

Telling changes in telling stories: Digitising Museums and Art Galleries

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Abstract

Digitisation is a well-referenced topic in discussions about the future of libraries, archives, museums and galleries. However, in broader works on digitisation, less emphasis is placed on the specificities of museum and gallery institutions. Drawing a distinction is important for understanding the digitisation process, because despite similarities to other 'memory institutions', the museum and gallery organisation is different in collection content and curatorial practice. Museum and gallery digitisation is about telling the story of the collection in the digital realm, and the purpose of this paper is therefore to conceptualise the digitisation of museum and gallery collections as a type of 'digital storytelling'. The discussion includes an introduction to digitisation in the museum and gallery context, outlines the benefits of digitisation, and discusses the complexities associated with museum and gallery digitisation, with a view to future developments in the field and implications for digital storytelling in the curatorial sector.

Introduction: Popular tales of digital futures

Digitisation has become a well-referenced topic in discussions about the future of libraries, archives, museums and galleries (Frank 2005; Holley 2004; Kirchhoff, Schweibenz and Sieglerschmidt 2008; Reid 2000). Much literature has been produced on the subject, highlighting the nature of the process, the people involved, as well as the benefits and possibilities (Yeates and 2006; Holley 2004; Williamson 2004). These include the increased accessibility, global community, cross-domain collaboration and 'ubiquitous knowledge' that digitisation affords (Yeates and Guy 2006; Kirchhoff et al 2008; Lepouras and Vassilakis 2005). Not all of the literature has been positive, though, with some less favourable accounts portraying a more dystopian view, pitting economic cost, human thoughtlessness and concerns of quality against the optimistic digitisation visions (Kirchhoff et al 2008; Manzuch 2008; Williamson 2004). Overall, digitisation has been received with both compliment and criticism, and is part of a global uptake, with numerous projects being carried out around the world.

As suggested by Holley (2004), this global uptake has been across a range of sectors, but more often than not, digitisation is discussed in reference to "memory institutions" (Kirchhoff et al 2008, 251), namely the aforementioned libraries, archives, museums and galleries. Much of the work tends to focus on libraries and archives in particular, documenting the processes and projects of these organisations as they digitise their literary and textual collections (Gulati 2004; Kirchhoff et al 2008; Skarstein 2010). There is also an emphasis on consortia; collaborations between library, archive and museum on large-scale digitisation projects in an effort to promote cross-domain knowledge and convergence (Anderson 2007; Yeates and Guy 2006; Nicholson and Macgregor 2003). Library institutions, in particular, have been a leading force in this digitisation field (Kirchhoff et al 2008). For many years, libraries have worked to digitise their collections of endangered material and make more books available in the electronic format for greater public access (Lopatin 2006). The oldest digital library in existence, Project Gutenberg, has been running since 1971 and in more recent years, other digital library projects have come about including Google Books and Internet Archive (Google 2011; Hart 1992; Kellogg 2011). These digital libraries signal the growing popularity of the 'e-book' and illustrate the value of acquiring, preserving and cataloguing digital material.

However, in broader works on digitisation, less emphasis is placed on the specificities of museum and gallery institutions. Drawing a distinction between these curatorial institutions and other memory institutions is important when considering the digitisation process, because despite similarities to the library, the museum and gallery organisation is different in collection content and curatorial practice (Barton, 2005; Lepouras and Vassilakis 2005). Beyond the actual labour and performance of the required task, digitisation in the museum and gallery context requires the construction of a narrative around the digital material. Museum and gallery digitisation is about telling the story of the collection in the digital realm. Arguably, it is the telling of this story that represents the difference between library, and museum and gallery digitisation: the difference between preserving and *cataloguing*, and preserving and *presenting*.

The purpose of this paper, therefore, is to conceptualise the digitisation of museum and gallery collections as a type of digital storytelling. My discussion includes an introduction to digitisation in the museum and gallery context and highlights some of the opportunities for digital storytelling that exist in the sector. I also outline the benefits and appeal of digitisation, and discuss the complexities associated with museum and gallery digitisation, at level of the digitisation process itself and at the level of the curatorial sector. This latter discussion is of particular importance to the concept of digital storytelling, as these complexities have a bearing on the way that a digital story is told, and by whom. Finally, I pose some areas for discussion as regards future developments in the field and in the telling of digital stories in the curatorial sector.

Museum and gallery digitisation: A storytelling-exercise

As mentioned at the outset, digitisation is a popular subject in relation to memory institutions and the collaboration among them to set up cross-domain knowledge databases. In a nutshell, the process could be defined as “going digital” (Ray 2009, 358). More specifically, digitisation involves numerous stages of “digitally acquiring, modelling, storing, manipulating and creating” material (Patel et al 2005, 179). These activities, of course, require significant technological investment and long-term administration, management and maintenance (Holley 2004; Tull 2002; Yeates and Guy, 2006). While digitisation is similar among the different types of memory institutions, digitisation in museums and galleries, in particular, offer excellent opportunities for digital storytelling.

Digitisation in the museum and gallery context is an extension of the practice of ‘curating’. A word that originates from the Latin *cūrāre* meaning ‘to care for’ (Harper 2010), curating is a process that extends beyond collecting, into practices of selection, conservation, interpretation and presentation. Curators of museums and galleries are not only entrusted with the guardianship of collections, but with the decisions about what the public is to see and learn, and how they are to experience it (Bayne, Ross and Williamson 2009; Knell 2003). They construct exhibitions and ‘museum experiences’ that do not merely display artefacts, but instead tell well-crafted ‘stories’, highlighting certain artefacts over others and presenting significant moments in a narrative form as the viewing public progress through the building (Nickerson 2002). As Hermann (1999, 1) suggests: “great museums tell great stories”.

The same can be said for museum and gallery digitisation. As an expression of ‘digital curating’ (Ray 2009) digitisation in this context means more than creating digital material; it means selecting, conserving, interpreting and presenting digital material, in such a way, that the material itself becomes a digital narrative. As Yeates and Guy (2006, 139) describe, there is a need “to go beyond the provision of mere databases of disparate objects and intellectual items, to create compelling navigational and learning experiences for end-users and provide appropriate contexts for use and learning”. Such sentiments correspond with Nickerson’s (2002, 1) notion, that “Visitors to virtual museums are looking for guided tours and exhibits that present information created by knowledgeable professionals that help them to understand and appreciate artifacts in their artistic and historical context”. As such,

the 'digital storytelling' in the context of museum and gallery digitisation is about constructing narratives around digital artefacts, presenting the artefacts in a selected and interpreted form so that the public is offered a 'story' about them.

Museums and galleries are already telling digital stories in the form of digitised versions of collection holdings, sourced from physical artefacts and institution materials that are based around a subject matter or theme (Knell 2003; Ray 2009). An example of this form of digital storytelling is the Greater Cincinnati Memory Project, which consists of 6000 digitised postcards, slides and photographs of the pre-1940s Cincinnati (Tull 2002). The aim of the project is to make the fragile image collections more available to the public and tell the less-well known story of the events and landmarks of that time period in the Greater Cincinnati area (Tull 2002). Another illustration of digital storytelling around a geographic theme is the "sense of place" (Nicholson and Macgregor 2003, 96) collections funded by the NOF-Digi programme in the United Kingdom. Numerous consortia have been set up to tell the local story of their regions, for example, the SoPSE (Sense of Place South East) consortium which has set up a website that brings together the cultural heritage of the area through digitised contributions from the local consortium partners (Yeates and Guy 2006). This is likewise the case with The Glasgow Story, a consortium telling the historical story of Glasgow, "from the earliest times to the present day through 550 stories and 12,500 images" (Anderson 2007, 367). As these examples illustrate, the digitising of collection holdings affords opportunity for digital storytelling in the construction of narratives around specific subjects and themes.

In contrast to the digitisation of collection holdings, other digital stories are being constructed for the online world only in 'born-digital' collections, digital material which is "not intended to have an analogue equivalent" (Digital Preservation Coalition 2009, "Born Digital"). Born-digital collections afford even more storytelling opportunities, due to the extensive potential of the technologies involved (Lepouras and Vassilakis 2005). To illustrate, individuals involved in the Coastal Carolina University and Arkansas State University project, Ashes2Art, make 'virtual reconstructions' of ancient world monuments using digital photography and 3D animation (Ray 2009). These virtual reconstructions provide a digital, 3D visualisation of archaeological sites that are either extremely fragile or no longer exist (Lepouras and Vassilakis 2005; Ray 2009). The public is presented with the opportunity to learn the stories of these ancient monuments in "QT flythroughs" or "short documentary videos" which take the viewer through the sites as if on a guided tour (Coastal Carolina University 2009, "About Ashes2Art").

Other examples of such digital storytelling can be seen in the different online museum exhibitions available. Whereas early online exhibitions were more for researchers and education professionals (see Reid 2000), they now offer digital stories to the public, available through museum websites. For example, the Louvre has developed "Explore in 3D" on Louvre.fr, which is a multimedia section that "presents artworks in an imagined or reconstructed 3D space" (Musée du Louvre 2011, "Explore in 3D"). The exhibitions present the viewer with the type of museum visit they would not be able to experience at the physical museum. The Louis La Caze exhibit is a reconstruction of the La Caze room as it existed in 1913 and invites the viewer to tour the artworks as they would have been positioned back then

(Musée du Louvre 2011). The Jean-Honoré Fragonard exhibit is 'imaginary' in that it exists in a 'purpose-built' digital space and is an exhibition only available online (Musée du Louvre 2011). Both of these exhibits illustrate the potential for digital storytelling in museum and gallery digitisation, as online exhibits can tell 'new' stories with the digital artefacts, offering visitors guided environments beyond the physical museum.

There are further digital storytelling opportunities when considering current digital developments. To illustrate, the Museum of London likewise hosts online exhibitions, but also has the added dimension of interactive 3D learning tools (I-Newswire 2010). These tools include "Museum Apps" for public download, which enable viewers to take exhibitions with them on their I-Phones or Androids (Museum of London 2011). "Streetmuseum" is a museum app that guides the viewer through "over 200 images of London from the museum's extensive art and photographic collections" (Museum of London 2011, "Streetmuseum"). Viewers have the option of 2D or 3D, the latter of which allows the viewer to "compare past and present views in situ" (Museum of London 2011, "Streetmuseum"). Such developments illustrate the future potential of museum and gallery digitisation, highlighting the different formats digital stories will be available in as technology advances.

Future developments include not only the technology, but also a broadened range of the digital stories that will be told. The literature extensively documents developments in the UK, Europe and North America, but other parts of the world are also engaging in digitisation projects, including countries such as Botswana, Israel, India, Malaysia, Taiwan, Australia and New Zealand (see, Kalusopa and Zulu 2009; Frank 2005; Gulati 2004; Manaf 2008; Chen et al 2002; Brown 2006; and Holley 2004, respectively). Developments in East Asia seem particularly noteworthy in the way that museum and gallery digitisation affords the opportunity to bring together cultural heritage across significant geological and political barriers (Lee 2010). Lee (2010) describes the situation between North and South Korea, and China, where there is shared dynastic history and heritage that could be lost if action is not taken to preserve it collaboratively. Lee suggests the best way forward is through digitisation, which would preserve valuable heritage and hopefully provide a medium for better cooperation and understanding among the three countries involved. As such, it is evident to see the possibilities of museum and gallery digitisation and the potential that future digital storytelling may hold.

Context for storytelling: Digital technology and the curatorial sector

Museum and gallery digitisation can, therefore, serve successfully as a medium for digital storytelling. There is already an array of digital stories being told and there is potential for greater development in the future. Digital storytelling, though, is not an independent development in the curatorial sector, but rather is the result of other driving factors that have furthered digital advancement. To better understand this wider context, it is worth briefly considering the reasons behind the development of digital technology in the curatorial sector and therefore also the appeal of digitisation.

A driving factor for adopting digital technology in the curatorial sector is preservation of heritage. Conservation and preservation of collections and heritage have always been key activities in the curatorial sector (Liddiard 2004; Ross 2004). Digital technology affords the opportunity to preserve collections and heritage in a different format. This format offers a range of benefits, including protection and security for museum and gallery holdings in the creation of 'back-up' resources, and increased long-term access to otherwise inaccessible material, either because of physical fragility or the heritage has fallen into disrepair, such as in the case of ancient archaeological sites (Holley 2004; Lee 2010; Lepouras and Vassilakis 2005; Tull 2002; Williamson, 2004). Digital preservation also offers the added dimension of assuring the integrity of digital holdings that have never existed in an analogue form. In an environment where there is a plethora of digital creation and 'born-digital' material, there is some concern about maintaining proper records and 'metadata'¹ to ensure successful storage and future access (Gorman 2007; Ray 2009; Patel et al 2005; Yeates and Guy 2006). Digital preservation is seen as a key way to ensure that standards are set and maintained to ensure the former objectives, and serves as a significant reason for advancing digital technology in the curatorial sector.

Digital technology furthermore improves accessibility to collections (Kirchhoff et al 2008; Lepouras and Vassilakis 2005; Patel et al 2005; Tull 2002). Global debate about the 'knowledge economy' has focused attention on the ways the curatorial sector could reach a wider audience and provide greater service through digital technology (Bowen 1999; Bowen 2000; Karp 1999; Knell 2003). The discussion is significant, especially when museums and galleries face such access dilemmas as limited exhibition space in relation to the size of collections, barriers in geographical location either hindering museum visits or making travelling exhibits necessary, and potentially limited services to those with disabilities (Kaushik 1999; Lepouras and Vassilakis 2005; Patel et al 2005). Digital technology alleviates some of these access issues, enabling a domain where there is increased space, geography is redundant and more options are available to individuals with disabilities (Lepouras and Vassilakis 2005; Patel et al 2005).

Closely aligned with increased access is the benefit of digital technology in providing education and learning experiences, especially in terms of museums. Cultural policy developments, particularly in the United Kingdom and Europe, have centred on refocusing the role of museums as education providers in terms of digital and online resources (Barton 2005; Bayne et al 2009; Knell 2003; Sandell 2003). Museums have traditionally had an education purpose, serving as a medium for learning and discovery for a wide range of audiences (Hooper-Greenhill 2007). The provision of online learning material furthers development for school-based programmes and resources, and increases access for community learning initiatives (Barton 2005; Bayne et al 2009; Hooper-Greenhill 2007; Nicholson & Macgregor 2003). Digital technology also adds a different dimension to the developments of 'edutainment' and

¹ At the broadest level, metadata means 'data about data' (Howe 2010), but in the context of 'memory institution' digitisation, Kirchhoff et al (2008, 258) define metadata as "the structured data about the information objects", such as catalogue entries, and Patel et al (2005, 179) conceive of metadata as "information or data about resources."

interactivity in museums and galleries (Lepouras and Vassilakis 2005; Rentschler and Gilmore 2002; Scott 2004). For example, Lepouras and Vassilakis (2005) discuss the added value of virtual reality technology in creating interactive e-learning environments. Overall, the digital technology capabilities offer possibilities for enhancement and development of education provision in the curatorial sector, serving therefore as a key driving factor for making digital advancements.

Complexities for museum and gallery digitisation

The above background demonstrates compelling reasons for the curatorial sector adapting to the digital realm, including digital preservation, increased accessibility and furthered education provision. These objectives have been significant in directing digitisation developments in museums and galleries, and subsequently contributed to the many digitisation projects taking place around the world. As shown in the opening section of this paper, these projects illustrate the digital storytelling potential of museum and gallery digitisation. However, while an excellent medium for storytelling, there are significant complexities associated with museum and gallery digitisation that can have a bearing on the telling of the digital stories. On one level, these complexities relate to the process of digitisation itself, the type of content, technology and metadata involved. Other complexities are at the level of the museum and gallery sector, where there are a range of views and issues associated with adapting to the realm of 'digital curation'.

Complexities (Process)

In their discussion of BAM (Gemeinsames Portal zu Bibliotheken, Archiven und Museen), Germany's online portal joining museums, libraries and archives, Kirchhoff et al (2008, 260) note that in contrast to museums and archives, libraries are "nearly twenty years ahead in terms of the digital cataloging of their objects". This significant difference is due to the need for museums to "invest a lot of effort in the cataloging of their unique resources" (Kirchhoff et al 2008, 260). The type of content that needs to be digitised in the museum and gallery context is more varied and complex. These collections consist of objects, artefacts and materials that often do not easily 'migrate' to a digital form (Knell, 2003). Therefore, specific content selection decisions need to be made regarding what is to be digitised. To illustrate, the Greater Cincinnati Memory Project set up a Content Committee to make decisions regarding digitising images of the greater Cincinnati area (Tull 2002). Selection criteria included: time period (pre-1940s); image content (such as landscapes and inanimate objects); format of images (only postcards, photos and slides were chosen); and quality of image (high quality or exceptionally rare). Such selection decisions in the type of content chosen tell a story about what is deemed worthy of digitisation, and therefore also what is left out. These stories are constructed on a regular basis as concerns museum and gallery digitisation, adding a different and more complex dimension to the digitisation process.

Furthermore, the process of digitising museum and gallery collections involves specific types of technology, both hardware and software, to be able to capture, model and host the digital form (Tull 2002). In addition to more standard 2D user-interface formats, 3D augmented reality platforms are also used, largely because of

the type of virtual environment they enable (Lepouras and Vassilakis 2005; Ray 2009). A 3D environment affords more choice regarding “the mode of capture and the quality of the dataset” (Kneil 2003, 138), to what extent the artefact is captured, (in every detail or simply an overview), and how it is stored, as part of an exhibition or database collection (Lepouras and Vassilakis 2005; Patel et al 2005). Lepouras and Vassilakis (2005) describe the Virtual Museums Project, launched to test the use of gaming technology in building a digital environment for exhibition. Gaming technology proved very successful in terms of dynamic user-interface and realism for participants. However, as the authors point out, the cost of the technology and high-technical skills requirements are often determining factors in the choice of digitisation processes used (Lepouras and Vassilakis 2005). As a result, it is sometimes deemed more effective to outsource the digitisation (Holley 2004; Tenant 1999; Tull 2002). The type of technology used, the associated cost and the option of outsourcing all add to the complexity of the museum and gallery digitisation process. These complexities likewise highlight that the digitisation process is selective and dependent on choices made from within the museum and gallery organisations.

Also, in order for the digitisation of collections to be successful, extensive metadata is required to ensure that the digital objects are properly catalogued, managed and maintained for easy access and future use (Kirchhoff et al 2008; Patel et al 2005; Tull 2002). Patel et al (2005, 179) note that metadata has “always been a critical aspect of describing and managing museum holdings” and that in the digital environment the function is as important for the “description, management, resource discovery, preservation, curation and rights management of information objects”. There are a number of different metadata methods or ‘standards’ that can be used for the creation of this type of data, such as the Dublin Core metadata standard (Kirchhoff et al 2008; Tull 2002), which is a well-accepted choice for many digitisation projects. Large-scale collaborative digitisation projects more often than not create their own metadata standard, to aid consistency and interoperability among the different contributing organisations (Yeates and Guy 2006).

In the case of museum and gallery digitisation, however, this latter standard metadata approach is preferred from the outset. As Patel et al (2005) explain, the metadata requirements for online museum and gallery collections is extensive, needing to satisfy a range of users throughout the digitisation process. So wide-ranging are the metadata requirements, that Patel et al (2005) have developed the ARCO data model (Augmented Representation of Cultural Objects), which draws on a full-range of metadata standards including the Dublin Core, but extends the Dublin system to gather data for every step of digitisation, from acquisition to presentation. Descriptive curatorial metadata, technical metadata, metadata for ‘resource delivery’ and presentation metadata are just some of the different sets required to fulfil the standard (Patel et al 2005). The metadata for museum and gallery digitisation in itself is a narrative about the content, but also represents the construction of the story of the collection in the digital realm, where the decisions made are by those in charge of the digitisation process and final selections determine the way the digital object is preserved.

Complexities (and challenges) of adapting to digital developments

In addition to the complexities in the process of digitisation, there are also complexities for museum and gallery professionals in their adopting of digital developments. While the sector has indeed responded to digitisation, full acceptance of the digital world is yet to come. There is a general perception still held by museum and gallery staff, as well as members of the public, that a 'real' visit to the curated site is superior to a 'virtual' one (Knell 2003). The first-hand experience of the museum or gallery is considered unique, generating an 'emotive experience' that is particular to the physical visit (Anderson 1999; Bayne et al 2009; Knell 2003). It is understandable, then, why the perception of digital technology in the curatorial sector is that the digital exists primarily as a form to enhance or complement the museum and gallery, either by providing further, in-depth information on cultural artefacts, or by encouraging a physical visit (Bayne et al 2009; Knell 2003).

This perspective, evident in the literature, suggests that museums and galleries view digital resources as secondary to the physical artefacts (Bayne et al 2009; Knell 2003). This secondary position exists particularly in reference to notions of materiality, stability and control. Material artefacts offer museums and galleries stability in terms of time and space, allowing curators to have control over the artefacts (Bayne et al 2009). This control includes the authority to determine value and authenticity, as well as which curatorial actions are to take place in collecting, displaying and preserving the artefacts. In other words, curators can direct and control storytelling more readily when dealing with material artefacts and, therefore, potentially surrender some of that control with digital exhibits.

These issues of control and authority have a direct impact upon curating processes, such as selection, collection and preservation (Knell 2003; Ray 2009). Digital documentation, digitisation of collections and 'born-digital' material form a large volume of digital data for storage and management (Ray 2009). The curatorial sector therefore has different needs to address in terms of selection, collection and preservation strategies in order for 'digital curation' to be successful. In the first instance, new digital skills are required on behalf of those working in the curatorial sector, to ensure technically-sound digitisation and collection of material (Ray, 2009). However, these skills involve more than the technological (though these are very important if digitisation is not to be outsourced); they extend into learning new curatorial modes and methods to be able to address the other types of challenges that face those curating the online world.

Often related to these aforementioned challenges are concerns for the authenticity of digital material. In line with the discussion on digital preservation, it is clear that digital objects are useful in their availability as a 'copy' of the original and therefore afford that original artefact a measure of protection (Knell 2003). However, digital objects are nonetheless in a format that enables manipulation through computer technology and software that can significantly alter or affect the artefact (Bayne et al 2009; Knell 2003). Concerns pertain to who then makes the judgment of authenticity on the artefact, a task conventionally reserved for the museums and galleries (Bayne et al 2009; Lagerkvist 2006). Curatorial institutions in this regard have always been placed in a position of authority, as 'expert', and therefore best equipped to make value

judgements (Lagerkvist 2006). The curatorial sector thus faces a challenge in the way it chooses to determine the authenticity of digital objects, whether it be from an authoritative expert position, or from a re-negotiated, inclusive position.

Despite these challenges, the curatorial sector has nonetheless responded to the digital developments in an effort to achieve its goals as regards increasing access, providing online education and facilitating digital preservation. To adequately fulfil such requirements for the sector it is recommended that museums and galleries continue to collaborate with other memory institutions, in an effort to create online repositories that are open and reasonably easy to access (Ray, 2009). While these notions of access pose challenges to the curatorial sector's views on control, authenticity and processes, to ignore them would pose an even bigger challenge, potentially threatening museum and gallery survival.

From the curator to the community: Changing storytellers

As demonstrated, there are complex dynamics in the adoption of digitisation in the museum and gallery context, including long-standing curatorial perceptions, issues of up-skilling, and concerns about authenticity and control. The complexities reflect wider changes in the curatorial sector that focus on social inclusion and democratisation (Ames 2005; Sandell 1998; Sandell 2003). These latter concepts add a further dynamic to museum and gallery digitisation, as the process then serves not only as a medium for digital storytelling for those who work within the sector, but also suggests the possibility of others telling the stories. For example, Lagerkvist (2006) discusses the need for the curatorial sector to have 'shared authority' with the community, making joint decisions about content. Bayne et al (2009) recommend that this involves embracing community and individual participation and contribution in digital material, such as through user-'tagging' of digital artefacts in 'curating' digital collections. Jorgensen (2004, 463) believes that, should such participant-focused strategies be employed, then "museums and other institutions could lead in the creation of a new world of intellectual and creative endeavour in which participants are empowered to share their knowledge and tell their stories in ways heretofore unimagined."

A recent digital development could increase potential for a form of Jorgensen's vision, namely the concept of 'cloud culture' (Leadbeater 2010). 'Cloud culture' represents the way in which culture is being generated and shared in a cloud-like fashion through computing technology, over the internet in particular (Leadbeater 2010). The internet is seen less as the information superhighway, but rather as a series of open-source, information clouds hanging above society, from which people can draw down information on whatever computing technology is available to them at that time. This re-conceptualisation of, and metaphorical change to, the internet has prompted discussion about the limitless potential this cloud culture can have, particularly in terms of culture and cultural relations (Leadbeater 2010). Culture can now be shared openly and extensively, generating further cultural production and stimulation, developing new forms and different relationships. With cloud culture there is the potential for digital storytelling to increase, and the possibility for everyone to curate and interpret cultural products and objects online. While this affords the opportunity to create multiple meanings, it will also raise challenges for

digitisation in cultural memory institutions, both in terms of the process of digitisation and the impacts on the sector as a whole.

Conclusion: The end of the story?

Museum and gallery digitisation is about more than acquiring digital material; it is about telling the story of the collection in the digital realm. In the digitising of physical collections and creation of born-digital material, museums and galleries construct narratives about digital artefacts, presenting them in a selected and interpreted form so as to offer the public a digital story about them. This paper has outlined some of those digital stories presently being told, as well some of the future narratives and formats yet to be explored. These digital stories offer the public the opportunity to engage with digital artefacts in a very interactive way, and experience artefacts or environments that no longer (or never did) exist in physical form. Such opportunities increase the appeal of digitisation in the curatorial sector, along with the benefits of digital preservation, increased accessibility and furthered education provision that digital technology has to offer.

Despite these benefits, though, there are significant complexities associated with museum and gallery digitisation that have a bearing on the telling of digital stories, now and in the future. Difficulties in the process of digitisation, including the type and selection of content, technology and metadata requirements and associated costs, as well as curatorial sector concerns in adapting to the digital realm which include long-standing curatorial perceptions and issues of up-skilling, authenticity and control, all have an effect digital storytelling. These complexities influence what stories are told, how they are told and who gets to tell them. As further digital advances are made and concepts such as cloud culture become more influential in cultural production, we can expect to see continued changes in the curatorial sector and in the tellers of the digital stories. Much in the same way that we today suggest the idiom, 'citizen journalist', so too we can ponder the impacts of digital developments on museums and galleries, and maybe one day coin the phrase, 'citizen curator'.

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