RIFLESSI COLLANA DI SEMIOTICA DELL'ARTE

RIFLESSI IN ELICONA SEZIONE DI MUSEOLOGIA

Direttore

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FLISA BONACINI

MUSEUMS AND FORMS OF DIGITAL STORYTELLING

Preface by

DAVIDE TANASI

Postface by

ANTONIA LIGUORI

Translation by

STEPHAN HASSAM





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Preface

Museums and forms of digital storytelling is the long awaited guest of honor in the heated debate between digital humanists, museum curators, communication experts and cultural heritage managers who have found themselves debating over a decade the role that the museum will have to play in the subsequent decades of the twenty–first century. This multivocal and transnational discussion, which feeds on rivers of pages of articles, books, blogs, social media posts, and revolves around the sacred trifecta of virtual museums, augmented reality, and storytelling, where the last seems to offer the greatest promise.

However, the main problem that in discussing storytelling is its multiface ted expression, especially through digital media, where a search of "digital storytelling" returns 44,000 hits on Google Scholar, on Google instead shows over 2,430,000 hits. If on the one had these number clearly indicate the appeal of the theme and the enormous cultural and economic capital that a wise application of it represents, on the other hand the proliferation of its terms, definitions, categories, typologies and varieties, each of these with diverse interpretations that derive from the has generated a disarming confusion. New disciples who would like to engage with digital storytelling are lost, adepts hesitate in choosing the most effective methods for their projects, and academics who, in the attempt to make things clear, often end up creating more complex classifications. It is the museums that pay the price for this impasse, as they are called to the most difficult task of preserving and promoting cultural heritage at any coast and to act as the cultural heart of the community in which they are located, constantly communicating with it in an effort to create culture.

From this point of view, Elisa Bonacini's volume, the latest of a captivating series, aims to clarify what storytelling is and what its origins and benefits are and, in light of the most recent research, what are its various expressions since

the digital revolution has so drastically changed the way we observe, listen, interact and understand. The result of a laborious study of the literature of the sector and endless hours of analysis of web resources, Museums and Forms of Digital Storytelling captures in a snapshot the state of the are and all the possible declinations and applications of both analog and digital storytelling as it applies to museums and the cultural heritage sector in general. Although the emphasis is above all on cases in Italy, the international reverberations of Italian experiences and the cultural value of the subject of those experiences confer a global quality to the author's voice.

The volume opens with an **Introduction** which in turn is a manifesto of the Participatory Age, of which Elisa Bonacini has been a prophet and forerunner. Web 2.0, the Internet of Things, 4G (and now also 5G!), the advent of mobile devices that have had seismic impact on the last two decades that have deeply shaken the monolithic information system. Traditionally top-down, public and private shareholders packaged products for consumption by its stakeholders in a unilateral way. Among the ashes of that system, stakeholders understand not only that they themselves were capable of obtaining information, but could also create and disseminate it using the sounding board of social media, where information itself could become culture without prejudice of race, gender, religion, or politics. This new awareness has had notable repercussions on the museum system, originating in the era of dusty display cases and captions with pompous terms. The language that the "public" of the museum speaks has in fact changed, the vocabulary is different, the medium that it used to express itself has also changed, but above all the public's expectations of the museum have changed. Members of the community of which a museum is part want now to be able to contribute to the construction of knowledge, they want to be heard and helped by experts in arriving the forms of knowledge that they seek. They want to participate and feel alive as citizens and be human thanks to a sense of belonging to something larger. Hence crowdsourcing, co-creation, co-curation, participation and all those other happy insights that have characterized the recent debate on museum communication. And above all these is digital storytelling, which the author outlines from its formation as an approach to / movement, tracing its main formulations by scholars and discussing its parallel and troubled political-legislative history of the codification of the concept of cultural heritage in the Italian and European milieu.

The first chapter, **Storytelling: from oral tradition to today**, is itself an extraordinary example of storytelling that traces the ancestral history of storytelling that has always accompanied people through images and words since the dawn of time. From the oldest example of visual storytelling, represented by the prehistoric paintings of the French caves of Lascaux with imaginative

scenes of lost and found hunts, to the transmedia storytelling of Homeric poems whose immortal fortune depended on the voice of the bards, the innumerable copies and written versions of it, and from the representations on Greek and Roman frescoes and mosaics, from the comic insert of Corriere dei Piccoli to Piero Angela's Quark, the carious iterations of its storytelling are discussed for their ability to produce knowledge through technique and art, to quote Cinzia dal Maso (2018a). But it is in the application to the case study of museums that storytelling strips itself from a simple amplifier and becomes the glue in the process of building collective memory through the institution of the museum. And it is in this process that storytelling rediscovers its formidable role in the construction of community, identity or connectivity, just to cite a few examples discussed by the author.

The second chapter, **Digital storytelling the cultural sector**, brings us in medias res, shifting attention onto the effects that the adoption of storytelling as a technique has on methods of museum communication, pedagogy, economy, and tourism through the institution's role of cultural mediation. By briefly discussing applications, technological opportunities — with their relative advantages and disadvantages — and case studies, a message successfully emerges that digital innovations such as Virtual reality (VR), Augmented Reality (AR) and Mixed Reality (MR) favor the recontextualization of the object of knowledge and consequently multiply the potential derived from the narrative. This piece of evidence, once learned, points to the adoption of digital storytelling as the supreme or at least preferred form of communication.

The third chapter, Typologies of Digital Storytelling, represents the beating hear of the volume while also being a gold mine of information in its methodical collection of all the various types of digital storytelling and a wide range of related case studies. Having meticulously sifted through the specialized literature and analyzed recent experiences of Italian museums and cultural institutions has allowed the author to identify fourteen main categories of digital storytelling. From forms absorbed over the past decade, such as oral storytelling, explanations through digital audio clips entrusted to audio guides or podcasts, written storytelling, with texts and hypertexts found online, video storytelling, which summarized the two experiences above in a video or cinematic cut, or visual storytelling, with its great impact in its merging aspect of traditional theatrical narration with the magive of video mapping, we move on to animated storytelling, which is once of the most interesting novel approaches. This category, which in itself collects various technologies, is the most promising in terms of being able to narrate a story that points to the belly and the heart of the observer, traversing linguistic and cultural barriers. The deconstruction of reality and its rearticulation in an animated form is in fact a powerful act of simplification — of forms rather

than content — which is light years ahead of the *lectio magistralis ex cathedra* that the traditional museum imparted, and which puts the public at ease by seducing them with the power of word, sound and image both "educating and entertaining" according to the formula of edutainment. The real flywheel of animated storytelling is in 3D, which derives from Virtual Archaeology, understood as a humanistic–technological discipline that uses the virtual representation of archaeological evidence to increase the cognitive abilities of the observer to quote Francesco Gabellone (2020). To this category belong such evergreen products of excellence such as *Rome Reborn*, *Syracuse–Smart Cities* and *APA the Etruscan discovering Bologna*.

Following this is the presentation of interactive storytelling, in some ways the newest form, albeit based on the assumptions of interactive fiction in vogue since the days of Zork's video game series (Infocom 1979–1988). The direct involvement of the user in the construction of the story, the sense of transmission of authority to the user, and the renewed sense of responsibility that these entail represents one of the most fascinating elements of this type of storytelling, but also the most challenging. If on the one hand, so-called serious games are successfully affirmed as the investment in graphics that dress up their content increases, on the other, the ratings of the Netflix production Black Mirror: Bandersnatch, the first example of an interactive film made by a large producer, tell us that there is still a long way to go to perfect this approach. Solutions using AR have, however, shown an enormous potential in this case. But the true challenge for experts in cultural heritage communication resides in immersive storytelling, where the human dream of going back in time on waves of words and images produced by Virtual and Mixed Reality is fulfilled. From digital exhibitions to virtual tours, the immersive experience reconstructs a context where it no longer exists or creates one ex novo as an original cultural vessel. But it is from the perfect combination between excellent cultural content, masterful narration and Hollywood quality 3D computer graphics animations that one gets small immersive VR masterpieces such as Siracusa 3D Reborn, Pompei 3D: una storia sepolta Marta Racconta, Storie Virtuali di Tesori Nascosti and Apud Cannas. Social media storytelling is new, fresh, and has a great impact, the most famous example of which being the successful communication experiment of the "Antonino Salinas" Regional Archaeological Museum in Palermo. The only case of a museum that has been closed for some time and has made itself capable of attracting new audiences thanks to communication and storytelling on social media (Bonacini 2016). But it is in the discussion on participatory storytelling that the great novelty within the phenomenon of digital storytelling emerges so clearly. With the lister becoming the narrator, the learner becoming the teacher, and the museum institution building content and narrative in an equal relationship with its audi-

ence, we find the multivocal nature that is often lacking in other experiments. It is such involvement that makes us understand how much the museums is a community anchor and how much the community is the main stakeholder of the museum. Here the author speaks from direct experience, being the founder and coordinator of the project #izi.TRAVELSicilia since 2016, for the creation of a participatory process of storytelling and crowdsourcing of cultural content throughout Sicily. She has also been the Ambassador for Sicily as part of the participatory content creation program of the national network #Invasioni-Digitali since 2013. The incredible success of these two initiatives in terms of engagement and measurable results is enough to show the extreme importance that participatory storytelling is destined to assume in the panorama of Italian cultural institutions. Less well known but no less relevant are generative storytelling an geo-storytelling, examined below, in which it is possible to experiment with the collaborative design of stories on digital development platforms and create digital stories linked to digital geographies. An evolution of museum native applications into platforms for the distribution of thirdparty content on mobile devices is the scope of the application of multimedia storytelling. Although these platforms are not always strictly oriented towards storytelling, some of them are distinguished by the use of narration to tell difficult and controversial themes, as in the case of the applications of the National Museum of African American History and Culture or the Jewish Holocaust Center of Melbourne. The discussion closes with the presentation of cross-media storytelling and transmedia storytelling which, although they represent a very successful marketing strategy for immortal cinematographic fictions like Star Wars or destined to become immortal (alas) such as the films of the Marvel universe, they have not yet been applied to case studies related to cultural heritage.

Finally, in the **Conclusion**, the author metaphorically embraces the rhap-sodic stick a reveals the most captivating message of this long story. The manifesto outlined in the introduction is made explicit here with a long and rigorous call for a stance and a precise plan of action. With the presentation of her model of museum connectivity, Elisa Bonacini entrusts us with a new and original concept, destined to be discussed and inspire countless conversations, to make us reflect and plan with enthusiasm the next steps of a long journey that will accompany this generation and its successors in the challenge of remembering in the future what museums so far have been able to keep us from forgetting.

Davide Tanasi University of South Florida, USA

Introduction

Over the last few years many scholars have sought to circumscribe and give a singular definition of modern society, which has changed drastically due to the profound and now visceral impact that digital and communication technologies have had and continue to have on it.

These definitions vary according to which aspect is considered a priority and also make it impossible to understand the level of hybridization between once different and clearly divided areas and sectors of daily life, information, culture, interdisciplinary sectors within themselves: it can be seen from the intertwining of Cultural Studies, Economic Studies, Tourism Studies, ICT Studies, and Pedagogical Studies just to cite a few disciplines that are now densely hybridized with one another, to such a degree that they could be defined not as inter– or multi–disciplinary, but clearly trans–disciplinary.

We have talked about the *information society* (when the role that information itself has on society was highlighted), *networked society* (when the characteristics of reticularity and interconnection favored by the web were highlighted, which have radically changed the relations of modern society) and *knowledge society* (when knowledge itself is considered a fundamental element of our own humanity):

So in the last few decades we have branded our society with all kinds of different names — information society, knowledge society, networked society — thus emphasizing the importance that information and communication structures have in our daily lives. [...] The terms "information society", "networked society" or "knowledge society" are political terms that do not have precisely defined meanings. They can mean different things to different people. These terms can imply more information, more communication infrastructure, more profit for the business sector or the emancipation of people in our society. (Uzelac 2008: 7–8)

Again, Ronchi (2009), in defining modern society as an *e*–*society* or *software society*, underlines the preeminence of technology and software, while the media sociologist Manuel Castells, some 20 years ago, described, with a truly prophet–like acumen, today's society as a virtual reality society, in which it was the virtual component that permeates all aspects of it. According to him, we live in the kind of culture that he called «the culture of real virtuality». It is virtual because it is primarily built through electronically based virtual communication processes. It is true (and not imaginary) because it is our fundamental reality, the material basis on which we live our existence, we construct our systems of representation, we practice our work, we connect with other people, we gather information, we provide our opinions, we act in politics and feed our dreams. According to Castells, this is what distinguished culture in the *Information Age*: it is above all through virtuality that we process our creation of meaning (Castells 2001).

Castells really was a prophet: as we will see throughout this work, virtua—lity has impregnated our daily life and, in the cultural field, has given space to new creative forms of communication and cultural enjoyment.

Among the most recent definitions that model society there is also that of the *app society* in which IT applications constitute the link between society and networks of services and their delivery (Longo 2014) and, one must add, guarantee not only the reticularity and uniquity of information, but also the very existence of our digital social relations.

The multiplicity of definitions is certainly an indicator of an unequivocal factor: the profound transfiguration that our society, and with it our culture, has undergone, especially as a result of technological evolution and consequently, of the transformation of information and its channels of transmission, including traditional ones (Mazzoli 2018).

In a contribution aptly titled *Re–thinking Cultural Policies*, ten years ago now, François Matarasso admits: «so profoundly has this new technology transformed our world and our culture that it is hard to remember how things were before the World Wide Web» (Matarasso 2010: 3), exactly because it is now inconceivable to not profoundly rethink culture, both from the point of view of the relationship of users and the relationship with heritage.

Those who deal in the protection, production, cataloguing, archiving, management, and dissemination of any cultural content can no longer consider themselves the mere repository of superior knowledge, nor a simple transmitter of knowledge according to top—down taxonomic hierarchical processes.

This profound rethinking of concerns above all culture. In the same way that the attempt to define our society in light of these profound transformations, the evolution of digitalization in the cultural sector and the impact that this revolution has entailed have led scholars to a new definition of culture as

well, so much so as to identify a real *digital culture* (Alsina 2010) which, by adapting Ronchi's thinking, we can define an *e–culture* or *software culture*, ever more based on the web, software, and apps. As mentioned earlier:

it is not just a shift in communication style, but a revolution in the centrality that communication and information architecture has assumed in our society and, therefore, a transformation of the logic of communication. (translated from Bonacini 2012a: 95)

Perhaps the most revolutionary of all the definitions of modern society is that of *Convergence Culture*, established by Henry Jenkins (2007a), who was able to grasp the element capable of bringing together traditional and digital media in the *digital revolution*: transmedia and bottom—up content production, digital platforms and mobile devices, through continuous levels of connection, this creating trans—media narrative forms that intersect each other with different narrative flows and through different media.

In the addendum of the Italian edition of his volume (2007a: 318–324) Jenkins summarizes the characteristics of the contemporary media landscape, which is still extremely valid: it is *innovative*, *convergent*, *quotidian*, *inte-ractive*, *participatory*, *global*, *generational* and, finally *unequal* (due to the obvious digital divide that in many cases is still insuperable). Thanks to the digital revolution according to Jenkins, a new era full of "promises" (such as *active citizenship*, *conscious consumption*, *widespread creativity*, *collective intelligences*, *shared knowledge* and *free exchange of knowledge*) was inaugurated, which the scholar defined as the *Participatory Age*. Many years on, these promises can be considered kept, at least in part, when one evaluates the participatory processes that are by now difficult to reverse (Bollo 2018: 324).

At the basis of everything there is, in fact, that which the scholar defines as a *convergence*, as the flow of content on multiple platforms, the cooperation between various sectors of industry and media and the migration of the public towards the continuous search for new entertainment experiences (Jenkins 2007a: xxv).

In the cultural revolution in which the computer has quickly transformed from a computing machine, dedicated to support office activities by mechanically storing data, to a single remote communication and interaction device, combining functions of other media within itself, to the point of becoming a telephone, television, journalistic platform, etc., Lee Manovich (2011) already distinguished specific actions that computers could guarantee in the cultural sphere: *creation*, *distribution*, *reception* and *sharing*, mediated by suitable software applications or tools. Today, we can certainly add a fifth action in the cultural sphere: the *reworking of digital content*, which can be done for almost

any format. And, as we will see, all these actions are further implemented by the hybridization that occurs between producers and consumers of digital content, so much so to be able to speak of a *pro–activity* and a *co–operativity* along the whole spectrum of life of cultural content. In many cases, there is even the risk of not being able to distinguish between an original cultural product from that which has passed through many hands. We will see that there is now software and digital tools that are so intuitive and accessible that anyone could easily create, share and disseminate digital cultural artifacts that contains representations, ideas, and aesthetic values. These actions, which are often unconsciously performed every day, allow us and other not only to live interactive cultural experiences, but also to create and disseminate information and knowledge, thus benefitting the dematerialization and decentralization of culture favorable to transformation of models, languages, and the construction of translocations (meaning "*transluoghi*", a definition translated from Ragone 2016).

For some time now, the Internet and new information technologies have provided cultural institutions with the opportunity to supply the ever increasing and precise demand for cultural heritage (Lippincott 2011).

Specifically, they have offered to museums the opportunity to finally be considered in the context of cultural consumption, as an interesting or more interesting alternative that others (Frey, Meier 2006) in today's (local and global) knowledge markets. This market and the consequent consumer choices, are based on criteria of *quality*, *quantity* and *accessibility* (Bonacini 2011a: 150) and on their convergence, since the consumer themselves have acquired the aptitude do always seek new information, cross borders, and activate connections between different media, actively participating in their dissemination and processes of *collective intelligence* (Jenkins 2007a: xxv–xxvi).

The evolution of new technologies has, consequently, profoundly changed the relationship of the public with culture, especially with museums and their collections. One can think to, for example, the role that Google has acquired, not only in daily life, but also in the sector of cultural enhancement and dissemination, with its numerous virtual and interactive projects, such as *Art Project* and *World Wonders Project*, launched in 2011 (Bonacini 2013; 2014a) and then definitely merged into the portal of the *Google Cultural Institute* which became *Google Arts & Culture*¹, in the *Explore with Street View* section (Bonacini 2017a).

Despite the great distrust shown at first, today Google's Arts & Culture portal has become a globally democratic access point for interacting with places and art digitized by Google all over the world. In addition to the traditional 360° walks in Street View, one can experience here visits and interactive

knowledge of various kinds: with the *Explore in High definition*, *Art Zoom*, *Art up Close* sections you can learn more about works of art and zoom into them (an evolution of the Google Art Project); in the *Explore by Color* section you can analyze paintings from Impressionism to Van Gogh; in the *Explore by Time* section you can browse the high resolution images of the world's collections organized in a timeline; in *Explore by Artist* you can do an alphabetical search of works of art with the name of the artists, accessing content digitized by Google in various collections around the world; in *Explore in 3D* you can consult the three–dimensional models of objects and buildings; in *Explore in Virtual reality* only some immersive experiences can still be done (as in the painting *The Fall with the rebel angels* by Bruegel); in *Explore the Collection* you can enter, in alphabetical order or from an interactive map, all the museums, galleries and cultural institutions participating in cultural projects with Google since the days of the Art Project.

Google's results, which consist of building a freely accessible global art collection, must definitively show how it is inconceivable today not to "take advantage" of even a private giant like Google to acquire, enhance, share, and disseminate their collection, considering how completely obsolescent the "attitude", unfortunately still very present at the decision—making and management levels, of "interpreting the future and the meaning of ceding to Google" (translated from Colombo 2020: 83). As we have been arguing for some time (Bonacini 2013; 2014a), the public interest, in a cultural democratization operation such as the one conducted by Google for over fifteen years (if we consider the first real cultural democratization project to be Google Books, launched in 2004), must appear superior to any private interest (often, as Maria Elena Colombo has admitted, are masked by principles of defending copyright) so that no doubt should arise anymore whether it is advisable or not to join such initiatives, which are capable of providing enormous visibility to human cultural heritage, which must be considered common and shared.

On the other hand, the museum has not only changed its mode of communication from «linear and didactic to informative, persuasive and educational» (translated from Gabellone 2020: 125), but has also activated a process of transformation that we cannot consider complete, from taxonomic, hierarchical and self–referential structure to a *participatory museum* (Simon 2010). With this transformation taking place, the museum aims on the one hand to establish a long–lasting relationship with visitors through audience development and audience engagement (Bollo 2016), and on the other to modify its role in society, evolving from «a medium that contains society, to a medium in and of itself» (translated from Mazzoli 2018: 26), able to activate forms of transmedia communication, from traditional to digital media, even through serious games, which are considered among the most promising trends in the

sector (Paliokas, Sylaiou 2016). As we will see, it has been definitively institutionalized among Italian museums production (Lampis 2018a; Orsini, Lampis 2019: 45).

Finally the debate on the forms of relations that can and must be established today between museums and digital environments, museums and the user, and museums' relation to both has intensified in Italy as well, with an eye towards both a modern and attractive educational purpose (Luigini, Panciroli 2018b), and towards developing adequate forms of audience development and audience engagement that guarantee an increase in cultural participation (Bollo 2016; Ducci, Marino, Raimondi 2018; Romi, Cerato 2018). Thus, museums seek to establish connections with different audiences «whose conquest will contribute to the process of democratization of culture conceived as a means to or a possibility of social growth» (translated from Spatafora 2018: 159).

But what do we mean by "audience development" and "audience engagement"? Alessandro Bollo, always committed to the correct definitions of these issues, identifies in audience engagement a specific and ever more important aspect of audience development, so much so that it develops into its own branch. Audience development is interpreted according to its objectives and its recipients as a strategy of "expanding the public", "strengthening relations" and "diversifying the public, and therefore:

if audience development concerns the strategic dimension, the vision and the objectives that an organization sets for itself with respect to its current and potential audiences and the type of participation it intends to stimulate and the impacts it aims to produce, audience engagement concerns the way in which the methods of engagement and participation are designed and implemented, aimed at improving the understanding, satisfaction, and growth of the people involved in the artistic and cultural experience. (translated from Bollo 2018: 325)

Even in the cultural sector — and it could not have gone otherwise in the era of *Convergence Culture* and the *Participatory Age* — a great impulse towards change has occurred from below with bottom—up processes thanks to the contribution and the push from evermore numerous groups of individuals within society, whether they are bloggers, Instagrammers, digital content providers, or simple web, mobile and culture enthusiasts. Initiatives on a national scale like the civic engagement program #*InvasioniDigitali* (which we will discuss more in depth in section 3.9), or on an international scale such as #*MuseumWeek* (Ryst 2014; Romi, Cerato 2018: 430–437), have paved the way in for a new approach to communicating culture: a pro–active, participatory and co–creative approach. Some of the more important initiatives of recent years are proof of this, such as the *Museum Dià* series of international conferences on museo—