic monuments, scans of documents) to the museum.

Regarding the institutional filters employed in the platform to assure the accuracy of the resources, every time there is an attempt to contribute to the site, a message asks users whether they indeed want to edit the account, and in case of submissions the section's administrator reviews the information. If the added account gets verified, the next verification system is performed by the users themselves: if they spot any errors or lacks, then they are free to suggest edits, which also must get verified. According to Stankowski, thanks the portal and the collaboration among the users, a lot of material that would have been otherwise lost, was able to be retrieved and published, allowing the Jewish community in Poland reconstruct its past through the accumulation of lay persons' expertise and contributions.

3.4. Faces of the First World War

2011- 2014, Imperial War Museum (London)

With the opportunity given by the WWI's centenary, the Imperial War Museum has launched a collection of stored WWI photos through the social platform Flickr. The photos started being uploaded on 11.11.11, the anniversary of the armistice and day of honor for the war veterans, and a new one would be uploaded every day until the August of 2014, the date that marks the beginning of the war. The photos uploaded were collected between 1917 and 1920 and each one of them tells the story of the war and its veterans from a different, personal perspective.



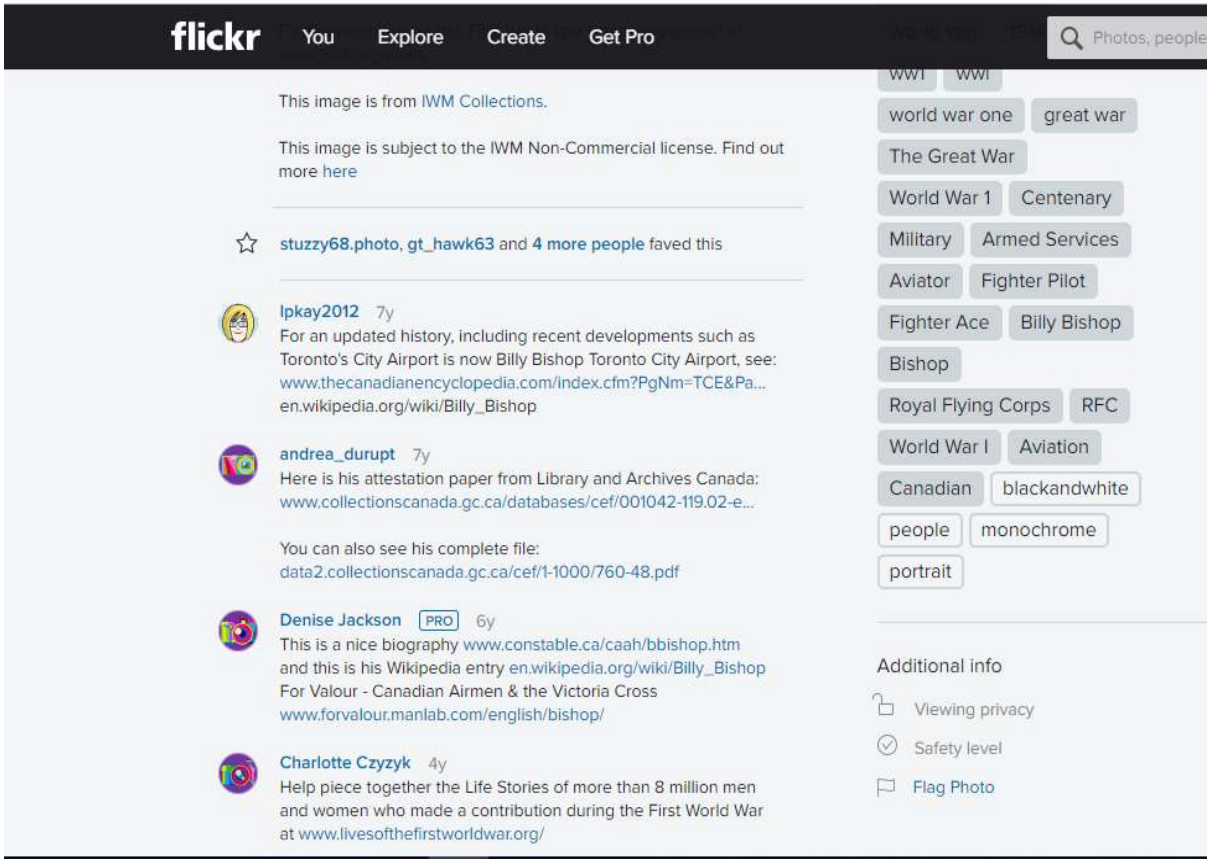
Flickr was employed by the Imperial War Museum to give access to previously forgotten photographs of the WWI veterans and invite the audience to contribute to their stories through research.

For the project, IWM chose a social networking platform centered around content sharing, instead of an own website as the rest of the projects featured in this thesis have. Before we continue to the exact aspects of shared authority between the users and the museum, it would be useful to explore the particular characteristics of Flickr as a content sharing site to understand, among others, the reasons that such a choice seems fit for the project. Flickr is a photo sharing and social media platform, which brings together amateur and professional photographers. Its features include a personal profile, a public portfolio (*Photo stream*), a personalized gallery of other users' photos, as well as a *Favorites* section, while the section *Groups* are a platform through which users can initiate discussions on topics of interest. The platform furthermore allows users to flag photos that are inappropriate, add tags and identify people on photos of other users and one's own, as well as post comments. In the case of Groups, the profiles slightly change as they also host a map, in which photos can be pinned. In 2008, Flickr and the Library of Congress started a pilot project aiming to showcase photographs of the library's archives and make them more accessible by adding tags to them- Flickr the Commons became thus a reality, aiming at making archived photographs accessible, facilitating their search, and providing a way for the public to contribute information and knowledge. Through the commons, the content of the online archives can also be

replicated, shared, and modified, within the boundaries of the copyright law, allowing thus co-creation practices to occur (Creativecommons.org. 2018). In addition to Flickr, IWM used a platform of its own, the *livesofthefirstworldwar.org*, which also aims at gathering material and filling in the blanks in the stories of those who lived the Great War, but resembles more to Virtual Shtetl.

Through Flickr The Commons, the museum attempts to co-construct history with its constituents, by asking them to share any information they might have related to those depicted on the photos. To assist the citizen historians, the IWM and the Flickr platform welcome new users with instructions of how to use Flickr and what they are being asked to do; at the same time, a list of databases is provided for those who wish to step their research a step up. Thereafter, the users get the chance to curate material by adding photos to their favorites, tag the photos with descriptions they find fit, and interpret the photos through their personal canon or by adding factual information. Because of the nature of Flickr as a social media, content sharing platform, The Lives of the First World War illustrates an example of multifaceted user communication as well: the users can initiate conversations through the comment sections, but they can move a step further by engaging in debates in the discussion section, and *follow* each other.

The project has 714 photos uploaded, 1.9K followers, 1.5K tags, and many contributions. The museum's staff would post often on Flickr to encourage participation and provide additional links to the museum, and to also redirect and encourage the users to navigate to other platforms and actions offered by the museum in the context of the centenary's commemoration.



Through Flickr, the users contributed tags, commentary, and information to the photos provided by the IWM, whereas the coordinators of the project would encourage participation and re-direct the audience to the museum's official platform for the commemoration.

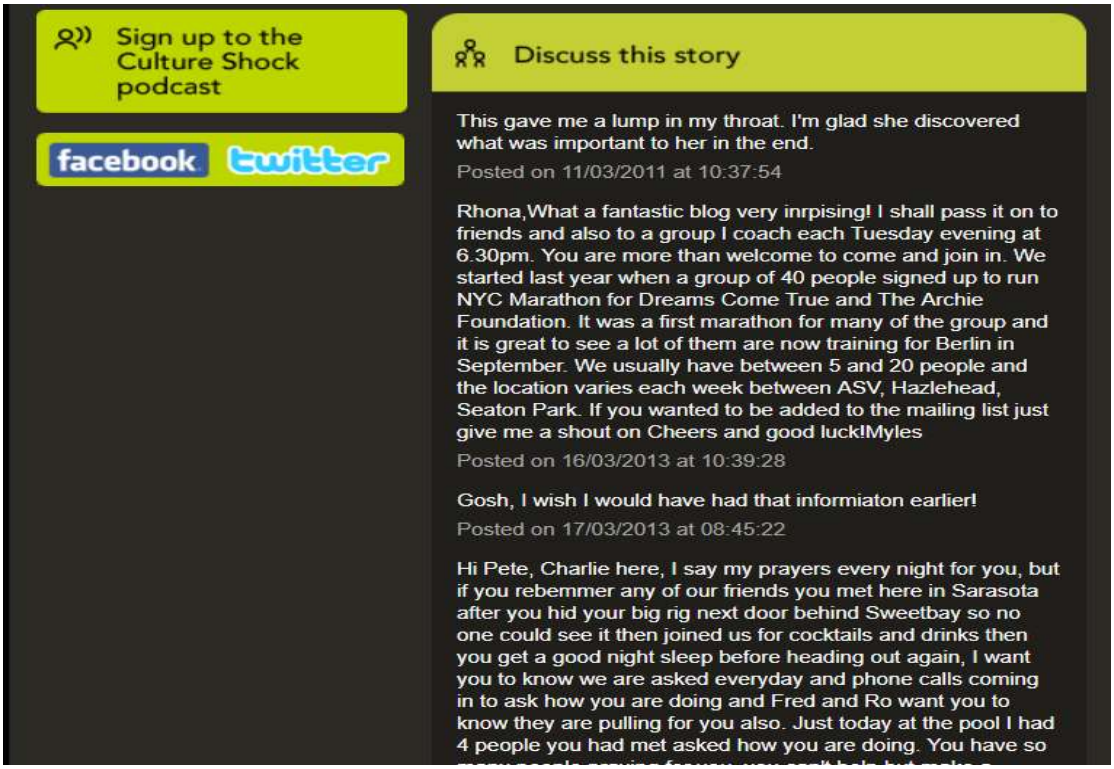
The photos uploaded are accompanied by a description produced by the museum, aiming to present a first interpretation to the photos, and therefore from the outset there is an institutional narrative passing down to the content. The museum, having chosen Flickr as the hosting platform, did not absorb any of the comments in its galleries, but encourages the users to submit their content on *Lives of the First World War*. The institutional filters implemented in the platform were minimal, and in cases the discussion turned inappropriate, the museum would intervene by reminding the mission of the collection. On the other hand, the *Lives of the First World* presents an entirely different system: many of the features are only available for subscribers and by adding information, users must conform to certain rules and terms.

3.5. Culture Shock!

2012, Tyne & Wear Archives & Museums (TWAM)

Culture shock is a co-creative, joined project, realized by Tyne & Wear Archives & Museums and included Beamish - The Living Museum of the North, The Bowes Museum, and Hartlepool Museums & Heritage Service.

Designed in line with ideas about the centrality of the audience and the social role of museums, Culture Shock! uses digital storytelling to re-contextualize artefacts through the experiences those evoke to the audiences in order to represent the diverse heritage of those residing in the North East of England. It was, thus, seen as an effort to contribute to cultural identity, cohesion, and citizen formation. Culture Shock! came to be one of the largest storytelling projects, with 550 participants narrating their personal interpretations of objects, which were exhibited, broadcasted through various channels and on diverse locations, and uploaded online on a special platform designed for the project. Regarding the aspect of digital storytelling, co-creation would be “an excellent choice of technique for a museums service with strong social aims like TWAM”, as it is “social/collaborative and personal; emotionally-engaging; strongly connected to self-identity; and drawing on visual, aural and emotional intelligence” (Culture: Unlimited 2011:2). The fact furthermore that storytelling creates an artefact for the museum (that being the digital story) accounts for greater representation of the community and a meaningful contribution to social history as told by participants of diverse backgrounds.

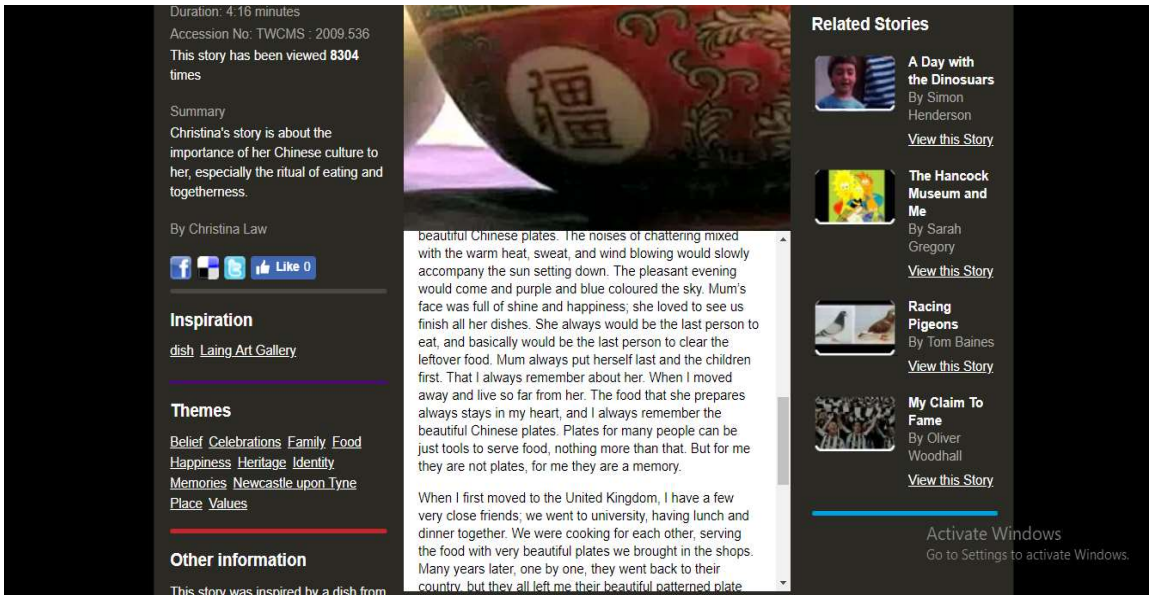


Screenshot from the comments section of the site, where users are able to discuss the stories, provide other interpretations, further connect to each other.

The project was realized on a platform designed to host it, under the domain name cultureshock.org.uk, which is still available. It includes sections with the main themes as those occurred from the stories (bullying, WWII, growing up, and others), a section dedicated to the stories themselves, as well as one showcasing the artefacts accompanied by links leading to the stories they inspired. Comments on the platform get uploaded automatically, without institutional filters.

In culture shock! the audience assumes the role of interpreter of existing heritage, and of the creator of new heritage content as the result of the creative process taking place through the storytelling activity. The audiences connect a museum exhibit to a personal interpretation of it, and their digital story goes online. Thereafter, there is a comment section underneath the videos, which enables others to join the conversation and discuss the stories or the objects those stories got their inspiration from. Those comments, apart from generating a peer to peer dialogue, do not determine the success of the project, as they are not expected to complete the stories or add to them. They simply exist, in an act of employing a further element of participation in the project as post-feedback. The aftermath summary produced by Culture: Unlimited indicated the content of those

contributions, and identifies them as passive and active, with passive responses constituting the 90% of the total. The passive responses are usually comments focusing on the effect of the stories on the commenter, while the active ones capitalize on this effect by taking action or by engaging in conversation (Culture Unlimited 2011:10).



Sample of the 'Stories' section, where diverse audiences are asked to elaborate on the museums' objects by giving their own interpretations to them.

Within the framework of the project digital storytelling workshops were created to engage more participants and help the already existing participants navigate through the project. The participants mostly came from community groups, clubs and educational institutions, but individual participants were also invited and encouraged to participate through one-day workshops.

Culture Shock! used an empty shop, capitalizing on the Empty Shop Initiative and housed in it several museum artefacts, organized a screening illustrating the diversity of the region, and a one-day workshop. Other outreach activities included a festival, and multiple screenings in diverse locations, whereas the exhibition of Culture Shock! opened mid-way through the project in order to attract more people who would encounter the stories and get motivated to submit their own.

Apart from the stories being displayed in the Great North Museum: Hancock in Newcastle-upon-Tyne, and the website that still hosts the audience's videos, a number

of objects have also been bought and exhibited in the museum collections at Tyne & Wear Archives & Museums. The purchase of those objects is the result of the audience's digital stories, which in some case found inadequacies in the museum's collections. The existence of the platform and the opportunity to continue the conversation through it, is another way that the museum shows its commitment towards the audience and the users, as the site functions as on online gallery of all the stories told during the project. Last but not least, the exhibition held mid-way through the project featuring the stories that had already been recorded consists a physical manifestation of the museums' appreciation towards the content produced by the audiences.

3.5. Click! A crowd-curated exhibition

2008, Brooklyn Museum

The Brooklyn Museum, an art museum, has been known for its community-based endeavors and use of web 2.0 tools as a way to enhance the visibility of its projects and content, through their blogs and other mainstream digital platforms.

Click draw its inspiration by the 'Wisdom of Crowds', according to which choices coming from a mass of people are smarter and more well-informed than those coming from, even expert, individuals. The exhibition resulting from the open call and co-curation process has been defined as an "art installation addressing the conceptual nature of a crowd-curated exhibition" (Singletary 2008), rather than a conventional photography exhibition. On that premise, Click invited the public to participate on the process of exhibition-making as co-curators and co-creators: artists were asked to submit their photos for the exhibition 'Changing Faces of Brooklyn', and the submissions were gathered on an online forum, where users could vote their favorites. The 389 photos accumulated were anonymous and shuffled, whereas co-curators were asked to evaluate their expertise in art, and indicate their place of residence (Bernstein 2008c, Surowiecki 2008). Their participation as co-curators was, also, fairly scaffolded, as they were asked to evaluate based on a scale of most effective to least effective, and take into account the aesthetic quality of the picture and its relevancy to the theme of the exhibition.

The physical exhibition comprised of the photos that ranked the highest among the online community of voters (Brooklyn Museum 2008).

The third stage of the process was that of the museum including the highest-ranking photos in a physical exhibition, creating thus a tangible, gratifying product of the audience's participation. Additionally, a virtual tour of the exhibition was set, and a photo album book was published (Brooklynmuseum.org., 2008). Regarding community engagement, the museum took up some traditional methods to engage the community photographers: printed cards promoting the open call where distributed in social hubs, whereas the staff also contacted Flickr groups related to Brooklyn, Brooklyn-based bloggers and artist collectives, as well as photo documentation projects related to the area. Panel discussions were also organized and promoted through the museum's blog (Bernstein 2008b).

3.6. Art Maps

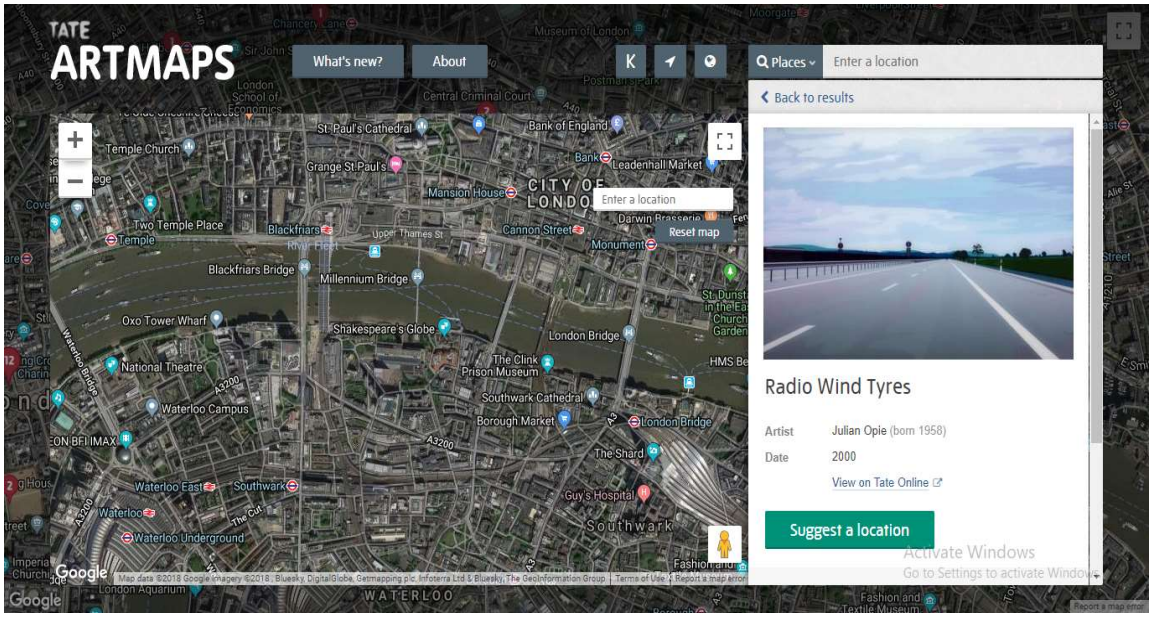
2012 to date, Tate Modern

Art Maps is a collaborative research project involving Tate, Horizon Digital Economy Research (University of Nottingham) and the Centre for Intermedia at the University of Exeter.

The Art Maps project is a research project that allows the audience to help pinpoint Tate artworks on a user-generated map, in an attempt to practice the use of a collection documentation tool, by linking Tate's collection to Google Maps. The website thus opens up Tate's collection to the general public and allows interactions with the works of art outside the museum's environments, but rather in the places they were originally conceived. Overall, through the project, the public is invited to search familiar places and through the Tate digital collection, locate the museum's artworks on the Google maps, with the objective of enriching Tate's archives.

The location of the artworks is either the exact landscape painted or a spot with which the artwork has been associated and allows the users to edit, add, or argue about the original location associated with the work. As such, the users can add place names, anecdotal or factual information, and personal comments to the artworks, and search for further information related to them, while they also have the chance to get recommendations in the fashion of you-may-also-like features.

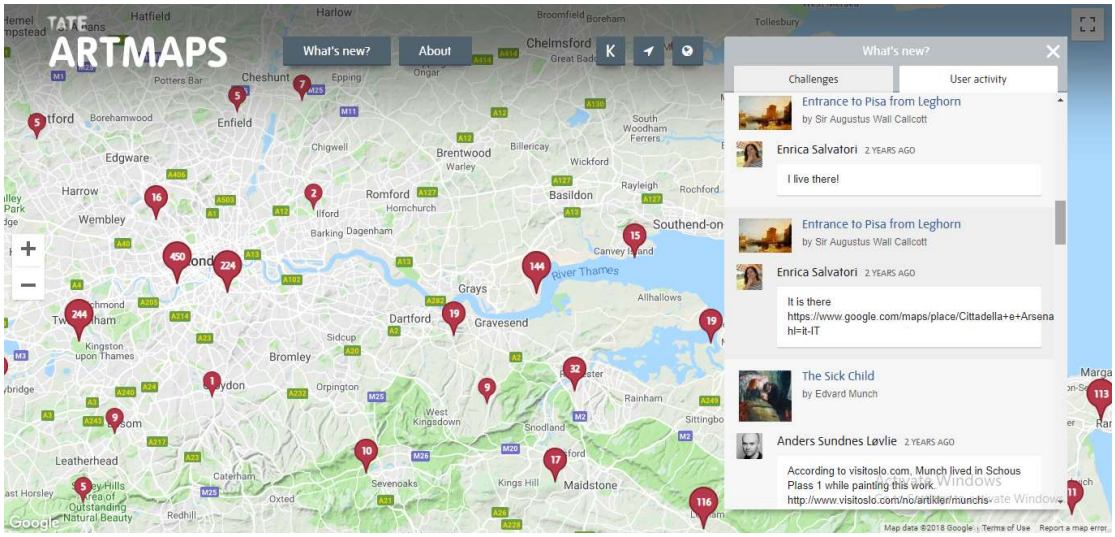
The project unfolds in and evolves around seven 'challenges', them being Personal Archives, Mapping the Weather, Joseph Herman's South Wales, Mapping Personal Landscapes, Multiple Locations, Keith Arnatt's Photographs, and Familiar Places. The first challenge was designed to run until the August of 2016, and invited users to pin locations featured in John Piper's photographs and add comments or stories that contextualize them through personal experiences. The Mapping Personal Landscapes Challenge builds on the emotive and personal work Julian Opie, who took pictures of landscapes and digitally edited them creating abstract sceneries that can evoke personal memories to the viewer- Art Maps therefore asks the users to cite any personal memories the photos evoke and pin them in the map. The Familiar Places challenge asks the public to navigate in the area they know best, and locate any Tate artworks associated with the place, and proceed to submitting their personal relationship with the place.



Users are asked to locate landscapes that evoke memories similar to the ones the photo 'Radio Wind Tyres' does, in the framework of the challenge 'Mapping Personal Landscapes'.

The users' comments are uploaded without institutional filters, but are not presented as information uploaded by the museum, as the caption 'one person agrees with the location' is displayed any time a location is attempted to be pinpointed.

The project features a separate section which showcases users' last comments. This is particularly interesting as it shows the traffic the website generates, instead of having to browse through the objects and see what others are saying and gathers all the scattered comments together, encouraging participation. The users can speak to each other directly and contest the original location of the object, or exchange personal memories related to it. However, and despite the fact that users have the option to log-in through third party platforms, such as Facebook, their profiles are not displayed.



The social component of the platform allows users to interact and exchange information in relation to the artworks.

The museum organized two workshops to introduce the project to selected participants and evaluate the ways those participated in the application. In those workshops, the participants were asked to use photography, video, audio and text functions on their phones, to explore the artworks and their original environment by pinpointing them on the map and offering personal insights when relevant (Tate Modern 2012, Giannachi 2012).

4. Cross-Case Analysis

In this section, I bring the case studies together in order to explore their similarities and differences when it comes to empowering and engaging the audience, as well as giving objects a second space of being. More specifically, the questions answered in this section are:

- How are users enabled to contribute and/or co-produce content?
- How do museums utilize digital platforms to empower, and therefore, share their authority?
- How do objects change context in the digital realm?
- How are users encouraged to engage in intra-user communications and negotiations regarding the contribution work for the heritage in question?

The above are addressed in their respective sub-chapters, by combining the findings, as they emerge from the case studies analysis, and related literature work. As such, the first sub-chapter of this section is dedicated to the ways the projects have empowered the users and the roles they have assigned to them; the second showcases the ways objects take up different meanings by entering the digital world and by becoming objects of reference for diverse users; the third sub-chapter elaborates on the ways virtual communities are drawn to the museum and the expectations arising with the use of digital platforms in relation to participation.

4.1. The users' new roles and shared authority: empowering and giving space to virtual communities and users

As the museum is an institution that is acknowledged and accepted for its authority and accuracy of narratives, the content of its exhibitions reflects notions of identity politics; in this premise who and what is omitted informs social relations and eternalizes or disrupts certain concepts (Macdonald 2006:4). In this light, as we have seen in the theoretical framework, the contemporary museum seeks to place the audience as the driving force in the process of heritage production, and has shifted its communication

practice to a model of dialogical interactivity, where the audience is able to draw meanings, negotiate narratives, and contribute to heritage content in order to play a social and dynamic role in its environment. This path towards greater reflexivity on the part of the museum is paved through a sharing of authorship when it comes to heritage material, which repurposes the role of the curator from a figure of authority and expertise to a facilitator of experiences. To evaluate the ways that museums appear to share authority with their constituents, I will start by mapping the users' roles as those are indicated by the selected cases, and in the second part of the analysis, I will attempt an interpretative analysis of their effects.

4.1.1. The roles of the users

The projects selected present an overview of the diverse roles users can take up in participatory projects. In the theoretical framework, we already saw the models of conventional and digital participation to museum work, accompanied by examples. However, the typologies offered can create confusion, as to what exactly user participation entails in a digital setting: the concepts of collaboration and contribution both result in projects that are either co-curated or co-created, with the only variable changing being the duration of the relationship that develops between the community/user and the museum. Virtual Shtetl provides such an example: the museum relies on the school groups to realize the projects *Memory on Stone* and *School Friends, Acquaintances from Neighborhood,* and the projects are of collaborative nature; yet again, the result is that of a co-curated process, as the students gather material which then goes into the museums records. Similarly, in Click!, the relationship is a short-term one, or like Simon (2010: Chapter 7) has approached it, a 'fling' between the museum and the user—even so, the result of their cooperation results in a co-curated exhibition.

Based on the above, I draw a different classification to facilitate the cross-case analysis and to provide an insight in the cases, fit to their own specificities. To this end, I combine the categories as drawn by Simon —collaboration, contribution, co-creation— (2010), and the categories and terms as employed by Fouseki and Vacharopoulou — co-curation and co-creation—(2012) towards a slightly different mapping of the users'

roles, similar more to Fouseki's and Vacharopoulou's approach. As such, the users' roles are divided into those of the co-curator and co-creator, with each one of them involving often similar activities (for instance, both Culture Shock! and Tag! ask the users' contribution, but the character of those submissions differ, as the latter is about tagging existing heritage and the other focuses on producing new heritage material through the contextualization of objects in the audience's life experience), but aiming towards a different outcome (*Purpose*).

Project	***Purpose***	***Content type***	***User roles***	***User activities***	***Design Type***
Virtual Shtetl	Enhancement of Records/Collection	Crowdsourced	Co-curator	Contribution (information, artefacts), commentary, editing, voting	Participatory design
Click!	Exhibition Curation and Creation	Crowdsourced	Co-curator and co-creator	Voting, contributing (photos)	Participatory design
Tag!	Online collection curation	Crowdsourced	Co-curator	Social tagging	Design for participation
Faces of the […]	Enhancement of Records/Collection	Crowdsourced and UGC	Co-curator and co-creator	Contribution (information), editing, social tagging	Design for participation
Art Maps	Collection Curation	Crowdsourced and UGC	Co-curator and co-creator	Contribution, editing	Participatory design
Culture Shock!	Online and onsite exhibition Creation	UGC	Co-creator	Contribution	Participatory design

In this wavelength, co-curation initiatives allow the user to affect the museum content and its interpretation (Fouseki and Vacharopoulou 2012), and are evident in Click!, as the audience is asked to vote for the photos that better represent Brooklyn, and in Virtual Shtetl, where the audience contributes memorabilia and information in the database, extending therefore the content of the site and claiming representation of the Jewish community. Faces of the First World submits to the same category, as the users are asked to provide factual information regarding the people depicted in the photos, and therefore act as curators on their own right, by complementing the museum records, editing each other, and tagging the photos. In Art Maps, co-curatorship also takes place in the instances where the users are asked to locate the art works in the map; however, as they are asked to contribute their own stories to create an open conversation between

the past place the painting was inspired from and the place as they have experienced it, their role changes and they act as co-creators in the heritage process.

On the other hand, the audience acts as a co-creator of content in Culture Shock!, since the users are asked to choose objects from the museum collection and they proceed on drawing inspiration from them to create their own stories through personal storytelling. In Click!, and related to the crowdsourced photographs, the users who uploaded pictures can also be regarded as co-creators of heritage, since their photographs were the result of the museum's call and were subsequently exhibited in the museum space.

Last, but not least, it is worthy to note that despite the fact crowd-sourced content is colored as less creative and resembling to more mechanical, static tasks (in comparison to User Generated Content), this distinction proves to be irrelevant in the case studies—in contrary, what determines the level of personal expression of the users is not the type of the content they are asked to submit, but the hosting platform. Based on that, we see, for instance, that platforms such as that of the Faces of the Third World allow the creation of user generated tags in the framework of crowdsourcing, whereas Virtual Shtetl, also counting on crowdsourced contributions, asks users to tag artefacts using pre-existing categories.

4.1.2. Community and user empowerment

Regarding the empowerment of the audience as a result of their respective roles in every project and their chance to participate in the digital platforms, this can take many forms. As we have seen earlier, empowerment is marked as an opportunity of communities/individuals to raise their voice, have a say in decision-making processes, and develop networks and affiliations with others (World Health Organization 2010). The projects offer diverse examples of attempts towards empowerment, and vary from allowing the development of commemoration spaces to giving value to diverse, individual voices.

In Virtual Shtetl and in the Lives of the First World War, we come across similar notions, despite the fact that the platforms are different and the users enjoy varying levels of control over the contents. Even so, both the projects aim at bringing up a history that continues until today to be of concern for their respective communities, and

they provide platforms through which the histories of the First World War and the Jewish minority in Poland can be represented anew and be negotiated. In this context, the Virtual Shtetl attempts to shed light to the story of Polish Jews, as it took place before the turning event of the Holocaust, by inviting the users' contributions. Although much stricter —in relation to IWM's Flickr project— when it comes to creative expressions, as it focuses on factual information without personal commentaries, Virtual Shtetl's collaborative archive features the experiences of a marginalized group and attempts to create an accurate depiction of an imagined community, as the Jews that lived in the Polish countryside were. The enabling of users everywhere to participate in the construction of a more accurate, bottom-up history provides the chance to the community to re-construct its identity through its own narratives, and restores collective memory through those contributions. According to Shandler, the site of the shtetl presents "unresolved stories of betrayal, valor, helplessness and doubt" and "many shtetlekh were abandoned as sites of a Jewish future, becoming instead sites of memorializing- or forgetting- the Jewish past' (2014:103,112). Virtual Shtetl by asking the public to submit evidence of a dynamic rural community of Jews in Poland, despite the fact that a lot of the monuments and heritage sites have disappeared from public view, challenges the image of Polish Jews as an imagined community (Kirshenblatt-Gimblett 1995) and attempts to co-construct Jewish heritage with its constituents in order to give a more representative account of the past. Furthermore, and whereas most projects that evolve around Jewish heritage in Poland focus on the Holocaust, Virtual Shtetl goes back to life as it used to be before the turning event, allowing thus the communities of interest to explore the social history of the land and people.

In relation to the Faces of the First World War, and regardless if it was an explicit part of the project's mission or not, the Flickr platform became also a place of collective memory for those commenting, as they sought to interpret the past through present experiences, contemplate on the trauma the war has left on Britain, and narrate their own family stories. We see therefore that the platform utilized by the museum became a space where users came together to renegotiate the meaning of the war and its effect, in a collective act of healing and remembering. Furthermore, as the past narratives surrounding the Great War have been a matter of reconsideration for many revisionist historians (Wilson 2012), Flickr provides a platform where the veterans can be commemorated and valued. The need of the British public to commemorate the war

veterans and renegotiate the context of the war is also manifested by their request towards the museum for the opening of another Flickr group; the result of this wish was the group *Your Faces of the First World War*[10], through which users could upload pictures and commentary of relatives who served.

Illustrative of those perceptions are the comments left by the users in the platforms, which appear to be both informative and emotional: some provide information on the content, others ask for information, while others connect the past with the present and contemplate on the effects of the war. Other commenters however, find through the pictures a chance to share their own narratives of the war, centered around their family stories, creating thus new accounts for the museum, in the form of textual information and testimonies. The project, thus, achieves to create a platform where a collective expression of remembrance is expressed. Examples of the above are provided by comments as:

"Is there any information on where this was taken? I live in Dumfries which is about 20 miles north of Gretna and Eastriggs, both of which produced shells for The Great War. The Devil's Porridge exhibition in Eastriggs provides an idea of what was made and the people involved but can't replicate the immense size of the site." [11]

"This certainly looks like Chilwell. The site is now the Reinforcement Training and Mounting Centre for the British Army, preparing individual reinforcements for combat before forwarding them to operational theatres. There are today photographs in the QM Block of the site as an ammunition facility during the 1914-18, including scenes of the devastation there caused by a catastrophic explosion later in the war.//." [12]

"If Oswald Fenwicke Clennell Carr Ellison, then he was born in 1895, the 2nd son of John Ralph Carr Ellison and Edith Clennell. Family from Newcastle, (src: familytreemaker.genealogy.com/users/m/o/r/Michael-J-Morri...), and so likely related

[10] Additional information on the page can be found at https://www.flickr.com/groups/your_faces_ww1/ .

[11] To see the comments, refer to: https://www.flickr.com/photos/imperialwarmuseum/9567383913/, https://www.flickr.com/photos/imperialwarmuseum/9567383913/, and https://www.flickr.com/photos/imperialwarmuseum/8559180683/ respectively.

to Colonel Sir Ralph Harry Carr-Ellison, T.D., Lord Lieutenant of Tyne and Wear, (but this needs confirming).”

In Culture Shock! the employment of storytelling brings the individual in the middle, as personal stories are made to contextualize the museums’ objects and the participants’ voices are highlighted. Through the process of recording their stories and the later projection of those in the museums’ website, the participants get the chance to highlight their individual experience in the greater framework of heritage and show how they have been affected by objects or how objects have been integrated into their lives.

With Art Maps, the audience has the chance to participate in the connection between past and present, by providing the locations of paintings and linking them with their own memory scapes, by giving their own personal stories connected to them. Another aspect that Art Maps brings forward is the connection between place and heritage, in the model of a digital eco-museum: by connecting heritage to the space outside the museum, Art Maps acknowledges that the audience attaches significance to the place as connected to heritage and personal memories, and capitalizes on that to contextualize its works by bringing together the place, the heritage, the memory, and the audience. (Rivard 1984:43-53 as cited in Davis 2009).

In Click!, the audience has the opportunity to decide on the content of the exhibition, sharing therefore the ownership of representing the city within the museum. The fluid nature of the open call released by the museum gave space for wide interpretations regarding what Brooklyn means to its residents, and that way, the photographers’ also exercised agency over the city’s representations in the museum. In this context, the museum acknowledges that there are concepts the curator alone cannot grasp, and therefore the collective experience of the audience can complement and build on this lack, for a heritage that is based on a bottom-up approach and hence it is democratic and reflects more accurately the community’s notions on given topics.

4.2. The Objects

In this section, we will only speak of existing heritage discourses through digital objects, and not the objects of co-creation as resulted by projects such as Click!. As mentioned in the theoretical framework, objects in the digital realm can take up forms

they did not previously have, bounded as they are by their locality and the museum's authority. However, after being digitized, their broad circulation allows them to take up meanings form diverse communities and serve as contact zones (Cameron 2008, Hogsden and Poulter 2012, Shrinivasan 2010).

In Culture Shock! the users are invited to attach personal meanings to the objects displayed by the museum and coat them with their own personal interpretations, linking thus their social life with the museum displays. As such, the project promotes an idea of heritage as a process that involves multiple agents, rather than a final product constructed by the museum. Further on, users other than the participants of the project can comment on the stories, renegotiate the meaning of the story, comment on the story, or narrate similar stories, making thus the museum's virtual platform a contact zone for various interactions between the individuals who chose to comment and engage to the project through the platform. At the same time, the way of display, that focuses on thematic units such as 'bullying' and 'friendship' creates a framework that employs universal narratives to connect the present with the past, contextualizing the collection more to the audience's life. The narratives furthermore give a vernacular dimension to the museum's exhibits, and therefore the objects enter a real context of social use and experience. Such interpretations are able not only to contextualize the auratic objects of the museum collections, but also serve as a ground where cultural narratives can be negotiated and be put into new proportions by the people who shape them. Further than that, Culture Shock had as a primal purpose to create a multicultural dialogue, acknowledging the diverse communities that make up the population of this part of England. As such, the museum contextualizes through its audience objects of its collection that come from other cultures, and opens them up for interpretations intended to be made by their source communities.

In Virtual Shtetl on the other hand, the project's contribution does not have explicitly to do with negotiations of meaning in a strict sense, as the users are not allowed to make their own interpretations of the objects. However, there is an approach towards re-drawing the framework of Jewish heritage which is channeled through the submission of pictures, memorabilia, and cemetery stones on the archives which might not invite users to offer interpretations (although the Facebook plugin allows that), but an intensive effort to re-approach Jewish heritage and re-locate its importance in Poland through the digital objects that testify that Jews of the region were a multifaceted,

dynamic community. The focus of the project not on the Holocaust, but of the narratives and objects that made up the community before the war broke out, also exposes the audiences to different realities that have not been voiced adequately over the years (Stankowskii, n.d.).

Art Maps also recontextualizes through the participatory maps the work of arts hosted by Tate, as by asking the audience to locate them in a map it contributes to developing a context that links the experience of the artist to that of the user who relocates them in the environment they were inspired from. The challenge related to personal memories, encourages the audience to look at the paintings and draw their own meanings out of it, introducing the works to personal frameworks. However, Art Maps seems to evoke more of a sense of place rather than contextualizing the objects per se: through the project, the museum takes the audience out of the museum and simultaneously expands its collection outside the museum, making heritage something ubiquitous and linked to everyday experience and life outside the bricks and mortars of the museum building.

4.3. Engaging Communities

Having a digital presence has become a buzzword for museums—however the ones that take up the challenge do not always prove to build successful projects, but rather, they seem to build platforms and engage in social media activities just for the sake of being labeled participatory. On the other hand, many projects, despite their initiators' good intentions fail to capitalize on the most important component of any digital participatory initiative: the community that sustains it. An example that can illustrate that, outside the case studies' framework, is Affleck's and Kvan's Memory Capsule project, where the authors addressed an already existing festival audience and other communities to provide interpretations on Hong Kong's heritage; the responses elicited by the users however were scarce and did not initiate dialogue or negotiated the meaning of the heritage in question (Affleck and Kvan 2008). The lack of community participation renders any such project unsuccessful, as it fails to address the audience, and it loses sight of Web's most important feature, that of users' participation; however, as the web is essentially built on the user's contributions, the inability to attain those lowers the

quality of the project, fails to create value for the audiences that encounter it later on, and discourages participation by others.

It is thus evident that neither participatory platforms, nor platforms designed for participation can work on a logic 'build it and they will come' (Palmer 2009), and as Kidd notes the fact that a museum establishes a web presence does not directly connote that users will be willing to contribute or that their contributions will be of a worthy volume (Kidd 2011). This echoes Nielsen's theory of user participation and its 90–9–1 rule, based on which the 90% of users are lurkers, the 9% of users contribute from time to time, and only a 1% of users participates frequently (Nielsen 2006). Based on the above, how do the projects selected engage their communities? I will continue the cross-case analysis by examining the ways the museums employed to bring communities in their platforms and sustain their interest, by aggregating their similarities and dividing them in three categories, defined as intra-user interaction, real relationships outside the museum, and the museum making use of the contributions.

4.3.1. Physical interaction is key

Although virtual communities function within the web, that does not necessarily connote that their engagement and the effort to sustain them should only occur digitally. Indeed, the common denominator of Virtual Shtetl and Culture Shock, as well as that of Art Maps and Click! in a lesser extend show that virtual communities can as well be engaged physically, with their interactions continuing online. Indeed, although there seems to be a disparity between the real visitor and the user, those share a lot of characteristics, as users are likely to become visitors and vice versa (Nicholls et al 2012). As such virtual engagement and the fostering of an online community should not merely be based on online engagement, but it should aim towards initiating or extending the relationships in physical environments too. What Culture Shock! and its success shows us is that even when material is produced in a digital form and is also disseminated digitally, it is important to engage the community in a physical level of interaction in order to achieve worthwhile results. Culture Shock's outreach program included workshops, festivals, and sought to engage both communities and individuals, instead of merely creating a platform and waiting for users to come. By creating a captive context, it is much easier to create enthusiasm and engage the audience, and at

the same time, scaffold the experience. Click, one the other hand, shows us the general tendency of communities to engage physically too: the photographers that took up the challenge of submitting their photos, would meet and take the photos as a group (Bernstein 2014). In Virtual Shtetl, the need of physical interaction is worked out through the participation of schools in projects like the Memory in Stone, whereas Art Maps has also organized workshops to bridge the digital divide of the participants, encourage their participation, and observe the different roles the audience takes in the project.

4.3.2. Meaningful participation

According to Simon, participation entails the meaningful use of the users' contributions (2010: Chapter 1); if the museum does not thus make use of the audience's input, the whole process loses its significance and ends up looking more as paying lip service to agendas related to social media use as a means to stay up-to-date, rather than a truthful shift in the museum's philosophy.

In Virtual Shtetl, the contributors' output is directly fed back into the museum's database, after it has been approved by the administrator of the area. In Tag! You're it!, the system absorbs all tags on which users agree and uses them as metadata to facilitate future searches, while the contribution of every user is displayed on her profile, providing thus a gratification to participants. Culture Shock's response to the audience's creative work was the exhibition, the establishment of the online platform that, at the time of writing, still hosts their responses, and furthermore, the acquirement of certain objects for the museums' collections that were labelled by the participants as important for the place's heritage, but were missing from the permanent collections. In Click, the community's photos as voted by the community itself were showcased in the gallery, with the photographers proudly taking photos next to their works (Bernstain 2012), whereas in Art Maps the community's contributions are fed into the GIS map of the project. The faces of the First World War presents however a slightly different reality: the participants are directed to submit their information along with evidence to the museum's other database 'The Lives of the Great War', instead of the museum directly using them. This is partly anticipated because of the looser institutional frame and the more casual character of the hosting platform; however, the Flickr group is

more of a discussion group self-sustained by its community, and, therefore, an offering by the museum to them.

4.3.3. Supporting Interactions

As Kollock suggests, museums, although they create platforms that look engaging, rate poorly in allowing social interactions among their online communities, and in consequence "many of these systems have more in common with lonely museums than with the vibrant communities they set out to create" (Kollock 1996:2). Similarly, Caterina Fake, founder of Flickr has said that someone "should be able to feel the presence of other people on the Internet". Figallo (1998), furthermore, argues that what makes a virtual community successful is interactivity, cohesion, and focus. Leaving aside the parameters of focus and cohesion, interactivity refers to the capacity of the members to provide content to the platform and eventually interact with each other with reference to this content; this enabling of interactions between users and content and users between them is the basic component of any digital environment building on Web 2.0 values. On this wavelength, Simon has presented a scale of social interaction that takes place within the museum, with 1 being a level of no interaction and 5 being the level of optimum social interaction. Specifically, the levels are analyzed as following (Simon 2010):

Social Interaction Scale
1. The visitor consumes content
2. The visitor interacts with content
3. The visitor's interactions are aggregated
4. The interactions are networked
5. The visitors interact with each other

Such a picture of direct user involvement is presented by Flickr, as the users initially get in contact with the content provided by the Imperial World Museum, and then they have the chance to interact with it by providing information and interpretations. As their interactions with the content are displayed underneath the photos, and other users can see the tags that others attribute to their pictures, the presence of personal profiles and

the chance to see what other users are up to through visiting their pages, as well as the discussion boards present in every page, the user has the chance to directly interact with each other, resulting to an almost self-sustained community of interest.

With Virtual Shtetl the users do not appear to be as connected however: the Facebook commenting function is not often employed by the contributors, although the user's likes are aggregated and people have the chance to connect to each other through personal messages. However, there are discussions about initiating a forum in the site, which has not yet been realized. In Tag, this precondition of interaction is realized through the tag-o-meter, which brings the users in direct contact through the game of the project, whereas in Art Maps interaction takes place underneath the GIS maps, without having the chance through to visit users; profiles and see other contributions by them. In culture shock, the interactivity between users and participants only happens in the comment section; noteworthy is the fact that anybody can comment without logging in the platform. However, contributions are not many and the majority of them doesn't initiate a sustainable dialogue.

Conclusion

As the theoretical framework has shown, engaging in digital actions does not a priori mean that the museum becomes a democratic, collaborative space of heritage production and communication; rather social media can adhere to one-way communication models, without repositioning the audiences as active participants and stakeholders and as such, they do not necessarily facilitate the creation of multivocal environments; As Hooper-Greenhill argues, the shift from education to learning has required a refocusing on the visitor or user, not on the media used (Hooper-Greenhill 2003). As such, we can acknowledge that it is not the tools that can better the relevance of audiences to museums, but rather a shift of attitude of the latter to welcome other voices and allow the ownership of heritage to be shared among multiple constituents, and to admit, essentially, that expertise is not a matter of monopoly. Insofar, the thesis has examined issues related to new museology and the redefined museum scape the theory draw, as well as issues related to digital heritage through the aspect of participation with the purpose of testing through case studies to what degree digital technologies can reposition the museum as a democratic, inclusive agent. The main question I had set out to address was:

"Do digital tools valorize new museology's quest for the centrality of the audience, as it occurs through authority redistribution and the contextualization of objects through their contact with various groups?"

The projects selected and their subsequent cross-case analysis paint an optimistic picture regarding the pairing of multivocal heritage and digital participation, and show some of the areas such initiatives can fall sort: reduced engagement (for instance in Tag! You're it!) and restrictions towards personal expression (Virtual Shtetl), limited impact on the actual museum records (Faces of the First World War). In some cases, the short fallings are anticipated: for instance, Virtual Shtetl is a collaborative archive that strives for accuracy, so the control of the content is inevitable, whereas in Tag! You're it! the task is rather mechanical and does not necessarily appeal to crowds in the abstract sense, but rather to dedicated groups of volunteers. However, and specifically in the case of Virtual Shtetl, freer forms of personal expressions and

negotiations or contextualization of meanings would be an advantage and would potentially engage lay persons without direct affiliations and interest in the Polish-Jewish community. Inadequacy to achieve that, however, reproduces object realities likely to be encountered in traditional museum settings: the objects remain mute and the cities the Virtual Shtetl presents in its platform offer the notion the way Jewish communities lived and potentially thrived in them, but fail to address the audience as active constituents, able to ascribe meaning to lived experiences and heritage contents, and consequently pass on these interpretations to other users. This brings in the foreground issues regarding authority and radical trust on the behalf of the museum, and a hesitation towards integrating sociality in museum and historical discourses.

In this line of critique, however, Trant offers that as museums move towards allowing the audience to draw its own meanings, they should not get competitive to assert control, but they should instead focus on managing the new knowledge produced (2006c). This encapsulates a new model of museum authority, where the museum practitioner should not perceive this situation of audience contribution as eroding professional expertise, but rather, as a means for this expertise to find new pathways to be channeled through, and spot a balance between being patronizing and being a guide in constructivist settings. Those views come also close to Byrd-Phillip's contribution on the model of open authority (elaborated in the theoretical framework of this thesis), which gets extended through Trant's position: "if museums do not take a pro-active role in the establishment of authoritative Web-based cultural information sources, their audiences would seek cultural information elsewhere—possibly through less reliable sources" (Trant 1998 in Russo et al 2006). Virtual communities, even the grassroot ones, rely and intentionally or not, create hierarchies within them. The value of the museum in the new participatory setting is to assert a position of authority and expertise while welcoming the expertise of others as well. Simon, in this line, argues that museums should be assertive about their expertise and project it (Simon 2008)- especially when multiple points of view are offered.

On the other hand, the Faces of the First World War and Culture Shock! fall short in terms of making an impact on the museum through the audience's contributions. Digital storytelling initiatives are often criticized for the levels of control over the content the participants enjoy and to whether they can really make an impact on the way audiences perceive museums and the way museums represent their audiences (Burgess 2007:209).

However, participation becomes better through constraints (Simon 2010:Chapter 1), and besides, Culture Shock! has brought another element to introduce greater reflexivity on the part of the museum: the capacity of users to interact in the comments' section, as well as a permanent platform hosting the participants' contributions. In the case of Faces of the First World War, the museum does not absorb the tags, nor the information provided by the public, but rather redirects the users with important inputs to the platform 'Lives of the First World War'; as such, the Flickr platform remains an area of casual conversation and a chance to engage Flickr's audience, with more serious participation taking place in another platform. The platforms combined thus, do fulfill the prerequisites audience participation entails, namely the sociality and the impact of the contributions in real records, and viewed as two projects that complement each other, the Flickr platform can be regarded as a successful experiment on audience engagement and polyvocality. Projects like Click!, on the other hand, show us the potential participatory digital actions yield: an open call through physical and online platforms on a topic of great relevance for the community gathered numerous contributions and votes and resulted in a physical exhibition. The initiative as such manages to engage the audience through a simple task and manifests the institutions relevance to its surroundings and translates the audience's contributions to a tangible result, the exhibition.

As it has already been argued, however, museums and the connection of participatory heritage with the social web is still in an infantile stage in the museum sector. As such, we are yet to see where the merging of institutional expertise with the lay persons knowledge and contribution can take us. Still, most contributory projects are the result of courageous museums taking the leap of faith, and those are often the product of collaboration with university programs and research initiatives. According to Watkins and Russo, the effect of social media on practices of participatory construction of heritage are yet to be determined (2007:9), whereas Shirky asserts that "Communication tools don't get socially interesting until they get technologically boring" (2008:105). Given this pre-condition in terms of technology excitement and the will to experiment with new tools, the projects can often fall short and fail to recognize that digital platforms need to be sustained and eventually be allowed to alter the content of the museum. The most important step towards democratizing the museum and engaging the audience, however, is a conscious effort towards redistributing the

curator's authority by sharing it with the audience, taking the products of the users' participation into account, and eventually filtering the contributed knowledge to create trustworthy accounts.

As a last remark, I would like to add that museums have been traditionally questioned about their contribution to society; today, a simple Google search can lead to an abundance of articles and essays that do not draw a very promising picture regarding their significance. As multiple actors outside their framework promise to document heritage and, most importantly, prove their ability to produce worthwhile results, such questions are inevitable, but they might be able to indicate the museum's new position in the cultural map: listening, gathering, and filtering information and accounts with a sensibility towards lived experience and its relation to events that are bigger than life, and therefore hard to be grasped unless paired with and filtered through the ordinary. In this wavelength, technology is not a final destination nor a panacea for all ills: however, Web 2.0 platforms are able to be a space where diverse accounts are brought together, negotiated, and be observed and further utilized by curators and other experts. As such, web platforms can and do take the museum a step closer to democratization. Pre-conditions that determine the success of said digital projects, nonetheless, exist and have been elaborated in this thesis; yet again though, museums should dare to establish a digital presence based on meaningful interaction with their publics and, even more, document their undertakings, as a means to identify what works and what should be re-examined. In the same wavelength, curators continue to be indispensable and especially in a framework of polyvocality, expertise is needed to avoid moving from pluralism to cacophony.

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