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Digital curatorship.

The origin of a new curatorial practice
and its alternative approach to
audience engagement.

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To the brightest Lighthouse

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ABSTRACT

This thesis aspired at demonstrating whether ***digital curatorship*** can nowadays be considered an effective practice to engage the audience. In fact, as the closures in 2020 due to the Covid-19 pandemic demonstrated, only the curators and, generally, art organisations that were prepared in terms of digitalisation were able to continue working and disseminating knowledge about art and culture despite the strict norms required to limit the spread of the virus.

Specifically, this qualitative research began by briefly outlining the origin of curatorship, its history, and developments, and thenceforth called particular attention to the emerging profession of the ***digital curator***, examining some digital event and media curation case studies. Moreover, it compared some European museums' digital policy, discussing how differently they invest in new technologies. Additionally, the thesis included five qualitative semi-structured interviews with digital and white-cube curators, enquiring them about how digitalism is perceived and used in their practice.

The research attempted to answer the following question: *can digital curatorship be considered an alternative to the traditional practice in order to maximise the engagement and the experience of the audience?* The study revealed that the employment of digital tools has gradually reduced the limitations offered by physical spaces such as galleries and museums, helping curators reach a broader audience and introduce new ways to engage it with.

INTRODUCTION

These last two years of Covid-19 pandemic forced us to rethink the importance of digital technologies in the artistic world. It was indeed the strategic use of such technologies that allowed farsighted curators and digitally developed institutions to continue their work despite the severe obligations to close their doors to visitors in 2020. As the *ArtNewspaper* (Sharpe and da Silva, 2021) highlighted in its report on the closures and the number of visits of 100 of the world's most visited museums in 2020, visitors' attendance dropped by 77%, meaning that if in 2019 the museums counted 230million visits, in 2020 these were only 54million. In this scenery, institutions had to find an alternative to tackle this situation and found it in "the digital" (Pirrelli, 2020).

In a time when I missed being able to go to museums and art galleries without any restriction or obligation, I began to explore all those existing ways that an art passionate or observer can find to consume art either when s/he cannot physically reach the artworks or when these are in their digital format. Precisely, the work explores all the facets and modalities of *digital curatorship*, on the one hand attempting at giving a detailed overview of this practice, since there are few sources on this topic, on the other analysing its engaging potential. It is, indeed, my aim to demonstrate whether this practice of curatorship can add value to the audience experience, engaging it more and reaching a broader one.

The thesis is divided into four chapters. The first one studies the origin of curatorship, outlining a brief history of its most relevant stages. Curatorship as we know it today originated during the twentieth century, when the curation of artefacts started to be managed by those who acted as cultural mediators, rather than displayers of art (Bourdieu, 1984; Heinich, 2012), but there is a long history behind it. To understand how the early stages of curatorship developed, I referred to some scholarship on the origin of curatorship (Balzer, 2014) and galleries (Impey and MacGregor, 1985; Ambrose and Paine, 2006). In the chapter, one finds the history of curatorship since the etymology of its term, which is rooted in Ancient Rome, and the first forms of curation that existed between the fifteenth and eighteenth centuries.

An important part is dedicated to the nineteenth century, the period when the very first type of independent and institutional curation began. On the one hand, this happened as a result of the rebellion of some artists to the exhibitions of the Royal

Academies of Art in France and England, like in the case of Gustav Courbet and James Turner, “artists-curators”, on the other as a result of the proliferation of museums in Europe that soon required the hiring of expert employees. These two early curational attempts favoured the birth of the role that, in the 1900s, has been defined “museum curator” and “independent curator”. Digging into the explanation of modern curatorship, mentioning those key exhibitions and personas like Alfred H. Barr, Harald Szeemann, and Hans U. Obrist that shaped the curatorial practice between the 1930s and the 1990s, the first chapter lays the basis for discussing what thenceforth led to digital curatorship.

The second part of the chapter draws a chronological trajectory which explains how the digital entered the artistic field, firstly for scientific purposes with the creation of the first computing machines in the 1950s and secondly opening to the research of artists and curators a decade later (Ghidini, 2019). Henceforth, arguing the diverse ways artists and curators implemented to experiment with digital technologies, following Christiane Paul’s example (2019), I discuss Digital Art in its two separate phases: Computer Art (the 1960s-1970s) and Internet Art (1980s-2000s). Presenting early examples of digital curatorship and describing its most relevant stages throughout the years makes it clear that digital curation - already with the Web 1.0 (in the field of Internet Art), and especially with the advent of the Web 2.0), allowed the audience to actively participate in the artistic and curatorial discourses. The last part of the first chapter focuses on how the audience became a co-protagonist in these discussions, as soon as curation became more interactive, based on knowledge sharing and collaboration (Cook and Graham, 2010).

The second chapter explores who the *digital curator* is, since there is a great deal of confusion on the matter. This expert is often believed to “only” work as a content curator, a figure that is in turn wrongly mistaken for the social media manager, but its profession includes, instead, a wholly distinct set of duties and contexts that this type of curators should master to curate artefacts in their digital form. When speaking of digital curators, we mainly refer to two types of curations: digital events and digital media curation. The chapter first describes the digital event curation, studying the specificities of the environment where the exhibitions of New Media Art take place (Connor, 2020; 2021), after that, it presents the Virginia Bianchi Gallery, the first and only New Media

online gallery in Italy, particularly focusing on the mediation role of the curator, Virginia Bianchi, and the tools she and the artists she works with used to engage the audience with in the exhibition *Subterranean Virtualscapes*. I go on describing the origin and developments of digital media curation and the advantages for museums to have their collections digitised (NEMO, 2020). Digitising a museum and, generally, an exhibition, is fundamental for curators and institutions that want to approach a broader audience and offer it new means to consume visual art. Like for the digital event curation, the analysis of this specific practice as well includes some case studies to observe their success in involving the audience. What these demonstrate is the profound link between engagement, interaction, and the emotions of the audience (Smith and Campbell, 2015; Tyng, Amin, Saad, Malik, 2017).

The third chapter analyses the digital policy and strategy of some of the most visited museums in Europe, arguing whether their digital offer provides the audience with a valid alternative to an in-presence visit. It observes how differently these institutions invest in new technologies and, in general, on "the digital" and suggests how the countries where these institutions are located are digitally equipped. Comparing the policy of the Städel, the Rijksmuseum, the Galleria Nazionale d'Arte Moderna e Contemporanea, the MAXXI, and the Museu Nacional d'Art de Catalunya, I explain which are the most advantageous tools for engaging the audience and include the broadest typology of visitors, not discriminating any. This analysis proves that one factor that all these museums have in common is a certain "digital interest", which, however, mostly means having a social media presence. Nevertheless, the study and comparison of their strategies reveal that curating exclusively the social media platforms is not sufficient *per se* to effectively engage the audience and, on the contrary, limits all the other possibilities of digital curation that are discussed throughout this thesis.

Lastly, the fourth chapter comments on the answers of five Italian curators I interviewed about whether they think that using digital technologies can improve their curatorship – and how – and if they think these can increase the involvement of the audience and add value to the experience they want to offer. Although being different for background, working experience and type of curation, the interviews with the curators demonstrate that there are essentially four aspects that find them in

agreement and these are discussed in the conclusive part of the chapter, after the results and comments.

Thus, this research aims at, on the one hand, theoretically covering the ground of curating "the digital", proposing a chronological trajectory of its origin and development (particularly focusing on the practice after the rise of Web 2.0 that established interaction as a necessary requisite for Digital Art), on the other, at practically and not only intuitively demonstrating how it has become a curatorial work that the audience seeks in its visit precisely for its great engaging potential.

METHODOLOGY

The objective of the research is understanding whether digital curatorship can nowadays be considered a valid practice to increase the engagement of the audience of museums and art galleries. To achieve this purpose, it was necessary to rely both on the collection of external secondary data, mostly for the first chapter, and of primary data to discuss the following ones. In the second and third chapters, my work presents the empirical analysis of some case studies that, together with the interviews to curators discussed in chapter 4, prove that the curatorial efforts to use digital technologies in curating the collections of the museums or events can indeed increase the engagement of the audience.

Documents were researched both in physical libraries (BAUM - Biblioteca di Area Umanistica, Biblioteca Civica Attilio Hortis), online libraries (JSTOR, Open Library), online magazines, and online databases (OPAC, CerCa', Taylor & Francis Online, Academia.edu, Google Scholar, ResearchGate) and, additionally, I referred to the texts provided for the academic courses of Sociology of Art Consumption and Curatorship.

Since the practice of curating the digital, meaning both the digital copy of a physical artwork and the curation of Web-based artworks, is still developing, there were few resources available for consultation, and the best method I had was conducting an empirical research. In fact, besides the case studies proposed, I also interviewed three digital curators to find answers I could not find anywhere else. Virginia Bianchi, Chiara Gesualdo, and Maria Chiara Iacona helped me comprehend their professions as digital event curator and digital media curator, their activities as Web gallerists (that is thoughtfully a wide term), and the dissimilarities between them.

Afterwards, I interviewed them about the research question of this thesis together with the other two curators that were, on the contrary, “white-cube” independent curators. All the interviews were semi-structured and took place online, because of the different places where curators were at the time when they occurred and the work commitments of the curators. The conversations took place either via email, in the case of Gesualdo and Iacona, or by means of a Skype video call with Bianchi, Cantori, and Mazzolini.

1. CURATING: A HISTORICAL OVERVIEW

The practice of curation has a long history; just think of when archaeologists set up the very first museum, in 530 B. CE., and who is said to have been its first curator, the Mesopotamian princess Ennigaldi-Nanna (Anonymous, n.d.). One could simplify it by saying that curation started as soon as humans began thinking and, consequently, curating their minds and surroundings. Nevertheless, there is not a real history of curatorship since curating as a profession is recent and there are not even many sources regarding this practice since the first anthologies on it began spreading by the end of the twentieth century.

As this thesis focuses on digital curatorship, this chapter attempts to create an outline of the events and historical figures that led to the creation of curatorship and to the following, simple, modern definition of "curator":

> a person whose job is to be in charge of the objects or works of art in a museum or an art gallery;
>
> a person who uses their knowledge to select and present information or items such as pictures, video, music, etc. for people to use and enjoy, especially on the Internet. (Hornby, 1995)

Following the example of David Levi Strauss in studying the profession of the "curator", I might start from its etymology. The term, indeed, has an ancient origin. It derives from the Latin word *curare*, which meant both healing and taking care of something. In ancient Rome, *curatores* were employees of the State: their job concerned overseeing road networks or being guardians of minors. In any case, during Roman Empire, the "curator" was the person who conducted monitoring because asked to, therefore it was not an autonomous occupation. Afterwards, throughout the Middle Ages, the word changed its meaning, acquiring a religious aura. The medieval *curatus* was a priest devoted to the cure of souls and, even in that case, *curati* were at the service of someone, serving for a higher purpose. For what regards the term, only after the Renaissance the definition loses this religious sphere, putting it aside.

As Anthony Gardner argues, it was mainly during the English Restoration that the word "curator" obtained a scholastic and artistic dimension, hence partial autonomy (in

Balzer, 2014). In this period, experts on specific matters, maintained certain independence although being at the service of institutions. Just think of Robert Hooke, the curator of experiments of the Royal Society of London, who carried out weekly experiments, having free access to the Cabinet of the Society whose objects and instruments were used, explained, and promoted by the works of the scientists. Hooke was, in a sense, a curator even in modern terms as he organised the "exhibition" of his experiments, showing the collection of the Royal Society even outside, being a "mediator" between members of the society and that inaccessible storehouse.

Conversely, during Renaissance, collections were kept private in galleries, at this point greatly popular, and in what were called *studioli* in Italian or *Wunderkammern* in German, that is "cabinet of curiosities" (Impey and MacGregor, 1985). Even the Royal Society Cabinet was compared to a *Wunderkammer* as it collected all those items which affected the "evaluation of curiosity" (Fontes da Costa, 2002). This private gallery was the ancestor of the modern museum while the ones managing it could be considered as the precursors of today's curators (Balzer, 2014). *Wunderkammern* were created to collect different items, from archaeologist findings to musical instruments, books, and paintings and their purpose was either to exhibit the wealth of the collector/owner or his power, thus having a political aim. In those cabinets, to sum up, the "curator" was no one else than a servant for their owners and collections.

Further development in the matter of exhibitions and curatorship can be observed in the eighteenth century. It was not until then that some galleries changed both the display of the items collected within them and the audience that could access their view (Ambrose and Paine, 2006). Indeed, a first transformation was achieved when Johann Wilhelm II von Der Pfalz erected a building next to his Düsseldorf Residence which became one of the first "art galleries" ever built in Europe. During his principality, his artistic repertoire filled the entire space of the building, floor-to-ceiling - as it continued to be the custom until the mid-nineteenth century – to expose his power and, so, to emphasize his high rank (fig.1) (Gaehtgens & Marchesano, 2011). It was then in 1756 that his successor, his niece Carl Theodor, hired an architect as a director of the family gallery: Lambert Krahe replaced the existing, chaotic display with a more

symmetrical organisation, encouraging viewers to make comparisons between paintings (fig.2).

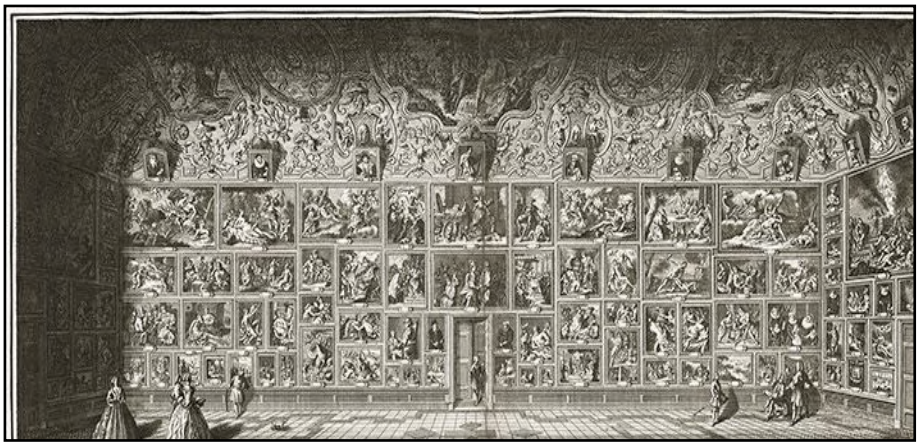

Fig. 1 View of a Room at Pommersfelden Palace, Johan Greog Pintz, 1728.

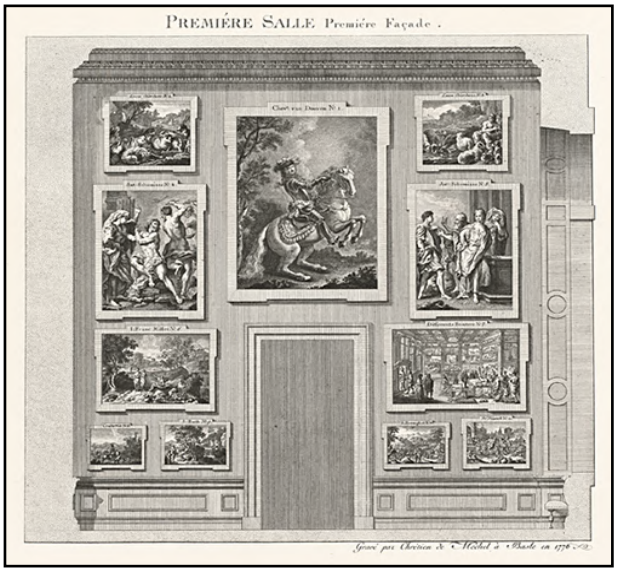

Fig. 2 La galerie électorale du Dusseldorff, Nicolas de Pigage and Christian von Mechel, Basel, 1778.

Therefore, what this architect did can be roughly seen as similar to what a museum curator does: he selected, organised, and told a story to the viewers. Afterwards, another improvement was obtained by Granduke Pietro Leopoldo Ausburgo-Lorena who opened, in 1769, the Uffizi Galleries to the public, followed by others such as the family gallery of Landgrave Frederick II of Hesse-Kassel which was transformed into a museum in 1775 and counted «260 noble and bourgeois tourists, connoisseurs, and

artists each year over the roughly three decades after the opening» (Weddigen, 2012, p.181).

Although one could write an entire historical encyclopedia mentioning the events that led to a change in Europe between the eighteenth and nineteenth centuries, what I think it is important to mention to present what have been the origins of curatorship, it is some phases that transformed the audience and the curatorial practices in that period. Indeed, two major events led to the first "democratisation" of the arts: the French Revolution and the Industrial Revolution. On the one hand, the first one led to a profound reorganisation of aristocratic collections, making them accessible to everyone; it was by the end of the eighteenth century that museums such as the Louvre opened and it is talking about 1800s Salons that Crow argues that such events gathered «countless young clerks, merchants, and shop assistants in whom unchanging, tedious daily labour has inevitably extinguished all feeling for beauty» (Crow, 1985, p.19). On the other hand, the Industrial Revolution gave origin to the first international exhibitions, proving that collecting could not remain a matter of private interest but should instead become part of a wider concern linked to political and social changes.

Nevertheless, the curatorial profession was not outlined yet, but surely a peculiar first form of "curatorship" was drafted. Though, before discussing it, it is necessary to clarify the difference between a curator and an artist. The first one is generally known as the person who displays artworks for an exhibition while the artist is the figure who is given the possibility to exhibit objects which have not yet been declared "artworks" (Groys, 2008). Starting from the nineteenth century, those who organised the display of paintings and valuable objects in galleries or museums were considered "curators". Furthermore, this simplistic idea of curatorship does still exist and as mentioned at the beginning of the chapter, it also reflects the most common definition of "curator". According to Groys, indeed, the major difference between curators and artists is that curators, by exhibiting the creations of the artists in a specific context like a museum or an art gallery, can elevate them to a status of "artworks", making them stop being "mere" objects, as for Duchamp *Fountain*. So, what we understand is that, according to the philosopher and art theorist, artists continue making art which, though, still needs a curator (or a context) to be recognised as such. If this mediation did not exist, then everyone could call herself/himself an artist. Only by keeping this simple description in

mind, one can consider the nineteenth century as a keystone of the origin of curating. In fact, in this period some artists began claiming to have more control over their art. Artists, indeed, could show their works on occasions such as the Royal Academy Summer exhibitions or at Paris Salons where, however, there were few possibilities that their art could stand out since there was a myriad of pieces displayed.
For this reason, painters started to mount their exhibitions and erect their galleries, thereby giving origin to the term "artist-curator". Among these, one could recall James Turner, whose first gallery was built in 1804. This building occupied a space next to the house of the painter in London and had room to exhibit at least thirty artworks. After having great success and many wealthy buyers and visitors, the artist even extended the structure, building a new, bigger, gallery measuring 5.8 meters long and 4.5 meters wide (fig.3) (Anonymous, J.M.W. Turner, the Original Artist-Curator, n.d.).

Fig. 3 George Jones Interior of Turner's Gallery, oil on panel, 1852, Courtesy the Ashmolean Museum, Oxford.

Another very famous "artist-curator" was Gustave Courbet that, subsequently to the denial from the jury of the Salon to exhibit his *L'Atelier du peintre*, built his own "Pavilion of Realism". The French painter, on that occasion, mounted his self-promoting exhibition selecting, organizing, and displaying his works.

The 1800s artist-curator is remarkable as it overcame the figure of the "institutional curator" of academic exhibitions, thus facilitating the promotion of events increasingly accessible to the public, enlarging the market and, contributing to mark a step closer to the modern definition of "curatorship". All the artists, the audience, and the States inexorably had to adapt to all those socio-cultural changes that the already mentioned historical events caused, changing also their attitude towards exhibitions and

collections.

Simultaneously, the first half of the nineteenth century was the era of panoramas; a new type of art – the precursor of cinema and the arts of the moving image - that was shown in an exhibition, a "spectacle" really, where large paintings gave visitors the illusion of being inside the picture. This new technique, "spoiled" the audience which was, at that moment, entering into contact with new technologies able to engage them. This new way of visualizing art "fooled" visitors that somehow felt as if they were inside the image. The audience was not only standing in front of a painting and watching it, but, conversely, it was transported into it and, at the same time, the image was capable of evoking strong emotional responses in the public. Nonetheless, when the National Gallery of London opened in 1838, many were dissatisfied and criticized its display as it was still crowded, while they felt the necessity of a new arrangement (Klonk, 2009). The pamphlet written in 1843 by Charles Eastlake expresses this disappointment:

> I need hardly observe that it is not desirable to cover every blank space, at any height, merely for the sake of clothing the walls…Every specimen of art in a national collection should, perhaps, be assumed to be fit to challenge inspection and to be worthy of being well displayed. (Eastlake, 1845, p.7)

Among the figures requesting a new, original display, there were John Ruskin and the architect of the building, William Wilkins. Ruskin was in favour of a display at eye level, for the viewers to admire pictures from the distance they were intended to be looked at, as indeed happened for panoramas which were set at a distance that allowed visitors to perceive the illusion of the 360° image (Helsinger, 1994). Therefore, it was no longer acceptable a display that would deny visitors the "aesthetic distance" foreseen by the painter, as it was for floor-to-ceiling exhibits[1].

[1] Aesthetic distance is a concept theorised by Kantian followers in the early twentieth century but introduced already during the eighteenth century by Charles Baudelaire. Indeed, yet the Symbolist poet argued the relevance of the distance in the observation of a painting in his essay *Salon de 1846*, part of his *Écrits sur l'Art*. In *Salon*, Baudelaire explains that the only way a viewer can understand if a painting is harmonious is to look at it at a distance able to «pour n'en comprendre ni le sujet si les lignes» (Baudelaire, 1846, in CollectionsLitteratura, n.d., p.11).
Nevertheless, the term "aesthetic distance" appeared for the very first time in Edward Bullough's article "Physical Distance as a Factor in art and an Aesthetic Principle" in *British Journal of Psychology*, 1912 (Bullough, 1912). This terminology refers to the relationship between a person (viewer) and an object and, specifically, between a viewer's consciousness and the object's fictitious reality.

Moreover, through the increasing rise of state museums and their significance, “curating” started to be recognised as something similar to a profession rather than a job where curators were «caretakers of those in authority» (Cairns & Birchall, 2013 para. 4). As a matter of fact, in a world where art institutions were increasing in importance, it was necessary to start treasuring curatorial employees, of whom the Museum Association established both the professional ethos and importance in the new museum hierarchy (Cairns & Birchall, 2013).

Eventually, it was in the twentieth century that curatorship laid its foundations. At that moment artists began to explore new concepts of art through a process leading to the reinforcement of the artwork value. Thereupon, artists started experiencing new media and technologies, modifying the concepts of “work of art” and “exhibition” which, indeed, stopped being an ordinary display of artworks and gradually became a participative event (Lopes, 2020). Moreover, during this process, curators gained the responsibility of being cultural mediators. This sociological concept (Bourdieu, 1984), was then extended and studied by other sociologists as Toby Miller, Liz McFall, Dave O’Brien and Natalie Heinich, all focusing on a particular aspect regarding these mediating figures. The latter, specifically, analyses cultural intermediaries regarding contemporary visual art and the so-called “pragmatic sociology”. This field of the sociology of art aims to analytically and empirically describe the relationship between human actions and objects. In explaining this pragmatic approach in art sociology and introducing the importance of cultural mediators, Heinich (2012) presents the example of the readymades of Marcel Duchamp. She denies the reality of his statement “This is Art”, and instead focuses on what the artist truly did: he let others act. Essentially, what the French sociologist argues is that the artist allowed cultural intermediaries to do their work, which he impersonated for his peers, that is, according to her definition: «treating and framing the thing as a work of art, insuring, describing, selling or exhibiting, lighting and commenting on it» (Heinich, 2012, p. 696). In the last century, the figure of the “collection-based curator”, mediating between the valuable object and the outside of the collection that is the public, extended into a wide variety of modalities.

Before discussing those, there is one “museum curator” who was active in that period that is worth mentioning: Alfred Hamilton Barr. Not only the contemporary display and concept of “white cube” are due to him, but also the first blockbuster

exhibition ever, *Vincent Van Gogh* in 1935, and the modern ambition of museums which at that point stopped being looked at as institutions collecting art with no regards to the audience and started being interactive institutes where one could "learn" (Barr, 1986). Barr, the first director of the New York Museum of Modern Art, also created the figure of the "modern curator". He worked closely with artists, letting their art inspire him, and promoted group exhibitions where he used to display different epochs and themes artworks, inviting the visitor to explore the differences and influences between them (Balzer, 2014). Furthermore, Alfred H. Barr was the first one who transformed the museum, at that moment seen as a cemetery - as the following quotation demonstrates - as thrilling as automobiles could be:

> […] cemeteries! Truly identical in their sinister juxtaposition of bodies that do not know each other. Museums: public dormitories where you sleep side by side forever with beings you hate or do not know. Irrational slaughters of painters and sculptors who murder each other in the same museum with blows of line and colour. (Marinetti, 1909)[2]

Among the modalities of curating, the most common by the 1960s were the independent curation and, again, the artist-curation.

It is indeed in that period that Harald Szeemann affirmed himself as an *Ausstellungsmacher*, a maker of exhibitions. He indeed considered himself a maker, rather than a curator, because he acknowledged his role to be a creative one, meaning that exhibitions themselves were the result of an artistic process and, consequently, he was to be considered a key protagonist, an artist. This artist, curator, and art critic, indeed, has been considered by many as Jens Hoffmann to have been the first curator in the modern sense. The curatorial figure promoted by Szeemann differed from the institutional curator as it actively collaborated with artists, it inspired them and shared with them original ideas to set an exhibition worth to be displayed. He encouraged the audience to discover the triggering cause of the work itself, rather than its final output. Namely, Szeemann stimulated the personal reflections of the audience, instead of

[2] Personal translation of this excerpt from the *Manifesto Futurista*: «[…] cimiteri!... Identici, veramente per la sinistra promiscuità di tanti corpi che non si conoscono. Musei: dormitori pubblici in cui si riposa per sempre accanto ad esseri odiati o ignoti! Musei: assurdi macelli di pittori e scultori che vanno trucidandosi ferocemente a colpi di colori e di linee, lungo le pareti contese!».

offering a “simple” visual experience as proposed by the twentieth-century institutional curator.

Now contemplated as a milestone, his exhibition *Live in Your Head: When Attitudes Become Form*, 1969, was the attempt of Szeemann attempt to transform the Bern Kunsthalle, of which he had been the curator until that same year, into an artistic laboratory, thus modifying the exhibition space (Balzer, 2014). During the event, Conceptual and Post-Minimalism artists were asked to adapt to the new space and to interfere with it (Lawrence Weiner for example removed a section of the plaster on a wall) (fig. 4).

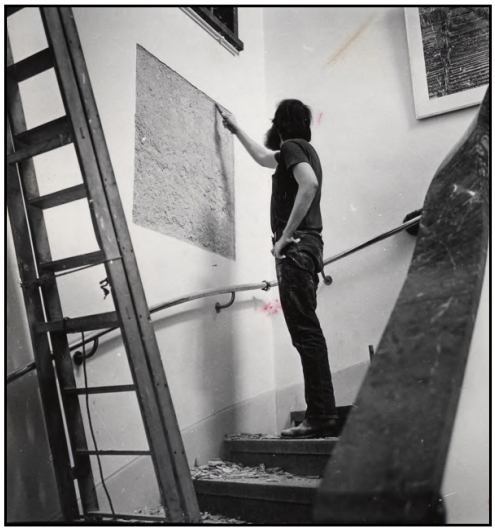

Fig. 4 Photo of *A 36” X36” Removal to the lathing or support wall of plaster or wallboard from a wall*, Lawrence Weiner, 1969.

Moreover, this exhibition was the very first event that Szeemann could organise without any restriction as he had «money and total freedom» (Obrist, 1996, p. 111). Since he started to work at the Kunsthalle, the exiguous budget of the association required him and his colleagues to employ a variety of different strategies to cover the costs of the exhibitions, among which the collaboration with other institutions like the Kunstverein für Nordrhein und Westfalen in Düsseldorf. However, in those same years companies had started to show an inclination in business towards associations for both performing and visual arts, as they saw art as a valid marketing medium. In this context, the Swiss curator was offered to have an international art exhibition sponsored by Philip Morris, the famous tobacco corporation that was emerging as a private sponsor of Avant-garde

exhibitions right in the mid-1960s[3]. This collaboration between the company and the curator marked a crossroads for the funding of artistic activities, at that moment opening to private sponsorships. This economic side of the event brings up another fundamental aspect of modern curatorship: it is vital, for a curator, to be "commercial savvy" and it was in that very epoch that curators began being looked at as managers; thus, requiring them to understand Avant-garde Art as an aesthetic and commercial product (Balzer, 2014).

Although *When Attitudes* achieved remarkable success on the international scale, it was severely criticised by the Swiss press. Due to the criticism of diverse choices made by Szeemann - among them, preferring to feature international artists rather than local figures and to be represented by an American company -, the curator decided to resign from his position at the Kunsthalle and to set himself as an independent curator. This new position, among other things resembling the one of the critic, let curators acquire the power to publicly promote or reject an artist and his work, being looked at with respect and even fear.

Additionally, the emergence of the artist-curator was the result of the increase of the Neo Avant-garde which overcame the Formalism and Modernism of Barr, giving space to Conceptualism where the idea behind a work overpowered the work itself. In this context, curators as interpreters and mediators were necessary.

Moreover, in the last century, curators and artists directly collaborated, making it difficult to distinguish which was the role of the artist and which of the curator. In truth, some curators as Obrist (2008) pointed out how artists began using the gallery space as a canvas for the creation of concepts of the curator or the artist. The best suggestion of this dual figure is given by Paul O'Neill that presented the "artist-curator" as a co-dependent relationship in which both imitate the role of each other (O'Neill, 2007). An example of this co-dependency could be the exhibition *Chambre 763* (1993) curated by Hans Ulrich Obrist, one of Szeemann's "heirs". The event took place at the Hôtel Carlton Place in Paris and consisted of works by seventy artists. It was a semi-secret exposition during whose show, Obrist himself inhabited the room, participating and becoming an

[3] We do not know the origin of this sponsorship: while Szeemann suggested he was the one being approached by Nina Kaiden - Ruder & Finn's Director of Fine Arts - and Jean-Marie Theubet - Philip Morris's representative in Lausanne -, Kaiden affirmed he had been the one searching for their financial support.

“artist-like performer” (Doubtfire & Ranchetti, 2015).

Summarising, besides being the epoch when «exhibitions have become the medium through which most art becomes known» (Ferguson, Greenberg, & Nairne, 1996, p. 2), enhancing the experience of curating, it was the period in which curators, to cite Bourdieu (1986), became “agents” in the production of the artwork, participating in the dynamics of cultural industries (Adorno & Horkheimer, 1998).

During the 1900s, if on the one hand curators wanted art to reach broad audiences, on the other art carried esoteric discourses within it that only an educated audience could understand and appreciate. In short, throughout the twentieth century, there was a conflict between the willingness of curators to reach a “mass audience” (Carrier, 1987), and the exclusive meaning of art which hampered the consumption of contemporary art. This was a century in which innovations and changes were brimming. It was a peculiar era, during which curators had to keep up with dynamics such as globalism and consumerism, fast modifications in the art market, large-scale expositions, and Biennials.

Additionally, the twentieth century saw a lot of modifications also in the way the contemporary art world perceived the figure of curators. Curatorship achieved so much prestige between the 1960s and 1970s that some argue that the history of the art of that period is, indeed, a “history of exhibitions”, rather than being a history of artworks (Derieux, 2007). In this first curatorial age, curators transformed themselves into *connoisseurs*, abandoning the role of collectors. As argued before, in fact, Conceptual Art required to be deciphered and interpreted to be understood and that was the duty of the 1960s-1970s curator. However, by the early 1980s, the art world began being populated by art dealers and critics that, although being professions that existed even in the past, acquired more power and influence, progressively marking their relevance in the context of contemporary art. This happened because it was a time that counted a considerable number of sold artworks, «the highest ever registered before» (Harald Falckenberg in Balzer, p. 67). In this circumstance, the figure of the art merchant and the critic rapidly emerged. As happened in the United States with Clement Greenberg and Abstract Expressionism, it was the critic who had the authority to promote art trends and artists, not the curator.

Furthermore, the 1980s was the period in which "consumer culture" broke out in the United States, giving space to a myriad of magazines, journals, and essays all commenting and discussing on art, both visual and performative. Afterwards, curators gained, again, power and fame, becoming seen as real "stars" in the 1990s. This radical change was made possible by some factors such as the proliferation of successful blockbuster exhibitions, the introduction of advertisers in the art world, the commercialisation of museums, and the renovation of cultural institutions carried out by "starchitects" like Frank Gehry, architect of the famous Guggenheim in Bilbao. All these factors had one common objective that was to amuse and conquer the public. At that moment, curators were regaining their role as agents and mediators and became truly recognised as professionals.

Therefore, by the end of the twentieth century, curators were again indispensable, opening to the epoch that David Balzer named "curationism"[4].

1.1. CURATING BECOMES DIGITAL

As curator Christiane Paul points out (2019), if we walk into any gallery or museum, we find works that have used digital technologies at least once in their production process. These technologies may be videos filmed using digital cameras or edited with post-production software, or computer-designed sculpture, but it has nowadays become so normal for us to encounter media art that we no longer wonder which tools have been used or how they have been employed by the artist.

Nevertheless, during the last century, people were thrilled by this new way of conceiving art, and the twentieth century was the age of experimentations on the digital. It was the time when artistic and curatorial practices took place not only in museums or galleries but on the Internet. Moreover, among the innovations and changes faced by curators in the 1900s, feasibly one of the most overwhelming was the rapid proliferation of new media technologies: televisions, radio, personal computers, and, of all, the World Wide Web.

[4] For David Balzer, who coined the term "curationism", the word refers to the ways of curating in the globalised world (the 1990s) and includes the attempts to win a broad and heterogeneous audience, promoting an often more democratic and inclusive art world.

Specifically, this chapter attempts to identify a trajectory to discuss the evolution of digital art, whose origin is dated between the 1960s and 1970s.

Ever since the 1940s, as the computer was invented, there have been attempts to connect this machine with humans, as it was considered a "mind machine" (Bush, 1945). It was following this thought that Ivan Sutherland projected his "sketchpad", the first graphical user interface, and then developed a head-mounted display. This innovative virtual way of using machines soon appeared in discussions of art and, rapidly, the idea of "computer art" was not that odd. Artists, indeed, have always reflected upon the technologies and tools of their time, therefore they soon started exploring those concepts behind the digital computing (Paul, 2019).

The first attempts to use computers in art works occurred in the 1950s. Then, artists as Ben Laposky or Herbert W. Franke used the new device to create works like *Oscillon 40* (fig.5) or *Grafik P21970* (fig.6) in which they involved the use of oscilloscopes to manipulate the electronic waves appearing on computers screens.

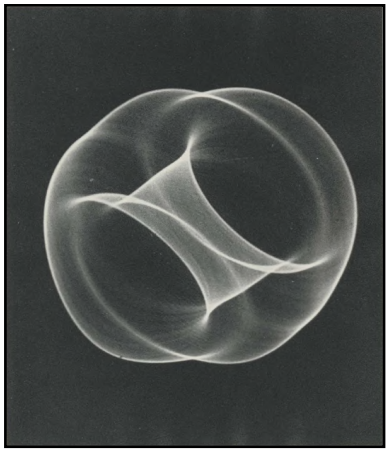

Fig. 5 *Oscillon 40*, Ben F. Laposky, Photograph of analog screen, 1952, Victoria & Albert Museum, London.

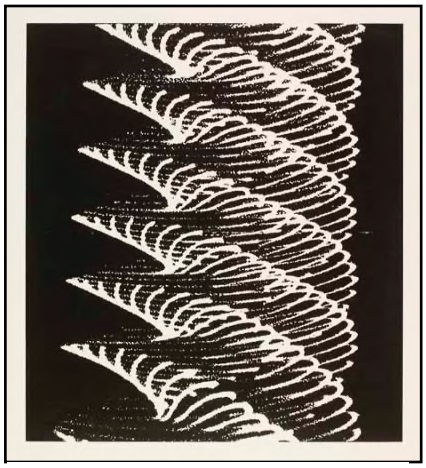

Fig. 6 *Grafik P21970*, Herbert W. Franke, 1955, Victoria & Albert Museum, London.

Still, in the 1950s, we date the first exhibitions on New Media Art: *This is Tomorrow* in 1956, at the Whitechapel Art Gallery in London was one of the very forerunners. It was an artist-curator collaboration of the Independent Group in which the space was used as a white canvas by 38 participants who investigated the new methodology of art creation through media and new curatorial approaches. Afterwards, by the 1960s, artists also learned how to create algorithms and how to develop their programs, through which they were able to experiment with the potential of computers. This was

for instance the case of *Hommage à Paul Klee 13/9/65 Nr.2* by Frieder Nake, realised in 1965.

This artwork, an icon of the revolutionary times of Computer Art, represents his study of the lines created by Klee in *Hauptweg und Nebenwege*, but with a horizontal orientation. For this artwork, Nake used the computer and the pen plotter to draw his version of the work by Klee and was able to explore the relationship between forms (fig.7).

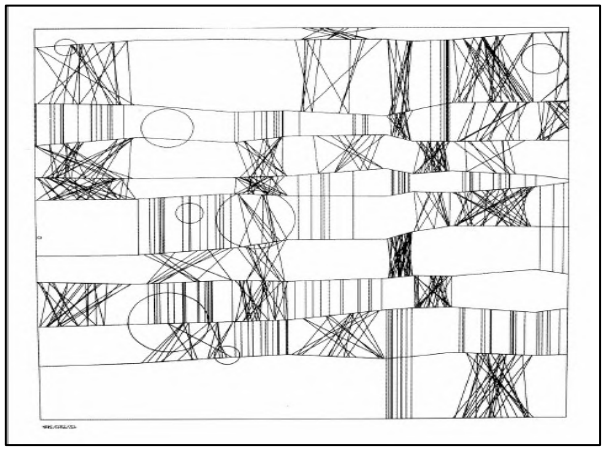

Fig. 7 *Hommage à Paul Klee 13/9/65 Nr.2*, Frieder Nake, screenprint from a plotter drawing, 1965, Victoria & Albert Museum, London.

In the 1960s institutions of all kinds began showing interest in the relationship between art and technology. Among these, the Bell Laboratories, a telecommunications company, supported American computer artists, promoting early pioneers of this trend as Ken Knowlton, Lillian Schwartz, Billy Klüver (Anonymous, n.d.). In 1966, the electrical engineer of Bell Labs, Billy Klüver, launched the first EAT (Experiment in Art and Technology): *9 Evenings: Theatre and Engineering*, a show where ten artists joined thirty engineers and scientists from the same company to host performances using innovative technologies. The American company had also been influential in the development of early computer-generated animations like *Studies in Perception* (fig.8), by Leon Harmon and Ken Knowlton (1997) (Anonymous, n.d.).

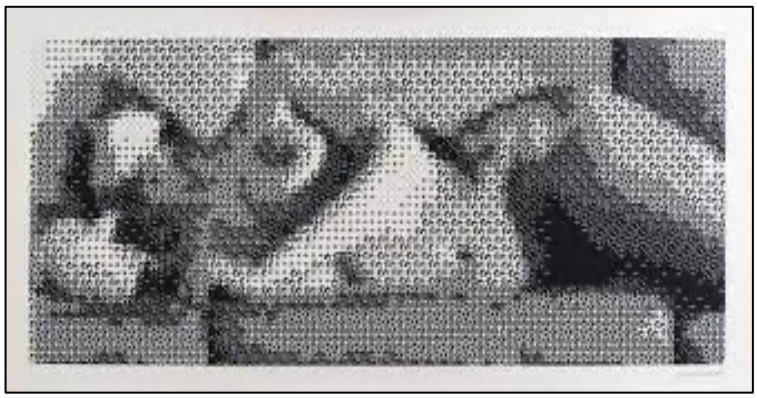

Fig. 8 *Computer Nude* (Studies in Perception I), Leon Harmon, Ken Knowlton, silkscreen print, 1967.

Another institution immersed in studying new media was the Institute of Contemporary Art (ICA) of London whose ground-breaking exhibition was, undoubtedly, *Cybernetic Serendipity*, which took place in 1968 and was curated by Jasia Reichardt. The show analysed the role of the artist as s/he develops her/his designs on cybernetic devices (sensing robots, light and sound environments, plotter graphics), resulting in computer-generated music, graphics, texts, or poems[5].

In the 1970s, artists began using video and satellites and started to experiment with technologies with live performance and networks which anticipated those interactions we are now used to experiencing on the Internet. Among the events of this genre, there was *Documenta 6*, which took place in 1977. On that occasion, Conceptual artists such as Douglas Davis transmitted live performances to more than twenty-five countries through satellite telecasts.

However, exhibitions were not the only places where visitors could find attempts of artistic experimentation with technologies. Conversely, in the 1970s museums started to experiment new media too, as witnessed by Manfred Mohr's *Une Esthétique Programmée*, curated by Pierre Gaudibert, director of Animation-Recherche-Confrontation at the Musée d'Art Modern de la Ville de Paris[6]. Gaudibert was so impressed by the research of Mohr on computer graphics that he invited him to prepare

[5] Nowadays many museums are active in the research of Media Art, as the Whitney Museum of American Art which counts a lengthy list of exhibitions, or the "Electronic or Digital Art Bauhaus", ZKM Center for Art and Media in Germany, Ars Electronica Center (Austria) or the InterCommunication Center (Japan); thus, signifying that media continue forging new ways of making art.

[6] The use of the adjective "programmed" about art dates back to 1962 and it appears for the first time at the exhibition *Arte Programmata* held at Negozio Olivetti in Milan. Specifically, the term is linked to the Italian kinetic Avant-garde and was coined by Bruno Munari and Umberto Eco.

his solo show at the Ville. This was the very first time a one-person show on New Media Art was held in a museum which, in turn, was exhibiting works entirely calculated and created by a digital computer (figs. 9, 10) (Mohr, 2011).

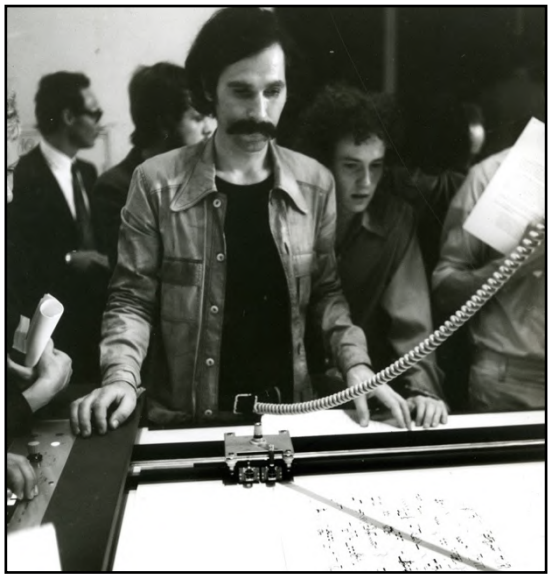

Fig. 9 Manfred Mohr with unknown visitors at the opening of the exhibition on May 11, 1971.

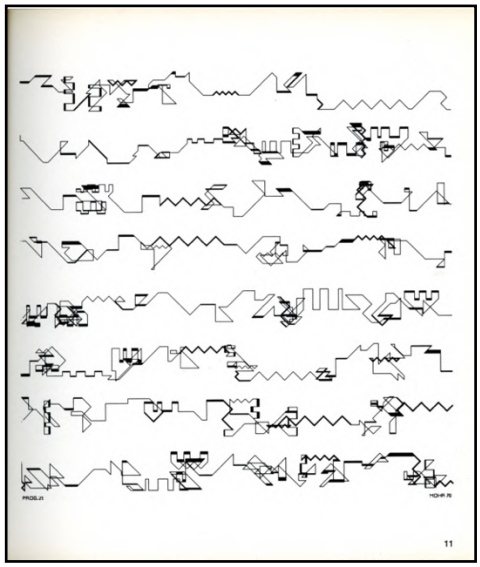

Fig. 10 page of the catalogue of the exhibition

As Christiane Paul wrote (2019), we can distinguish two types of digital art: the one from the 1960s and 1970s and the one which began to exist in the 1980s and endured until the 2000s. The first period included works such as those already mentioned, therefore artworks based on codes which, using pen plotters and computers, would generate algorithmic drawings or films; the second, though, embraced a type of art which was "born digital". This means that from the 1980s onwards, art was created, collected, and distributed via the digital technologies (Paul, 2019). A further differentiation we could make is referring to the 1980s digital art as the first prototype of Internet Art whose characteristic was its being shaped by the Internet.

As I have just stated, art historians and critics define the 1980s as the age which acted as a watershed as it was the time when digital technologies entered everyday life: computers began being employed for personal or business purposes and the Internet started to appear as a bigger opportunity to communicate. In this context, artists originated online environments running as service platforms not only to explore the technology but also to seek that opportunity to share and host online communications.

It was in fact in 1980 that ARTEX (Artists Electronic Exchange System) was created as an «intercontinental, interactive, electronic art-exchange program design for artists and anybody else interested in alternative possibilities of using modern technologies» (Adrian X, 1980). This new way of conceiving online exchanges enabled the creation of many exhibitions as *ELECTRA 1983*, where Roy Ascott chose to use the ARTEX network as an organising instrument and as a textual medium. Indeed, for the *La plissure du texte*, the artist and New Media theorist developed a twelve-day project where the final output resulted in a "planetary fairytale" (Ascott, 1983): fourteen nodes were set up across the world and in each one visitor could add inputs to the story. Therefore, the result was a collaborative asynchronous narrative project that was developed online (fig.11).

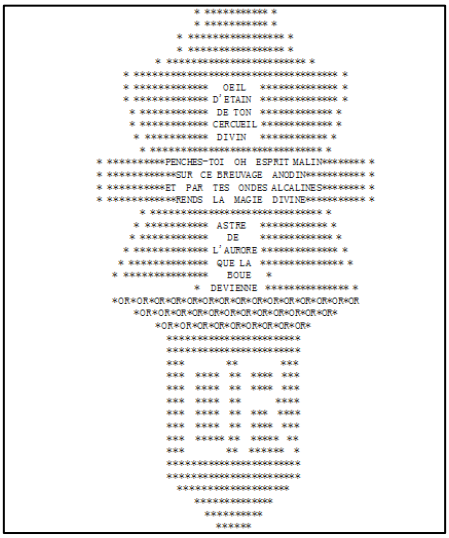

Fig. 11 *La Plissure du texte*, Roy Ascott, 1983.

Another community understanding of the technology was supported by *Cybercafe*, realised by Heath Bunting in 1994, whose aim was to create immediate communication between individuals. Both *La Plissure* and *Cybercafe* promoted a community-oriented conception of the Internet, presenting it as an alternative for art galleries and museums. The purpose of all these online environments was to go behind traditional exhibition spaces, institutions, and roles, by broadening the modes of communicating between the actors involved.

Therefore, these platforms made the curator, or the mediator between the art piece, the public, and the context, less fundamental. Specifically, *La Plissure* did not need the

mediating role of a curator as its ambition was to challenge the audience, presenting a completely new way of using technology, and giving the public the freedom to react as it wished to. As I will argue below, curators were relevant figures also in digital art contexts, but "curationism" is a phenomenon that had not started yet in the 1980s, as it is typical of the 1990s artistic research. Aiming at a different type of audience was *Cybercafe* by Heath Bunting. Indeed, its purpose was to facilitate the sharing of ideas amongst its members – artists, critics, hackers, and technologists – rather than of its public. Indeed, the artist focused not on visitors nor the display of artworks but rather he was interested in discussing digital culture with experts on the matter.

Although these specific projects did not involve curators, their example is worth to be mentioned as it marked an important step towards a more inclusive dialogue on digital art.

Furthermore, due to the technical expertise required to manage new technological means, professional curators were necessary figures to include in the production, promotion, and exploration of digital art. Indeed, between 1993 and 1994, the first Web browser and blog spaces were announced, increasing the so-called "net surfing". This introduced a new generation of artists, defined "Net-Art artists", who explored the Web, its language, and the relationship between the user and the interface. Their research drove curators to promote Web-based Art and to explore the "online" as an exhibition space where the browser would be a user-friendly medium for displaying and realising art. Namely, service platforms became art platforms where it was possible to host a Web-based exhibition while embracing the specificity of the Web. Unlike what had happened with earlier New Media artists, whose research was based on the use of algorithms and codes, or, as for the just mentioned 1980s projects, where artists began exploring the communicative potentials of the digital, "Net artists" focused on the specific use of the Internet for artistic purposes. To better understand this new interest, we might consider some examples. The first curatorial model in that sense was *äda'web*, co-founded by Benjamin Weil and John Borthwick. This platform promoted a series of Web-commissions of site-specific artworks, which also concerned the help of Web programmers as the artists involved were required to be not Web-savvy. Among those commissions, the one realised by Jenny Holzer in *Please Change Beliefs*, 1995 (Ghidini,

2019). The work offered a list of “truisms” which the visitor could choose, then change or replace, thus developing through the interactions of the audience (fig.12).

Fig. 12 *Please Change Beliefs*, Jenny Holzer, static HTML pages, 1995.

The platform also included projects realized by curators themselves, such as *Stir-Fry* by Barbara London: a “travel-log” of her curatorial research in China. Still on *äda’web*, the exhibition *Gesamtkunstwerk* where the meaning of the Website itself was created by the interactions of the viewer. In general, *äda’web* facilitated multidisciplinary collaborations, exploring in a pioneering way the relationship between the online and offline spaces in a way that made them, curatorially speaking, as «complementary spaces that could build onto each other» (Ghidini, 2019, p. 9).

However, since Web technology required technical expertise that not everyone possessed, only a few curators and institutions were able to explore how the Web could be used as a curatorial means. Furthermore, we might mention Gallery 9 in Minneapolis and the DIA Art Foundation in New York. Their purpose was to provide the artists with a new medium and the audience with an “unmediated” experience (Tucker, 2009). Curators Lynne Cook and Sarah Tucker launched the DIA *Web Projects* at the end of the 1990s. On the one hand, they created a conceptual framework to contextualise both the artwork and the practice of the artists, on the other they regained the curatorial mediating role, facilitating the artistic experience of the viewer, which was somehow refused in the previous Net-Art decade because, as we have seen for artistic projects like *Cybercafe*, it was left aside in favour of an anti-institutional approach.

Indeed, as Ghidini argues (2019), until the end of the twentieth century the role of curators was still associated with the idea of art produced and archived in a gallery space

or a museum. In *Documenta X*, 1997, this belief was evident. Catherine David commissioned Simon Lamunière to organise a Net-Art exhibition built both online and offline. From this project, it was evident that curators gave more importance to the offline event (*The Hybrid Workspace*) and how the online one was underestimated. The latter was taken down right after the end of the festival (Anonymous, n.d.).

This lack of understanding of the potentialities of Net-Art was indicative of the unreadiness of curators and institutions to affirm their mediating role. In that situation, it was the artist who carried on generating "media awareness", creating always more Web-based Art. This was the case with *Art.Teleportacia* (fig.13) by Olia Lialina which, still nowadays, offers «on-demand Net-Art works over the Internet» (Lialina, Net Art Generations, 2013), the free Web-hosting service *Geocities* used by Kiran Subbaiah to create a personal Website to test her artistic concepts, to engage an international audience and even to learn by peers (Maithani, 2015).

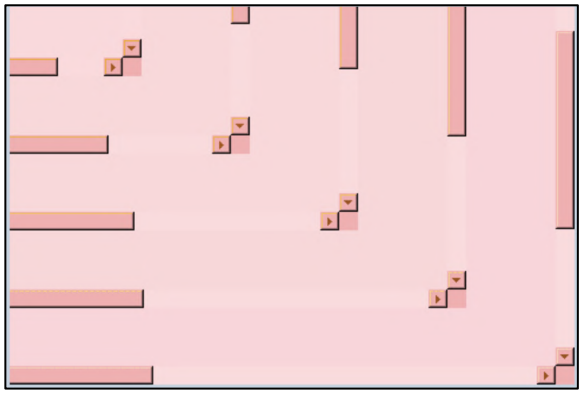

Fig. 13 *False Memories*, Olia Lialina, 640x480 AI (automated) version online, 2020.

In the early 2000s, software companies began to invest in providing services that rapidly turned the Internet into a software development platform. In this way, they increased user-friendly interfaces covering each kind of service, from publishing to broadcasting and social media. Moreover, this new use of the Internet had an impact also on the artistic and curatorial production (Ghidini, 2019). At that moment, many became "prosumers", activating a process of producing and consuming on the Web while creating frameworks of knowledge appropriating cultural materials available online. This scenario generated innovative approaches to Web curating, officially challenging curatorship in the online environment.

As Ghidini appoints, there was a project, *Runme* (2003) which acted as a bridge between the 1990s Net Art and the Web 2.0[7].

> This is a bridge between curating spaces for showcasing Web-based site-specific content, with the Web seen as a technical context made of interfaces and hyperlinks, to experimenting curatorially with already existing services by creating platforms for art that is context responsive, where the Web is understood as a part of a context larger than its technology. (Ghidini, 2019, p. 12)

Since the early 1980s – and mainly during the 1990s– digital curation consisted in displaying New Media works commissioned for purposely built art platforms, as previously discussed. Moreover, the characteristic of these artworks consisted in being "fixed" on the viewing platform: they did not alter in response to the environment. As time passed, curators and artists slowly started to appropriate ready-to-use platforms and to respond to already existing publishing services. *Runme* was then the very first example of this new research. Precisely, it was both a platform that displayed artworks submitted by the artists and a database for Software Art that was, after all, the distinctive form of digital art in the 1990s (fig.14).

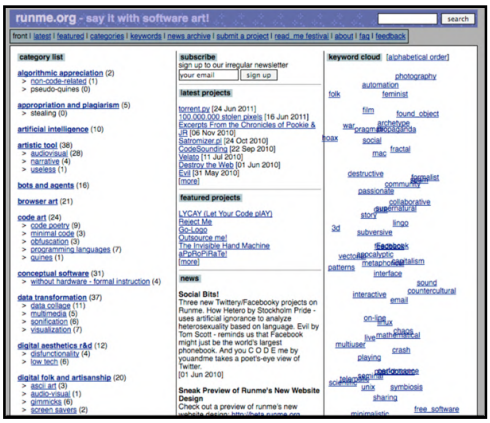

Fig. 14 *Runme*, Screenshot of the index page, 2003.

[7] "Web 2.0" was coined in 1999 by Darcy DiNucci and made famous by Tim O'Reilly and Dale Dougherty in 2004 at the *O'Reilly Media Web 2.0 Conference*. The term is generally used to describe the second phase of development and diffusion of the Internet that especially focused on the interaction between users and Websites. It marked the transformation from static Web pages to dynamic and user-generated content.

Additionally, we must consider the innovations brought by *Runme*. On the one hand, the project promoted an "anti-institutionalised art" and, on the other, it introduced a new manner to categorise artworks. Indeed, it included a way of classifying works that was subversive as it evoked the mechanisms of blogs. As a matter of fact, art pieces were archived based on various features which went beyond software categories – software used, tags and keywords – and that embraced popular keywords written by users and viewers (a wiki modality, principle that will be discussed in the following chapter). So, by providing a model based on the idea of a display growing through artistic interventions made over time and based on a collective and open-source repository, *Runme* gave life to an «art platform in the making» (Goriunova, 2012, p. 71)[8]. For the first time, an exhibition created on the Web was responding to the specificities of the medium and, at the same time, it was reflecting on the productive context enabled by Web technologies, becoming context dependent.

In early 2000, if on the one hand Web exhibitions were emerging, on the other institutions were reducing the number of Web-based productions. Afterwards, this conflicting progress with regards to digital media led to a proliferation of independent curators. This gave them the possibility to explore the opportunities of innovative technologies, triggering some peculiar trends and curatorial research that characterised the mid-2000s, as discussed in the following paragraphs.

Firstly, if *Runme* had been one of the very first attempts to use the mechanisms of blogs, which were right then starting to spread, it was right in the first decade of the 2000s that they acquired a social function, and it was in that period that the very first curatorial efforts in using them was made. Indeed, among the innovations brought by blogs, there was the "comment". This tool was used as an instrument to establish online relationships between bloggers and readers, and it was this particular aspect that artists and curators wanted to implement in their works. On that occasion, in fact, curators began to promote a digital curation that appropriated common uses of Web tools. Projects of this epoch as *Surf Clubs* (2006) or *Loshadka* (2009-2014) were in fact

[8] Goriunova's "art platform" definition follows: «a stand-alone Website that, together with other actors, forms an ecology of aesthetic production, but it might also take place as a subsection of a large platform, or even as a space between a corporate service, artists' work, hacking, collaborative engagement, and a moment of aesthetic fecundity. An art platform engages with a specific current of techno-social creative practices and aims at the amplification of its aesthetic force» (Goriunova, 2012, p. 2)

characterised by an exploration of Internet-generated cultural items, their presence in the online setting and involved a collective and discursive form of curating, where posts and reposts were used as a true curatorial mechanism.

Still in this period, another advancement achieved by the world of Digital Art was the fluidity between online and offline environments, which started to be considered as spheres conceptually related. Moreover, already referring to *Surf Clubs* and *Loshadka*, scholars talk about "Post Internet Art", suggesting the artworks originated after the advent of Web 2.0. Among the definitions of this concept, we find the one given by Jennifer Chan (2012) who defined it as the differentiation from the formalist late-1990s Software Art – or Internet Art, based on codes – and the willingness of artists to exhibit artworks created on the Internet, in galleries. To understand the definition of Chan, we can think of *Loshadka* whose online work was then presented by artists in a physical space. By using various mediums such as videos, prints and films, artists taking part in the project translated their online practice of sharing treasures into an offline area. Furthermore, this fluidity was emphasised in *DUMP.FM,* an exhibition held in 2010 at 319 Scholes and curated by Lindsay Howard, operated as an «image-based chat room for real-time communications» (Howard, 2010).

These projects marked the achievement of art created by community interest that used the patterns of communicating online to blur the boundaries between high and low culture (Ghidini, 2019; Howard, 2010). In the mid-2000s another event marked this blurring: interfaces of the Web began to offer free access to a considerable number of databases of user-generated cultural content. Indeed, the more we dive into the history of twenty-first-century digital art, the more we notice how it was influenced by pop culture and all that user-produced cultural content.

Rapidly curators began to use services such as "social buttons" (the "like") to investigate the limitations intrinsic to new interfaces and, moreover, they criticised some effects caused by the accessibility of the Internet. Among the curatorial attempts of this kind, *CuratingYouTube*, where the platform became a space for anyone to create video assemblages of elements sourced on YouTube and then display them in audio-visual formats. The platform questioned the role of curators in the age of algorithmic services and their use; furthermore, it provided a critique on ready-to-use broadcasting platforms like YouTube that turned, in a sense, anyone into a cultural producer (Ghidini,

2019). Further curatorial projects relying on social platforms were *#0000FF* by George Jacotey (2012-2014) and *Gallery Online* by Ronen Shai and Thomas Cheneseau (2012-2018). The latter gave artists the possibility to generate an exhibition of their work as live performances, interacting with the public in real-time (Shai & Cheneseau, 2012). This was the case of William Wolfgang Wunderbar's *Joyfully Mutating Curiosity* in 2012 which included screenshots, GIFs, and new media art in the form of Facebook images and posts (fig.15).

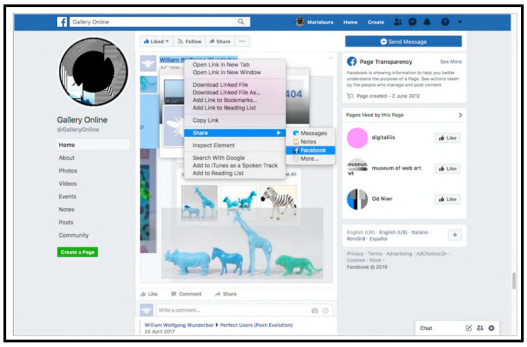

Fig. 15 Gallery Online, *Joyfully mutating curiosity*, William Wolfgang Wunderbar, screenshot, 2012.

Moreover, some curators explored on a new platform, *or-bits.com*, created between 2009 and 2015, online group exhibition and their environment, gallery exhibitions (On Accordance, 2011) and the immateriality of digital art, while others focused more on site-specificity and commission of artworks realised for a Web-based display. Among these last, Nicholas Weist and Lumi Tan curated *Why + Wherefore*, an interface where group exhibitions were housed in pop-up windows (fig.16) and Reinard Storz's *Beam Me Up*, 2010. Storz developed a function to navigate a database that could take the viewer through some guest-curated exhibitions and presented the same event at plug.in gallery to emphasise different settings of Web-based Art (Storz, 2014).

Fig. 16 *Why + Wherefore*, 7 exhibition, screenshot of exhibition page, 2007.

Therefore, one could argue that digital curation saw many changes and developments between the 1980s and the 2000s. It originally focused on the display of Software Art on newly built platforms which explored the potentialities of technology while attempting to host first online communications. Then, the 1990s saw curators investigating the specificity of the Web, the relationship between users and interfaces and how to host Web-based exhibitions (*äda'web*). Afterwards, 2000s curators concentrated on the abolition of boundaries between online and offline environments, besides considering the user and the context as pivotal points of their curatorial projects (*Surf Clubs*). Eventually, the latter examples of exhibitions I mention here represent the attempts of combining the 1990s research on the Web seen as a specific medium with the interest in contextualising Web-Art, browsing behaviours, and curating narratives of the twenty-first century.

Summarising the first mid-2000s, one can argue that this period responded to the artistic and curatorial needs to show that digital art was not only related to the medium employed in its creation process, as it was for early new media artworks, but, instead, it marked the importance of the context in which art was displayed and realised for (Paul, 2009; Ghidini, 2019). Curators in fact proved that digital art could adapt to various platforms – blogs, social media, video sharing platforms or e-commerce Websites –, depending on their functions and audience.

Thereupon, from the mid-2010s onwards, independent curators settled on new exhibition modalities considering the commercial environment in which digital art was developing and still exists. *Art-Micro Patronage* (2011-2012) originated in this perspective, and it was a collective art platform capable of creating an autonomous market where digital art was exhibited in group exhibitions and organised by invited curators and artists. As Ghidini asserts (2019), it was a system of micro-patrons where viewers were encouraged to associate their appreciation of the works with small monetary values. Another project investigating the online marketplace was *#exstrange*, curated by Marialaura Ghidini and artist Rebekah Modrak. By using eBay as a platform to produce, display and distribute artworks, they explored the types of exchanges occurring in an online marketplace in a four-months long exhibition where art pieces were presented as a seven-day auction. These last examples highlight a new curatorial approach to Web-based exhibitions where curators, acting as mediators throughout the

first decade of the 2000s, support and promote distinctive uses of technologies, according to the type of interaction, distribution and behavioural patterns proposed by the software employed.

In short, by offering a historical trajectory of digital art curation, I wanted to demonstrate how the modalities of making, distributing, and experiencing art have changed from the 1940s onwards, specifically from the invention of the first computing machine. Early attempts to use computers for artistic purposes in the 1950s show how inaccessible Computer Art was, on the one hand, because of the expensive nature of the technology of that period and on the other because it required skills and knowledge that not anyone possessed. Then, it was not until the 1960s that artists started to explore more freely New Media Art, arousing the curiosity of event and museum curators who, in fact, began promoting events centred on the use of cybernetic devices and, later, the Internet. Afterwards, as argued earlier, the 1980s deeply influenced digital art as it showed that this could also be distributed via digital technologies. Eventually, from the 1980s onwards, art put more emphasis on the viewer or, digitally speaking, the "user", deeply transforming her/his experience on the Web or in regard to Net Art. So, one could say that, gradually, digital curators and artists have appropriated all the Web tools that could enhance both the production of Web-based artworks and their distribution and consumption without losing sight of the audience.

To conclude, as I tried to show, digital art, its curation and market keep rapidly evolving: since we live in the "Digital Era" there are always more online art galleries (*OnStream Gallery*), auctions (section BID NOW | WATCH LIVE on sothebys.com), digital reproductions of offline exhibitions (*The MET Unframed*) and also events purposely created for the Web; moreover, curators and artists discovered the potentialities of social media not only to attract potential visitors and buyers but also to engage them. Therefore, the following chapter focuses on new methodologies of experiencing art, analysing some interactive curatorial spaces.

1.2. INTERACTIVE CURATION AND PARTICIPATORY EXHIBITIONS

The fundamental difference between the traditional curatorial space and the interactive one is that the second much more reflects a visitor-centred consumption,

allowing audiences to experience the artistic content in a way that goes beyond the "simple" act of watching but that, conversely, becomes experiential learning.

This new interactive trend is due to the specificity of Web 2.0, also called "dynamic Web", which considers not only the usability of the Internet but its social dimension. It represents, indeed, the move towards a more shared, participative, and responsive Web whose content, besides being consumed by users, is managed and created by them. This was possible to achieve through networks and connections where users were given the possibility to put anything online in the form of social media, social networks and social news sites – Wikipedia is the most famous – which all have in common the human interaction that happens within them. The "blog" was indeed a Web 2.0 creation, together with the "wiki", a Website that anyone can edit. On Web 2.0 we post, share, comment and even make friends. In other words: we *connect*.

Among the tools introduced to make the Web more responsive, we can mention AJAX (Asynchronous JavaScript and XML) which is a technique used for making more interactive Web applications via scripting programs. Namely, it is a way to make the Internet easier to use since the user is not required to refresh the Webpage at each "click" s/he makes.

Undoubtedly the developments of the Web 2.0 had their consequences also on its users, bringing many modifications also in the "offline environment" that is people's everyday life. The Web 2.0 in fact affected diverse spheres such as politics, commerce, journalism and many more. An example of "classic" professions reshaped by the Web 2.0 is journalism. First and foremost, less and less people read physical newspaper, favouring e-journals. Moreover, today, journalists must consider some factors which are the result of the inclusivity and responsiveness of the modern Web: news spread faster online and are more accessible. Likewise, multimedia presentations replaced spoken storytelling; thus, requiring reporters to familiarise with videos and images. A further consideration we can make in regard of journalism and the Web 2.0 is that the latter eroded gatekeeping, giving more and more space to amateurs.

Clearly, the Web 2.0 had an impact also on the arts. As Lopes asserts (2020), during the twentieth century the museum curator partly loses his authority in favour of a thought-provoking role, allowing visitors to construct meaning basing on their experience and knowledge. Furthermore, it was right in that period that the audience

changed. It was no more a “passive” public, but, instead, it became a «performative audience» (Bagnall, 2003). This means that visitors began using memories, personal stories, and narratives during their consumption experience, becoming part of the curatorial process. Moreover, as argued by Dr. Sarah Cook and Dr. Beryl Graham in *Rethinking Curating: Art after New Media* (2015), the key concepts – which are discussed further below – of this new curatorial process are *collaboration*, *knowledge sharing* and *experience*, all ideas related to Web 2.0 technologies.

Collaboration is an intrinsic aspect of New Media Art, as it concerns this type of art since the beginning when artists needed to cooperate with computer scientists and technologists to use computers and other high-tech means. Over time, the importance of this action perdured and took different forms. When speaking of 2000s digital art, collaboration not only refers to a group of artists or curators working on the same project, but it also concerns the relationship established between artworks and audience, almost becoming co-creation.

As soon as the Internet entered humans’ everyday life, it became a place where anyone could have a voice. Clearly, this had an output in artistic environments, galleries, and museums, which progressively started to be asked to adjust according to the wants and needs of the audience, seen in terms of participation, collaboration and co-creation. In this context, new ways of communicating information were required. It was no longer a one-way communication but, instead, became a shared-knowledge experience. Nowadays, museums and curators share knowledge through digital tools like social media and Websites; some even apply immersive technologies to their exhibitions, enhancing knowledge-making by providing experiences.

As shown so far, the idea of participation is rooted in modern twentieth-century thinking, moving from independent to collaborative working styles and from institutional decisions to co-created contents. In the following paragraphs, I provide some examples of exhibitions, artworks and, lastly, tools that were realised and used to create an experiential space, aiming to encourage the involvement of visitors and to make it meaningful.

An early attempt to reflect this process was the exhibition *Dominique Gonzalez-Foerster, Pierre Huyghe, Philippe Parreno*, curated by the artists themselves in 1998. The core theme of the event was to rethink the concept of “exhibition”. Indeed, among the

artworks exposed, *Séance de Shadow II (bleu)* by the French artist Dominique Gonzalez-Foerster invited visitors to interact with the environment created by his work. Indeed, this comprised a corridor-like gallery fitted with a blue carpet, matching one of the walls. The interaction consisted of motion detectors connected to bright footlights which illuminated lights corresponding to the movements detected. As a result, a "dance" of shadows was created as visitors walked and "performed". We find a similar output in the work of Takahiro Matsuo *Aquatic Colors*, an example of interactive "artist-curation". This was a system of light installations, evoking the oceanic abyss, where human interactions were strongly encouraged. Like in *Séance*, the contact of the visitors with the architectural space changed the appearance of the whole work. Indeed, by "playing" with the artwork, the public was able to modify the frequency and number of shown jellyfish (figs.17-18).

Fig. 17 Photo of *Séance de Shadow II (bleu*), Dominique Gonzalez-Foerster, 1998.

Fig. 18 *Aquatic Colors*, Takahiro Matsuo, photograph by Anonymous, 2009.

An additional experiential curatorial space was the one created in 2011 in *Radical Camera: New York's Photo League 1936-1951*, by Mason Klein and Catherine Evans. Throughout the event, visitors were encouraged to interact with it by tagging activities that involved hanging printed words that better described pictures from their perspective and question boards on which they had to stick their answers (fig.19) (Evans, 2014).

Fig. 19 Join the Conversation board, Mason Klein and Catherine Evans, *Radical Camera* exhibition, 2011.

Similarly, museums started to include visitors in the conversation by asking their thoughts on exhibitions or general feedback: *I went to MoMA and…* soon became a campaign that let everyone to a compelled share of their experience, creating an intense sense of community (fig.20) (Kueh, 2016).

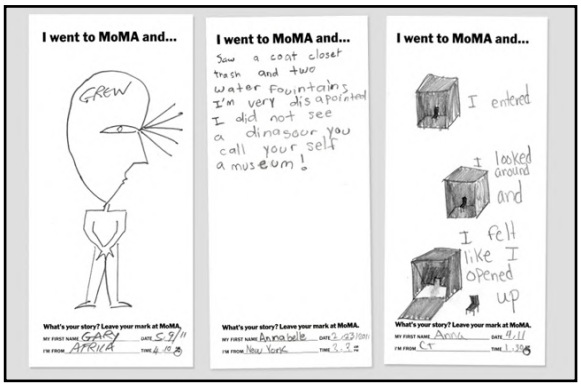

Fig. 20 I went to Moma and..., cards of visitors, 2011.

Moreover, the number of museum curators attempting to provoke the emotional response in the visitor by employing different mediums has begun to increase. Some, as the Museum of Art and Design of New York even focused on the stimulation of the senses: *The Art of the Scent* invited audiences to lean into the wall,

generating the release of a scented stream of air together with the activation of sound pulses and text projections. Not every curator can use smell in his/her exhibitions, but video and sound effects would be an interesting alternative.

Clearly, there are numerous means a curator can implement to connect visitors with artworks and the space (museum or gallery) and, obviously, amongst these we must consider the digital tools. Digital interaction is, indeed, perhaps the most evident today but it has become essential for the audience. For example, having an institutional social network account, besides giving the possibility to discover more about the protagonists of an exhibition (collections, artists, curators…), is also a method to shorten the distance between the public and the institution. Furthermore, social networks not only educate and inform visitors but give them the power of having an active role in the exhibition. In fact, starting from the use of chosen hashtags when posting pictures taken at events, visitors become part of the curatorial process.

Likewise, we consider digital means also digital labels or informative touchscreen tables that are used to complement an exhibit display (fig.21).

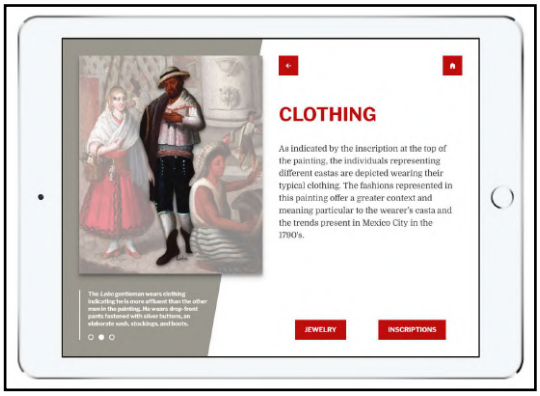

Fig. 21 screenshot of digital labels created by cultureconnect (Aixell Group).

A technology very often employed by art institutions is thenceforth the mobile phone. Indeed, museum visitors are frequently invited to scan QR codes to explore artworks and discover curiosities about them during their visit.

Furthermore, museums have started to build mobile software to engage their audience. This is the case of *The MET Unframed*, an augmented reality application for iPhone and Android devices and of *Meet Vermeer*, the first online retrospective of the artworks of the Dutch Old Master. These programs really give the impression of being inside a museum and are just two of the many existing forms of virtual tours. From the J. Paul

Getty Museum in Los Angeles to the Vatican Museums and the Museu de Arte de São Paulo, viewers of all over the world can experience the physical institution even from their homes. For these tours, as I have just mentioned, there are various platforms other than applications: from interactive 360-degree videos and "walk-around" tours with voiceover descriptions to slideshows with zoomable photos of masterpieces of all over the world.

Curators nowadays have thus a myriad of tools to use at their advantage and, moreover, the benefits of curating an interactive exhibit are many. It is believed that interactive displays can help visitors to retain more information, besides making it easier for the public to be receptive to discovering new curiosities about a cultural item. Moreover, through interactivity, «art gets closer to each individual, and it acquires a meaning that is more personal and therefore resonates longer into each person's memory» (Vermeeren, et al., 2016, p. 3348).

Indeed, allowing audiences to actively participate in the visit makes their consumption more inclusive, valuable, and conscious. Curators, by using additional interactive means in their displays can offer more accessible reading keys, or deciphering codes as Pierre Bourdieu would have called them (1984), to a very heterogeneous public made both either of connoisseurs and "art novices" which nonetheless digital media, so widely diffused and used every day, can make converge. Plus, artists, curators and institutions must keep in mind that the twenty-first-century audience is a digitalised one, so its "digital expectations" should be taken into consideration.

The case studies presented in this thesis analyse distinct types of digital curation which all have interactivity in common. Indeed, this study tries to dig deeper into the research of digital curation as an alternative and yet necessary method to involve audiences. Thus, my aim is to show how digitalism and its application in curatorship are now fundamental to prompt the interest of the audience to make visitors feel the need to consume more art.

In the following chapter, I will describe the figure of the digital curator, its role in the today art world, presenting the different existing modalities of being such a curator in the twenty-first century. Thus, distinguishing the event curator from the museum curator and the figure of the content curator. The analysis of these types of curations will be useful to the reading of the case studies presented.

2. THE DIGITAL CURATOR

In the previous chapter, I outlined the steps that led to the establishment of the "curator" as a profession and the technological and artistic efforts that soon led to what we still nowadays call "digital art", demonstrating how these have been fundamental for discussing online curating. Moreover, the historical trajectory I tried to outline, highlights how necessary the simplification of computer and Web technology had been to make them accessible and usable by others besides technologists and engineers[9]. Indeed, without it, curators and artists would have not begun experimenting with the "online" as an alternative space to host art and its properties, nor they could have broadened the traditional definition of "curator" and, to be precise, that of the "independent curator".

Nevertheless, as the preceding sections considered early curatorial attempts in curating New Media Art, the intention of this part is to demonstrate what it means to curate this type of art and online art in the twenty-first century. Indeed, despite our living in the "Digital Era" and notwithstanding the proliferation of digital professions in the artistic field, there is very little research that explains the work of a digital curator and that, moreover, analyses all its facets. Therefore, this chapter of my research aims at providing a description of the profession of the "digital curator" and all those peculiarities of the online environment and Web-based art that h/she must consider to effectively organise his/her work.

It must be noted that the still emerging profession of the "digital curator" includes a considerable variety of professions within it, so we must distinguish its diverse forms. Referring to the artistic field, one can speak of *online event curation* and *digital media curation*. The first practice, *online event curation*, is a bewildering one. It is often believed to indicate both the curation of exhibitions of New Media and gallery-based – physical – artworks. However, it refers exclusively to the curation of New Media Art and, plus, is a form of "independent curation". The curation of physical artworks online is instead what the *digital media curator* does, and it is usually considered to be a form of

[9] The term "Web technology" refers to all those applications that are Web-based.

institutional curation[10,11]. In fact, as stressed in an interview with Nicolette Mandarano – art historian and digital media curator of the Gallerie Nazionali d'Arte Antica at Palazzo Barberini and Galleria Corsini in Rome – this profession is specifically linked to the museum context (Broccoletti, 2020). Indeed, digital media curation entails the management of contents on the social media page of a museum, the administration of the online collection of an institute and its Website and, lastly, all those museum-related events that happen in the digital environment.

So, with regards to digital curation, there is not a structured and single definition. On the contrary, this type of curation is a wide field open to interpretation which involves a multiplicity of practices. In general, we could argue that this career differentiates from the traditional independent and institutional curation for the knowledge required to the digital curator in areas surrounding new media technology: Websites, mobile applications, interactive strategies, informatic systems, conceptual digital display screens etc.

In the interest of offering a clear description of who is the "digital curator", this chapter will firstly analyse the online event curation and secondly, it will explore the wider concept of digital media curation, describing what it is curating online for a museum. Thus, the second part will discuss the centrality of digitising a museum – I will discuss the reasons why it is considered fundamental for a museum to be online – and lastly, it will present the skills requested for this kind of profession.

Each section will be then followed by case studies, used as evidence of how differently the audience can be engaged by digital curatorial projects.

2. 1. ONLINE EVENT CURATION

For the purpose of understanding online event curation, it is necessary to explore those specificities of the Internet that a digital event curator encounters in his/her daily

[10] Note that the media curator does exist in the gallery context, but it is a figure more commonly hired in museums.

[11] It must also be noted that the terminology "online artwork" is not aimlessly used as a synonym for Net-Art or New Media art. On the contrary, there is a sharp difference between these concepts. Net-Art, in fact, was – and still is – a widespread term used to distinguish works that were purposely created for the Internet by artists who know how to use Internet's properties. New Media art, instead, is a term which encompasses art forms that are produced, modified, and transmitted by means of new media. Conversely, "online art" refers to those works of art created by artists who "simply" use the Internet for publication or other purposes (Cramer in Connor, 2015).

practice. Amongst the most obvious characteristics, we can argue that an online exhibition is no longer a "walkable" and spatially bound event, but turns out to be a globally accessible experience, not necessarily limited in time:

> there's no need to remove an art project from your gallery by a certain date because there's another one waiting for its turn—there's enough room for everyone. Moreover, you can keep updating and changing an online exhibition for as long as you like.
> (Lialina, 2017, para. 60)

This gives the audience the possibility to look at the exhibitions from any part of the world, anytime it wishes to, whilst for the curator, it means to create a valid digital archive and to develop certain preservation expertise.

In addition, curators should reflect on the specific materiality or, more precisely, the immateriality of the artworks they present. Indeed, the uniqueness of art pieces they exhibit in the digital environment is that they are flat images that require to be "staged" for the extended view. A key characteristic of digital artworks is, in fact, that they are not physical objects, as one could define for example a painting displayed in a traditional physical exhibit, but, instead, they are the performance of their "objecthood" (Connor, 2020). As a matter of fact, their consumption begins only when they are endorsed in hardware, software or involve the use of external Websites (Manovich, 2001). Hence, the artworks will appear to be one with these mediums and their contexts. Namely, their appearance can differ from one computer to another, as the screen of one could be smaller than another, altering in some way the overall display of the artwork and the individual experience of visitors. Moreover, it should be noted that it is the relationship between the files designing the artefact and the technical apparatus used by the user that will establish the "performance" of the object.

However, the *performativity* of digital art is not the only trait that online event curators should reflect on, but, on the contrary, it brings up another fundamental aspect that is *variability*. Indeed, each artwork is scalable in quality, meaning that different versions of the same artefact can be generated at various sizes or levels of details (Manovich, 2001). This clearly affects the overall appearance of the piece once put on the Web and explains the concept of "variability". To contrast unpredictable outputs, curators can set

some boundaries for their online exhibitions. For the purpose to understand this concept, we could take the example of *Net-Art Anthology*, an online exhibition launched by Rhizome in 2016 and completed in 2019, whose aim was to collect the most prominent Web-based creations, making them accessible notwithstanding the changes of the hardware and software used. The organisation of this online event required to restore or recreate elements of the original technological context of the artworks. This involved drawing the "object boundary" in relation to what curators thought to be the technical environment – the software employed, for example – where the public would encounter the work, together with the singular features of this expected environment.
In *Net-Art Anthology*, some works were presented in an emulated legacy software environment, that is an outdated information system – computing software or hardware – that is still in use. This was the case of *Form Art*, a work realised in 1997 by Alexei Shulgin, made of configurations created using HTML buttons and menus. For this artwork, since its configurations rendered differently in modern browsers, the curator of Rhizome, Aria Dean together with the artistic director Michael Connor, decided to offer visitors the original aesthetic view of *Form Art* by retrieving the legacy software used by Shulgin, Netscape 3, which runs on the cloud (fig.22) (Connor, 2020)[12].

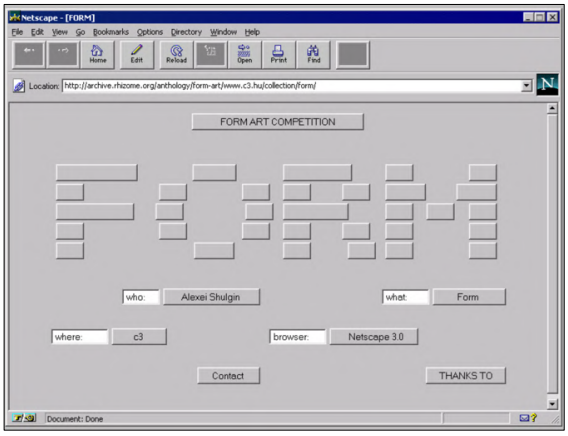

Fig. 22 *Form Art*, Alexei Shulgin 1997, HTML buttons and boxes.

At the same time, in the exhibition of Rhizome, there were also artworks where legacy environments were presented in modern software settings, thus merging aspects of

[12] Netscape Navigator, created in 1994 by the Netscape Communications Corp, was the most successful Web browser in terms of usage share in the 1990s.

Web 1.0 with more recent features of the dynamic Web. *Life Sharing*, for instance, was a project by Eva and Franco Mattes whose aim was to make the contents of their personal computer accessible to the public. Originally, visitors could browse their private files, view their emails, and see the daily changes happening on the computers of the artists through a Web interface. For the exhibition of Rhizome, however, the original system was transformed into a static archive. Although the documents presented in *Net Art* are those contained in *Life Sharing*, the decision of not setting this work in a legacy environment but in modern software, resulted in a reshaping of the initial artistic documentation (Connor, 2020).

Nevertheless, this "risk" is one of the aspects digital event curators should consider when setting an exhibition in cyberspace. Already Groys claimed - referring to digital images - that each view of a digitalised picture is the recreation of the picture itself or, to use his words, it is the «image that emerges as an effect of the visualization of this image file» (Groys, 2008, p. 84). In turn, re-staging artworks online means displaying a new version of them, as curators and artists cannot predict how they will appear and function on the monitors of the audience, meaning that the "new" version is the one shaped both by the technical context it is viewed on and its participation in a real-time network (Connor, 2020). Besides the re-staging process, we can consider the "mise-en-scène" of online exhibitions, a metaphor used by Michael Connor in the article *The Rules of the Game* (Connor, 2021). As Rhizome's Art Director recalls, the term was initially coined to refer to everything into the production of a theatre play, recital of lines apart. This concept applied to this study, then, would indicate all the elements combined to create the performative scene of an online exhibition.

At the root of these elements are both technical infrastructures that perform exhibitions and those through which the audience access them[13]. As previously mentioned, *Net Art Anthology* emulated some of these infrastructures to offer viewers access to legacy artworks. An important aspect of Web Infrastructures is, for example, the Uniform Resource Locator, commonly known as "URL". The formerly mentioned Net artist and curator Olia Lialina (2017) claimed the relevance of the address bar as part of the whole experience online by affirming that:

[13] There is a serie of technology infrastructures which are deployed to manage IT environments. These include hardware, software, networks and data storage.

> the address bar is the author's signature. It's where the action takes place, and it's the action itself. The real action on the web doesn't happen on the page with its animated GIFs or funny scripts, it's concentrated in the address bar. (Lialina, 2017, para. 57)

Moreover, Lialina tried to prove that the URL not only locates the exhibition on the Web but also gives it meaning, justifying the existence of a page. In an exhibition mentioned by Connor (2020) *Location=Yes* (1999), Lialina used artworks to accentuate the URL (fig.23).

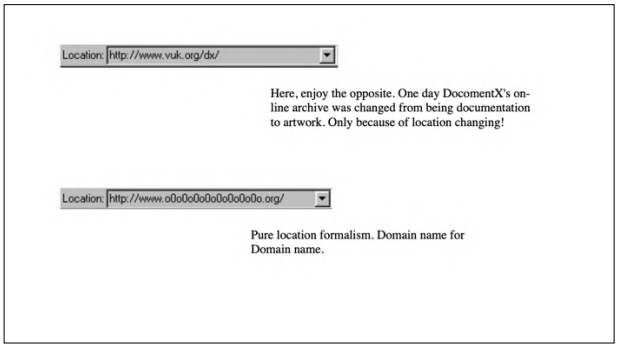

Fig. 23 *Location=Yes*, Olga Lialina, 1999, URL bar.

Furthermore, using platforms as infrastructures can offer interpretations on modes of interaction, they can be used to attract new audiences and experiment with new formats. Among the artistic and curatorial attempts in this sense, we can mention *Exhibition Kickstarter*, an "experimental exhibition" curated by Krystal South in 2014, where the format used was, indeed, the crowdfunding site "Kickstarter". Clearly, a curator can decide to overlook the use of digital infrastructures, but they surely play a central part in shaping the experience of visitors.

A further aspect is the "arrangement" of works. Connor (2021) argues the suitability of this term – preferring it to the traditional curatorial idea of "ordering" objects – since "arrangement" evokes a performance metaphor that is appropriate to digital contexts for the reasons discussed before. In fact, the online "space" of an is a flexible concept: it can either be arranged in a *skeuomorphic*, *informatic* or *embodied scenery*. The first type of "arrangement" reproduces the exhibition in a virtual environment, that is, for instance, creating a three-dimensional gallery on a platform where users, represented by avatars, can interact with displayed works and chat with one another. Moreover, it

should be noted that this space is perfect for artworks that are purposely made for a 3D environment, because those which do not respect this requirement, are subject to distortions of all sorts – because of the principle of "variability" of New Media art – that are not desirable for an online exhibition.

The second arrangement we can find in an online event is the informatic type and it implicates the creation of a well-defined ordering of links, thumbnails, and metadata. Amongst the exemplary platforms used to perform a clear presentation of information and elements is *Feral File*. In the first exhibition held of this platform, *Social Codes*, the visitor was provided with all the essential descriptions of artworks and with the opportunity to see them in full view by clicking on a specific link. In an informatic space, it is difficult to achieve a smooth experience unless each informatic system works correctly. Here, navigation buttons allow users to effortlessly move from one work to another and return to the description simply as needed. However, this is not the only informatic space one finds in online exhibitions. Indeed, if offering users a comprehensible arrangement of the event is the core purpose of this specific space, it is the curator who deliberates which tools are to be used. Indeed, like in *Social Codes*, there are curatorial choices that employ giving full descriptions of the artworks, but this is not the only method to organise a digital exhibition in an informatic setting. Leah Beeferman and Matthew Harvey's exhibition, *Parallelograms*, encourages the viewers to tackle the relationship between images and interpretation, focusing the attention on source image and artworks (figs. 24-25) (Connor, 2021).

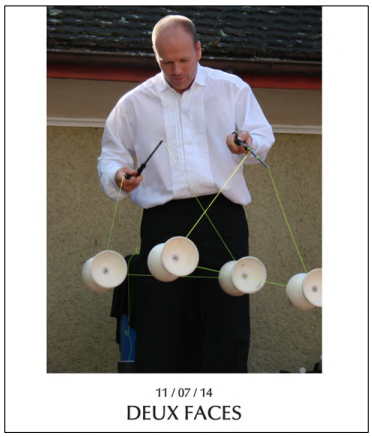

Fig. 24 *Deux Faces,* photograph, 2014.

Fig. 25 *deauxfaces.bz*, Jess Willa Wheaton, Nicholas O'Brien, Monica Palma, GIF image, 2014.

In fact, as one can read on the "About" page of the exhibition, «invited artists are given a set of images taken from deliberate web searches and asked to create a Web-specific piece in response to one of them» (Beeferman & Harvey, 2011). In this exhibition, users could only read the names of the artists and the image they were responding to. Furthermore, they could find external links which sent them to the bios and Websites of the. Lastly, information in informatic sites can also be encoded in artworks.

The ultimate space for an online exhibition is the embodied one. In this environment, the audience is physically involved. There are plenty of ways this can happen. In *Do It*, a project envisioned and curated by Hans Ulrich Obrist, Christian Boltanski, and Bertrand Lavier in 1993, and launched online on the artist-run and curatorial platform *e-flux* in 2001, requested the public to complete some instructions offline such as reciting «a poem with a pair of glasses inside one's mouth» (Brossa in *Do It*, 1993) and then upload their results in JPEG or GIF formats (fig.26).

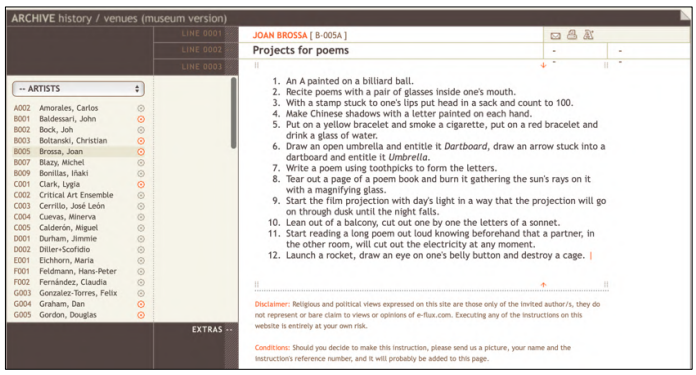

Fig. 26 *Do It*, Joan Brossa, 1993.

Furthermore, we can mention Heath Bunting's *Project X*, which involved writing a URL throughout the city of London with chalk. As soon as somebody went to that URL online, the page appearing would be a Website with a form asking where the person found the URL, why, in his/her opinion, it was written and by who. Finally, one could think of augmented reality exhibitions, and locative media exhibitions using geolocation where the interactions of the visitors are fundamental for the success of the whole event and address users also in the domestic space as in *Imaginary Friend* by Nina Chanel Abney, 2020.

Moreover, besides physical arrangements, curators should also consider the temporal arrangement that is significant in setting an exhibition on the Internet. Brian Droitcour (2010), editor of *Art in America*, describes the temporal experience of the Web user in his essay *The Chill Zone*, commenting on *JstChillin*, a curatorial platform created by artists Caitlin Denny and Parker Ito. According to Droitcour, time on the Internet is frozen, except for some gestures. Internet users can, in summary, "just chill". As the editor suggests, the main difference between time in a physical exhibition space and time on the Web is that in the first case, artists and curators operate within certain deadlines, while art online can be fundamentally consumed at any time. Indeed, many online exhibitions stay on the Web for a very long period, and this gives the virtual visitor the possibility to visit or study them much after their openings. Just think of *Net Art Anthology*: it was firstly launched in 2016 and completed in 2019 – which means curators added artworks realised within that timespan – but one is still able to see its artworks. Thus, it is still accessible and consumable. Another relevant example may be Douglas Davis' *The World's First Collaborative Sentence*. This Net-Art art piece was launched in 1994 and still now – also thanks to a restorative project created in 2013 – offers visitors the occasion of adding their contribution to the piece.

Temporality online is generally addressed by curators in – at least – two different ways: they can decide the period to unfold the exhibition over or they can choose when it is needed to place new updates throughout the event (in *Serial Chillers in Paradise* an artist is introduced every two weeks on *JstChillin*).

It should be noted that temporal arrangement is relevant to express both the performativity of works born online and the performativity of the Web. In fact, for the first case, we could mention *Sunrise/Sunset* which is an ongoing series happening every day on the Website of the Whitney Museum of American Art that marks sunrise and sunset in New York City, "disrupting" the normal execution of the site by broadcasting an artwork on the page the user is looking at. Therefore, its performativity relies upon this precise "disruption" that happens every day on whitney.org and causes a temporal dysfunction of the Website.

Thus far, I have discussed some of the key characteristics of an online exhibition, grouping them in two macro-themes: "re-staging" of Web-based artworks and their "mise-en-scène". Regarding the latter, I argued the importance of the arrangement for curators to convey meaning to their online art exhibition. However, this can also be obtained by employing a wide range of aesthetic choices that we might call "style". This array includes colours, fonts, images etc. First of all, Weinman (1999) identified only 216 "browser-safe" colours - meaning that only these colours can be accurately displayed on the computers of users - that curators and artists are encouraged to use for decorative titles or backgrounds. Therefore, by using this array of tints, the design can be consistent across different browsers used by viewers. In addition, if the online exhibition needs to display texts, it should be given importance to typeface and size. As argued by Kalfatovic (2002), style sheets can help to achieve consistency in these designs. Specifically, he suggested some fonts such as "sans serif" for accessibility reasons – it is clearer and less distracting also for people with disabilities such as dyslexia (British Dyslexia Association, 2018) while he firstly advised against the use of italics formatting – as it is difficult to read on-screen – and secondly against underlines, as they could be confused with hyperlinks. Furthermore, according to a study by Microsoft (Gausby, 2015), the average attention span of people is 8 seconds. This suggests that content online should be engaging and should present short texts. Generally, images are considered preferable to texts.

Among other stylistic choices, a particular mention should be made for the background colour. The white colour for the background of an online exposition is clearly linked to the white-cube architecture, which is the default gallery exhibition. Consequently, if digital event curators decide to set their online display on a white background, it is

evident they want viewers to reflect and compare the differences between the two environments. Indeed, by proposing a Web-based "white cube", the distinctions between the traditional exhibition and the one set online immediately come to mind. To give an illustration of this concept, one could mention Claude Closky's project titled *iGalerie* (2000) (fig. 27).

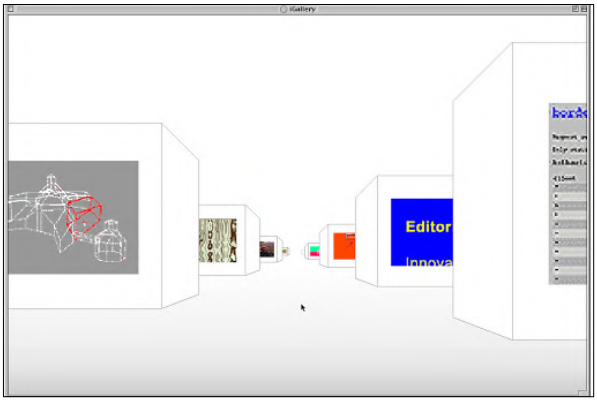

Fig. 27 screenshot of *iGalerie*, project by Claude Closky, 2000.

Although this work was commissioned for the Contemporary Art Museum of Luxembourg, it highlights the strong limits of the traditional exhibition space and its incompleteness. In this online white cube, indeed, the user crosses a corridor with digital artworks on each side, in a version of what we might call an "endless scroll" that cannot happen in a physical gallery. In sum, the white background maximizes the context of the Web which is the opposite of the purpose of the white-cube gallery envisioned by Brian O'Doherty because he wanted the exhibiting space to be totally free of context, to exclude the outside world from the perception of the artworks within it (O'Doherty, 1976).

An additional characteristic of curating an online exhibition is the social process behind it. In fact, the Internet mise-en-scène include not only curators and artists but also audience participants and, moreover, they all play an active role in determining the context and shape of each project (Connor, 2021). Therefore, in online artistic and curatorial projects, it is important to consider the involvement of the public. On the artist-run platform and virtual museum Online Museum of Multiplayer Art, oMoMA, launched by Paolo Pedercini, Tenley Schmida, and Heather Kelley in 2020, this social relevance is highlighted in an online multiplayer space and exhibition titled *First Person Soother* (fig. 28) which was initially held at the LikeLike gallery in Pittsburgh, United

States. In both the offline and online environments, users were required to interact with one another – in the online 3D space, each user is asked to create an avatar – and the event questioned people on mediated sociality and digital embodiment, drawing from the tradition of the roleplaying worlds and chats of Net-Art.

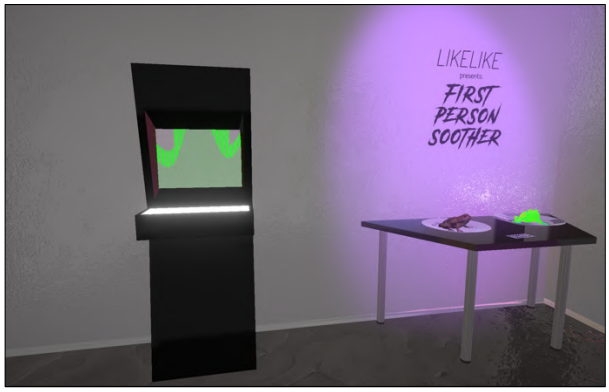

Fig. 28 *First Person Soother*, LikeLike, browser-based interactive 3D exhibition.

In some other cases, the social process can be found in an external link, referring for instance to an artist's personal Web page. This would help artists to maintain the stewardship of their artworks while accommodating the dynamic essence of Web-based art. Plus, the user who notices the link of the artist and clicks on it begins a process that could let him/her contact the artist, promote the works of the artist via social media, financially contributing to his/her work – acquiring artworks or through donations – or even starting a collaboration with him/her. In this way, certain assimilation and acculturation are developed. Additionally, embodied spaces for an exhibition can include both onscreen and physical social interaction. On that end, one could state those multi-day running online exhibitions where visitors can attend physical "openings" for the event held online, as in the so-called "gathering sites", where visitors without a computer could go to and access computers, Internet, and beverages.

2.1.1. VIRGINIA BIANCHI GALLERY

The first case study of this thesis is the Virginia Bianchi Gallery (VBG), the first and – by now – only New Media online gallery in Italy. It was opened in September 2020, during the COVID-19 pandemic, by Virginia Bianchi, cultural marketer, and online event curator. After graduating from the MA in Arts Management at King's College in London,

she started to work at the Annka Kultys Gallery in London which let her get acquainted with New Media Art. After two years at Kultys Gallery, she decided to come back to Italy where she attended the School of Curatorial Studies in Venice and later opened the VBG. Currently, besides her job as an online event curator and gallerist, she is working for the Comune di Bologna as Social Media Strategist.

Bianchi said in our interview (2021) that she created the gallery in response to what the Italian lockdown was leading to recreating physical gallery spaces in an online environment. However, in many cases, the Web was being simply seen as a "location" suitable to host physical contents turned into digital images, but for Virginia Bianchi, the "online" is more than a setting.

In fact, as an online event curator, she thinks of "the digital" and the "online" as a medium, as it were marble for a sculptor. Therefore, as argued by Bianchi there is a key element for the online curation, that is "context":

> As a curator I take a Web page, that is like a wall in a white-cube gallery – it is exactly the same thing – and from that white Web page, we create an art installation that has a context. It is not (simply) the showcase of artwork since we also try to give a curatorial meaning to our creations, enclosing them into a context and keeping in mind all their peculiarities. (Bianchi, 2021)

When I interviewed her, my aim was to understand how an online event curator engages and communicates with her audience, but first I wanted to know more about her profession in Italy, hence in a country where the level of digitalisation is among the lowest ranking positions (the Digital Economy and Society Index (DESI) placed it at the 25° place out of 28) (European Commission, 2020). Indeed, one of the reasons why Virginia Bianchi decided to launch her gallery was to give the opportunity to Italian New Media and digital artists to work and display their works in their native country, without having to leave Italy in search of a job opportunity overseas. Indeed, there are not many educational programmes an artist can attend to practice on this art or simply test, as explained by artists she collaborates with in the interview Bianchi held on her Instagram

account[14]. In turn, according to what Bianchi argued in our interview, not only Italy lacks enough digital expertise and investments, but the reason why digital art is still seen as niche art is that the dominant approach to culture in Italy privileges heritage and tradition.

For this reason, the so-called "brain drain" happens and counts numerous Italian New Media artists (and curators as Bianchi) that go abroad. Bianchi together with the majority of the artists she displays – Alice Palamenghi for example – have studied in the United Kingdom. In fact, I might say that, in returning to Italy after her studies and works in London, Virginia Bianchi took the risk of not being – at least not immediately – understood by the Italian public.

Indeed, as one can read on the "About" page of the Virginia Bianchi Gallery Website, her aim is to «represent a new reference point for emerging artists and audiences keen to experiment with bleeding-edge, atypical exhibition spaces» but, as she discussed during the interview, in order to be «keen to experiment with bleeding-edge, atypical exhibition spaces», one must be open-minded or, at least, must be willing to know more about digital art (Bianchi, 2021). As this art is still less known than other forms of art, it is necessary to give the audiences the possibility to enter in contact with this new reality and give them the time to get used to it and to be able to fully appreciate it. Indeed, art appreciation can be very subjective and requires a certain level of knowledge and competencies, either it is New Media art or any other type of art. Moreover, such knowledge and skills are needed to understand New Media art as it sometimes demands technical competencies. Therefore, the audience must be given the lecture keys to such artworks, which means finding the right tool to engage it.

When I asked her how her public is composed, she replied that the typical user/visitor of the Virginia Bianchi Gallery – according to the insight data of the social media accounts of her gallery, as reported by Bianchi (2021) – is young, under thirty-five years old, generally female, and mostly lives in the United Kingdom or the United States of America. She mentioned the Italian component of her followers by saying that she has some, but only because she is herself Italian, therefore people who have personally met

[14] Note that there are some in Milan, Naples and Florence but the most accredited ones are in other countries (mostly in United Kingdom).

her, tend to support her activity. Moreover, she added that her typical visitor already owns a certain knowledge or interest in digital art and digital practices.

As for a white-cube gallery, Bianchi relies on the "word-of-mouth" publicity as she collaborates with other galleries and artists to self-promote her through her colleagues, together with press releases and the use of social media. Among these, she affirmed that she mostly uses Instagram and Facebook.

Having built this general background knowledge on the Virginia Bianchi Gallery, I now focus on a specific exhibition she curated: *Subterranean Virtualscapes*. This two-month-long online event involved sixteen New Media Italian artists who joined the curator in a dialogue about crypto-spaces[15]. The event, in fact, hosted works offered in their "non-fungible tokens" (NFT) version and, additionally, for neophytes of crypto art, Bianchi ensured that artworks were available even through a more traditional purchasing process.

Specifically, the exhibit consisted of sixteen personal exhibition spaces – it was a "group" show made of sixteen "solo shows" – where artists were able to conceive their individual digital installation, free of constraint. Therefore, the only "boundaries" Bianchi set regarded the usage of a greener crypto value of type "proof of stake" and the marketplace *hicetnunc.xyz*[16]. This exhibition, adopted an "embodied" kind of setting, as defined in chapter 2.1, as the viewer was often asked to interact with artworks.

For the purpose of this research, I have considered three specific aspects of the event: a) the mediating behaviour of the curator throughout the event, b) how the audience was engaged – which means were used to engage it and how – and c) the response of the audience.

The answers to these questions are commented on below.

2.1.1.1. MEDIATION

During the interview, Bianchi argued that, as a curator, her interactions with the audience during *Subterranean Virtualscapes* happened exclusively for promotional

[15] "Crypto spaces" are all those environments that host cryptocurrency trades.

[16] "Proof of stake" is a type of protocol that avoids the process of "mining" – complex mathematic operations which involve a huge consumption of energy by many computers at the same time –, attributing mining power to the proportion of coins held by a miner.

purposes, therefore she communicated with it mainly through social networks. In her Instagram and Facebook posts, Bianchi not only promoted her show, inviting her "followers" to visit the exhibition on her online gallery but also gave some descriptions of the "staged" artworks, "tagging" artists and interacting with the creators themselves. Moreover, she interviewed the artists involved in the show, in order not only to mediate between them and their art but also to give visitors the occasion to reflect on the idea which stays behind them and the working experiences of the artists. Additionally, as a curator and a gallerist, she offered some guided tours via Zoom, as if it were a physical exhibition, but her direct interactions with the public did not go beyond these "guided visits" and the contents published on her social networks. Conversely, I might say that although her mediating role was not observable in this event, the figure of Bianchi marks a fundamental step further in bringing New Media art and digitality awareness in Italy. Indeed, although her main followers come from other countries, her presence in Italy and her collaboration with Italian artists help foster the discussion on these topics on the Italian territory. Through the publications of articles about her gallery in Italian newspapers and the use of sponsorships – where a geographic target can be set – she can also reach more Italian visitors. Indeed, what she wishes to communicate to the audience is that «"the digital" is an integral part of our lives that we cannot refuse but must comprehend» (Bianchi, 2021).

Therefore, her curatorial mediation can be intended as daily activity, perhaps it has not so much to do with the artworks she displays, for example, in *Subterranean Virtualscapes*, but rather with the mission, values and propositions of her gallery. Namely, she is intrinsically a mediator between her gallery, thus New Media art discourses, the artists she exhibits, the audience and the research on new technologies. Besides, she thinks of herself as a researcher, since she attempts to dig deeper in the study of everything that is connected to digitalisation, to understand it and raise awareness of it through art.

2.1.1.2. AUDIENCE ENGAGEMENT

In the interview, Bianchi said to be aware of the challenges of an online gallery working exclusively with digital art and of the numerous difficulties in engaging the public online. For *Subterranean Virtualscapes*, she primarily used social media to engage the audience,

thus she published posts, “stories” and held interviews with the artists on the Virginia Bianchi Gallery Instagram account. However, as for the exhibition itself, the involvement of the audience exclusively relied on the tours she offered by sharing her desktop on a Zoom video-call focusing on the displayed artworks. Although the potential use of Instagram and Facebook as a tool to communicate with her followers, she did not interact much with them on social networks. Plus, since it was an online event, the audience could not go to the curator and ask for further explanations of artworks nor meet the artists at the vernissage of the event. However, as shown in the exhibition of Bianchi, digital art can offer tangible experiences to visitors – aspect not always feasible in a white-cube gallery or in a museum – that is interacting with artefacts themselves. Artists of *Subterranean Virtualscapes*, indeed, used various formats that gave the audience the possibility to modify, play and even steal the writing of an artist. In *It was going to be a lonely trip*, artist Federica di Pietrantuono decided to lend her writing – in terms of “font” - to the audience (fig. 29).

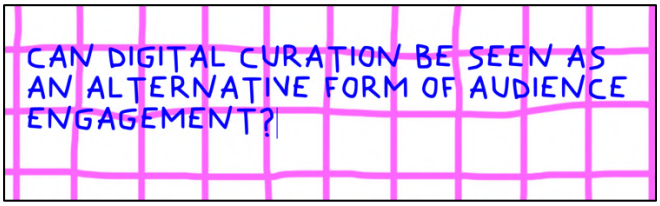

Fig. 29 *It was going to be a lonely trip*, Federica di Pietrantuono, 2021, font (.otf file). Screenshot of a personal sentence.

Another artist offering interactive artworks to the audience was Andrea Frosolini. His *Your Public Display of Affection* is indeed a photoshop action (.atn file), meaning that he pre-created a series of steps, “actions”, that anybody – the audience – can play back. The work of Frosolini specifically focused on the “texture”, thus it was a game of overlapped images whose result was presented as a JPG image (fig.30).

Fig. 30 *Your Public Display of Affection*, Andrea Frosolini, JPG image, 2021.

The examples above show that audiences can be engaged throughout a New Media Art exhibition, interacting less with the curator and more with the work of the artists, reflecting on it by "giving life" to the artefact itself. Therefore, it is difficult to engage audiences in an online New Media art exhibition, but it is not impossible. Moreover, the Virginia Bianchi Gallery also exhibited this type of art in physical spaces, as in the recently launched –July 24, 2021 – exhibition titled *Warped Passages*, organised at DumBO space in Bologna and which will end by the end of September 2021. Here, the curator noticed how easy it is for a material exhibition (also of digital art) to engage and bring visitors to it and the reasons are understandable. One passes by the location where the exhibition is being held, gets curious, and simply decides to enter and participate. Therefore, visitors do not think that digital art is unexciting, but rather it is the Web seen as a valid environment to host events that is still misjudged (Bianchi, 2021).

Thus, having a New Media art online gallery as a niche practice supposes that the curator is aware of the challenges that might occur. Nevertheless, besides using social media, collaboration with other galleries, curators, and artists is fundamental laying the foundation of a thriving business.

2.1.1.3. AUDIENCE RESPONSE

This event was the first big exhibition for the Virginia Bianchi Gallery, mainly if we consider that it counted 1200 visits, three times the other online exhibits she has organized thus far. On her social media pages, although I could not find much feedback,

I noticed some comments which included “emoji” that suggest a positive response by the followers, as shown. in the screenshot of fig.31.

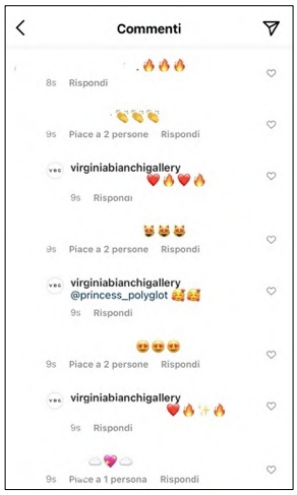

Fig. 31 Screenshot of comments under the post on *The Great Beauty* by Veronica Petukhov, @virginiabianchigallery.

Furthermore, important European magazines such as Vogue (Italia), ATP DIARY and gallerytalk.net wrote articles about it, demonstrating it was of interest to the attention of their readers and subscribers. Since this gallery is one of a kind – in Italy – and that, moreover, digital art is still deeply underestimated and unknown, both the number of visits and the publication on such magazines, are factors that bode well for the future of the events of VGB.

As a matter of fact, I firmly believe that soon we will be accustomed to digital art and therefore we will be willing to visit more exhibitions displaying it. However, in order to be fully engaged by it, this topic should be discussed also in schools, so that people could have the chance to get to know its existence from a young age and decide whether digital art can be of interest or not.

Right now, online event curators like Virginia Bianchi should, in my opinion, focus on developing the knowledge of the audience on the digital through social networks campaigns and physical events, when possible because, as Bianchi also said during the interview (2021) the problem is that unless one gets to know it, it is hard for somebody to get immediately excited by this type of art.

2.2. DIGITAL MEDIA CURATION

I have previously argued the idea of staging works of art in a digital environment, but I have not mentioned yet that this phenomenon can already be found in early 2000s blogs. Their importance for the digital curatorial practice has already been partly explored, as they embody the participatory nature of Net-Art and at large of digital art. However, it is now necessary to present them as a groundbreaking device also for exhibiting offline content. Blogs, in fact, have been the very first means used by artists and curators to accustom spectators to experience the display of physical works on the Web. Some blogs, indeed, have been exhibiting on the Internet both offline and online artworks for at least a decade, subordinating their display to the gallery experience. *VVORK* for instance, an art-log realised by a collective of artists, curators, and designers in 2006, is considered a true "exhibition space" (Joseph del Pesco, 2009). It does indeed offer the view of artworks accompanied by title, year, and author, like on gallery and museums' labels. Another example is *Contemporary Art Daily*, a blog created in 2008 which still nowadays presents art pieces withdrawing them from artist-run spaces and established museums, consequently resulting in a true "online display".

Currently, these kinds of blogs – and not only – are managed by a specific professional figure: the digital media curator or, to use a more common term, the content curator. Unsurprisingly, I could not find a definition of this practice, least of all if applied to the artistic and cultural contexts. Some articles describe this profession simply stating it is like a museum curator but working in an online setting. Nevertheless, the closest definition I have read is the following one:

> A content curator is someone who sorts through data on the Internet and collects the most relevant data to share on blogs, Websites and through social media. A simpler explanation is to think of a content curator as a type of librarian. Librarians organize books and place them on shelves in specific groups based on the type of information the books hold. This is similar to the way that content curators assemble their data. (Kennedy, n.d., para 1)

We could think of the media curator as a qualified worker whose expertise is both on art and technology – proficiency required in digital art curatorship – and whose duty is halfway between the one of the archivist and the collector.

The media curator is like an archivist because, as Mandarano states in the previously mentioned interview and in her book *Musei e Media digitali* (2019), this figure is expected to work for an institution such as a museum. Moreover, his/her interest lies in making sure artworks are not lost, deciding which ones must be collected and preserved for the future[17]. Furthermore, we could argue the similarity between a content curator and a collector. As argued at the beginning of this thesis, it is in the nature of the curator to collect items, it is its primordial function. The equivalent process to traditional collections in digital content curation is generally finding a resource and tagging it. The approach can either be artist driven or idea driven. The first case implies that the curator displays artworks in the best way possible, thus the curator is in service of the artists. The second approach, quite the opposite, puts the curator at the first place, hierarchically speaking. In fact, in an idea driven attitude, the curator and what h/she decides to communicate are the key-protagonists of the overall display.

Moreover, it is important to mention how digital media curation has developed alongside museums, for which this practice has become fundamental. It is therefore necessary to contextualise the changes which affected these institutions, beginning from their digitalisation to the introduction of digital means and digital strategies within their walls. It is impossible, nowadays, for a museum to not exist online or, to put it in another way, a museum can decide whether to create a Website or not, but its choice will affect the number of visits, how the institution will be perceived by the public, and it will also make it difficult to achieve the specific goals of the institution.

Digitising means «democratizing knowledge, enhancing the visits of the many who come to us in person, and extending our reach to the millions who cannot» (Clough in Enhuber, 2015, p. 16). Indeed, for Clough, the shift from a physical art consumption to a virtual one is a synonym of democratisation, education, and socialisation. Even though the first aspect, democratisation, has not proved to be feasible since it presupposes that everyone has a computer with access to the Internet, the use of technology in museums

[17] This aspect is in common with online event curation, since also this curator needs to store New Media Art, whose consumption is accessible only though a structured digital archive.

has demonstrated to achieve good results in terms of education (Chang et al. in Enhuber 2015) and socialization (Simon in Enhuber, 2015).

However, the process of digitising a museum is rather expensive, mainly if we consider the lack of funding that the artistic and cultural sectors have been facing in Europe since 2010 (National Committees of European Countries, 2013). In the survey launched by the Network of European Museum Organisations (NEMO) in 2020, one result was that the biggest obstacle of three out of four museums in this process regards the insufficiency of economic resources, which is the reason why only 43.6% of the Network's collection is digitised. However, it has proved to be essential for a twenty-first-century museum to have its collection digitalised and, moreover, to make it accessible (NEMO, 2020). At the base of this statement, there is an increase in Internet users. As it increased, in fact, museum audiences of all over the world started to navigate on the Web to come into contact with art and culture. However, when it comes to Italy, the population is not among the first countries for Internet users in Europe. In a report which dates back to 2016, Italy was placed at the 4th ranking position, after France, the United Kingdom, and Germany (De Biase & Valentino, 2016). In December 2020, Italy was in 3rd place, after France and Germany, which confirms itself as the country with more Internet users in Europe. In addition, it must be noted that one of the most used means used in making museums collections accessible, besides offering a digital collection on the Webpage of the institution, is social media. If in 2016 there was a total of 36.593.969 social media users in Italy (De Biase & Valentino, 2016), such number increased to 41.000.000 in 2021, therefore counting 67.9% of the population (Kemp, 2021). With such numbers, one understands the importance of digitising a collection and planning a digital strategy. First and foremost, digitalisation helps in cataloguing processes through replacing paper records and card files with computerised systems which let professionals search and sort all the digital records using a database. Furthermore, these systems can store more information than in a traditional collection and they ease the process of sharing information with other institutions. In digitising a collection, museum experts can either record in electronic formats descriptive data about their articles or they can produce some digital representation or image of each artefact (fig.32).

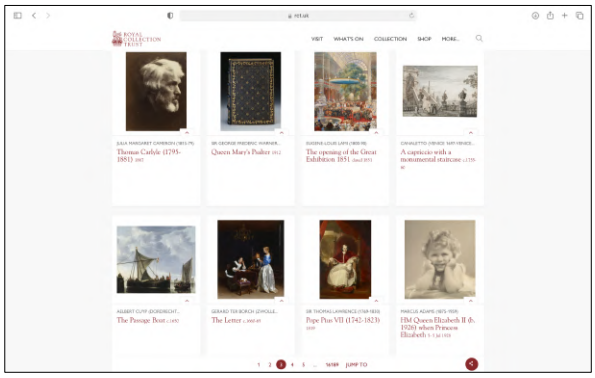

Fig. 32 screenshot of the Royal Collection Trust's online collection (catalogue).

We are now used to digital imaging, but one should notice that seeing the image of an artwork in the "Collection" page of the Web page of an institution does not mean that the item has not been recorded with its descriptive data. On the contrary, each "image" must be recorded with information regarding its provenance, classification – the type of artefact – and composition that is the technique employed (fig.33) (Marty, 2010).

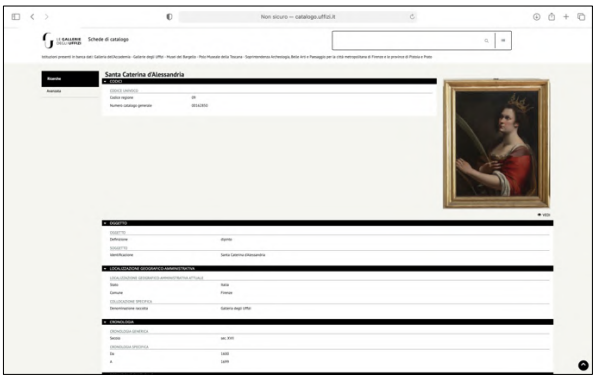

Fig. 33 screenshot of the online collection of the Gallerie degli Uffizi (catalogue).

Recording data give museum workers and visitors immediate benefits. These are, for museum professionals, safer conservation of data and an easier process of inventory, together with an easier process of adding information. For a museum curator, for example, it means having an immediate overview of all the artefacts present in the collection without physically going to the deposit, as well as tracking those artworks that have been lent to other institutions or which are temporarily used for some projects and cannot be displayed.

For visitors, instead, it means having faster access to collections – useful for research and study purposes – and comparing them more easily. Moreover, digital records give users the possibility to interact more with artefacts and provide all the necessary information remotely, thus offering the opportunity to study and explore the collection also to an international visitor.

Like the following case studies will show, digitising a museum means offering new opportunities to curators to let the audience interact more with the collections, covering topics in ways that are not possible in physical museums. For example, it is very rare to see the restoring process of a work of art, however, it is easier to achieve it online. As for Rembrandt's *The Night Watch*, the Rijksmuseum accomplished to offer visitors the possibility to both physically and virtually attend the "Operation Night Watch", the latter through a live video. However, there have been other projects aiming to use digital means to show the restoration of an art piece. The exhibition curated by Douma and Henchman allowed visitors to digitally remove layers of painting from Bellini's *Feast of the Gods,* showing its underdrawings (fig.34).

Fig. 34 interactive study of the underdrawings of Bellini's Feasts of the Gods by Michael Douma and Michael Henchman.

A further example of curators – media content curators together with all the digital department staff – using digital technology to open the doors of their collections online is the cycle of live streams curated by the professionals of the Gallerie degli Uffizi. Each live streaming is broadcasted on the Facebook page of the Gallerie and focuses on a specific set of artefacts or spaces of the museum, offering visitors an alternative and "private" tour of the collection. This last statement brings up another characteristic of

online events: they give visitors the possibility to enjoy their "visit" and netsurfing without worrying about time and other people murmuring or standing in front of the artworks just to "take a selfie". Note that, although this mechanism might annoy the visitor who simply wants to enrich its cultural knowledge by observing and studying artefacts, without showing off its presence at the museum, the practice of taking photographs in front of paintings and then posting them online, is an important aspect of our contemporary society. It indeed mirrors the twenty-first-century essence of being "social" and "connected", as Lynda Kelly would argue (Kelly, 2013).

As soon as a museum concludes its process of digitising itself and decides which digital strategy wants to employ, that is when the institution needs to hire digital specialists whose duty is to take care of everything that happens online or that concerns digitality. Besides the digital media curator, depending on the number of employees a museum can hire, thus based on its dimension, there could be the Web developer, the graphic designer, the informatics technician, and the social media manager, often confused with the media curator (it is wrong to think of the social media manager as a digital media curator, but not the opposite). According to Maria Chiara Iacona, digital media curator and founder of *Art in Pills*

> the social media manager has a general knowledge of topics h/she treats, with a high specialisation in marketing and management of editorial contents and calendars. H/she clearly is an expert on digital communication and digital strategy but with general knowledge on various topics as h/she works with different types of content. My work (on the contrary) consists of curating the digital, thus I create an aesthetic concept (vision). I accurately select contents and artists, with extreme precision, exactly as the "curator" picks the artists and artworks to display in a museum. (Iacona, Personal Communication, August 24, 2021)

One could summarise the difference between these two professions by stating that the first one develops a strategy based on the exclusive use of social media (Facebook, Twitter, Instagram, etc.), while the second – as previously argued – is the person who manages all the type of digital contents. Such contents can either be the items shown on a Web page or on a social media or the media curator can be, in this case, closer to a

traditional exhibition curator, the person who sets online events like a tour or a virtual preview of an exhibition or, again, who organises an online exhibition of museum-based – or gallery-based – artworks. As Mandarano argued in the interview carried out by Fabrizio Broccoletti (2020), the digital media curator manages the strategic administration of social media, the update of the Website, but also the development of all those interactive systems useful to access information such as Web app and digital totem[18]. Since this profession is comprehensive of many facets and duties, it is useful to have different experts – like the social media manager – on specific duties. The smaller the institution is, the more responsibilities entirely depend on the media curator.

In the definition of "curator" proposed by Timothy Ewin and Joanne Ewin (2016), they put emphasis on the inspiring role of such professional. In their view, curators should in fact employ new methods to engage visitors with, and «empower them to ask questions and giving them the skills to go on and find out for themselves» (Ewin & Ewin, 2016, p. 324). Therefore, for the reasons discussed above, one could argue that the digitalisation of museums reinforces this curatorial aim.

Hence, the "curator" is no longer the person who manages, organises collections and their exhibitions, but rather his/her curatorial duties required are comprehensive of new skills that aim to reach a broader audience, reasons why the traditional "museum curator" needs to cooperate with the "media curator".

Indeed, amongst such skills, there is the strategic employment of communication tools such as social media[19]. The rise of social media – there are 4.62 billion people using such platforms– clearly could not go unnoticed either in the artistic context (Anonymous, 2022).

Having the number of social media users in mind, one can immediately think of the huge attracting potential that museums could have only by launching an institutional social media page. Moreover, if the largest and most famous museums such as the Metropolitan Museum, the MoMA, and the Louvre count millions of followers, it has

[18] "Web app" is an application program written in JavaScript or HTML5 which is stored on a remote server and delivered on the Web through a browser interface (Google Chrome, Safari etc.). "Digital totems" are multimedia infopoints in the form of totem/column, where visitors usually find information, a showcase of images or even videos with or without sounds.

[19] Keep in mind that in a large institution there could exist both the media curator and the social media manager; these figures are complementary and not completely alike.

been proved that social media also help small institutions. In an article on the online magazine *Museum Next*, one can read that in 2018 the Museum of Rural Life in Berkshire (United Kingdom) posted a picture that gained more than 112.000 "likes" and 25.000 shares, consequently translating into an increase of 47% of international visitors at the Museum (Anonymous, 2019). Although not every institution using social media can flaunt the same success as the Museum of Rural Life, it clearly shows that such channels can operate as means to attract new visitors.

Additionally, social media can be used in various ways, depending on the singular mission of the museum, "personality" – values and situation–, and on the will of the media curator. Assuming that the main goal of all types of museums is sharing knowledge, there are other aspects that can vary from institution to institution. Deciding how the museum should appear to the outside is up to the digital media curator. Indeed, h/she must decide how h/she wants all these aspects to perform, beginning from the choice of the right "voice" and "tone" and ending in the selection of the type of contents the curator wants to implement. It must be noticed that "audience engagement" in the twenty-first century is profoundly bound to emotions, «both evaluative and an essential part of reasoning» (Smith & Campbell, 2015, p. 299) and to participation. Research has indeed demonstrated that emotions trigger memory and attention, essential factors to influence the learning and involvement of the audience (Tyng, Amin, Saad, & Malik, 2017). It is, therefore, necessary to deliver some emotional experiences that enable learning and drive the feelings of visitors. Moreover, it is at the core of the modern museum to offer participatory activities to the audience, as Alfred Barr had already affirmed in 1939 by saying the famous phrase «the Museum of Modern Art is a laboratory: in its experiments, the public is invited to participate» (Museum of Modern Art, 1972, p. 15).

The following case studies provide some examples of participatory digital experiences that media curators have offered their visitors to allow as many people as possible to enjoy masterpieces of their collections even when they cannot physically reach the institution or the exhibit, as during the current pandemic, that is digitally.

2.2.1 @UFFIZISOCIAL

One of the simplest methods that a museum can employ to engage visitors is to use social media as a platform for open communication and participation. What museum visitors want to feel, is to be part of the institution. How? Being connected to it through a digital environment, an aspect that many Italian museums started to explore only recently.

The first case of this study is indeed @uffizisocial, the institutional nickname linked to the complex of the Gallerie degli Uffizi, which now include the Uffizi Gallery and its historical collections – the Collection of Prints and Drawings and the Library –, the museums of Pitti Palace, Boboli Gardens, the Pagliere Stables, and the newly arranged Vasari Corridor.

The primary goal of the social media policy of the Gallerie degli Uffizi is to promote the collection of the museum, cultural heritage, and activities, making them more accessible. As one can read on the readable online policy, the accounts marked with the title @uffizisocial (and @uffizigalleries) are active on Facebook, Twitter, Instagram, YouTube and, lastly, TikTok. The first social media to be opened was YouTube in 2015, then followed by Twitter and Instagram in 2016, thenceforth by Facebook in March 2020 and TikTok in April 2020. Although each social page counts thousands of followers, it is on the latter social network that the Gallerie hold the record of being the museum with more followers (85.2 thousand) and likes (590.8 thousand) of all (Giraud, 2020).

As discussed in many local periodicals such as *FirenzeToday* (Redazione, 2020), the opening of Facebook and TikTok meant, for the Uffizi, an increase in the number of visits of 24% in the second week following the re-opening after the first Italian lockdown. However, the digital media policy of the Gallerie do not only include having a social media page, on the contrary, it is also comprehensive of various "digital experiences" such as virtual tours, conferences, and debates. In an interview the Director of the Gallerie Eike Schmidt argued the importance of the connection between the digital sphere and the physical experience, by claiming that the first one boosts physical visits to the museums:

> It is a duty for us to communicate with new digital methods. To show everybody who we are and what we do, to let anyone observe our artefacts and get them to know our

> projects. The fact that surprises me the most is that the more you offer (users) to "follow" us digitally, the more people are encouraged to live the real (physical) experience, (the more people wish) to see that painting live. It seems odd but it is true. (Schmidt, 2021)[20]

As argued before, a digital success implies the establishment of a valid and complex strategy that only a highly specialised expert can produce, that is the media curator together with the social media manager. At the Uffizi Gallery, these roles are both performed by Francesca Sborgi, Coordinator of the Digital Strategy Area and Senior Social Media Manager. Generally, there are some commonly used tactics in digital policies, and I will present them through the analysis of @uffizisocial. The first one is *staging* the museum. Typically, this involves introducing life-size interactive picture frames and touchable objects relating to the collection of the museum, to invite visitors to enhance the "selfie game" and post pictures of the institution on the Web. However, this form of physical interaction with the artefacts is not yet possible in the Uffizi, as one cannot touch Gentile da Fabriano's *Adoration of the Magi*, it is simply unthinkable. Nevertheless, selfies and photos of the artefacts are not forbidden in the Gallerie, unless for commercial purposes. In that case, a special request must be forwarded to the competent office.

The second tactic implicates the creation of *storytelling* using hashtags. They can indeed be used to maximise the engagement – by increasing the visibility of the page of the museum – and act as a crowd-sourced photo album, as is evident on Instagram, where one clicks on a hashtag and all the photos have the same hashtag appear. One example of the "storytelling" of the Uffizi through hashtags was *#UffiziDecameron*. This was created to launch the homonym social campaign which acted as a first response to the Italian lockdown in March 2020. Taking inspiration from the masterpiece of Boccaccio,

[20] Author's translation of the following excerpt from the interview held by Benedetto Ferrara to Eike Schmidt: «E' un dovere per noi comunicare seguendo le nuove strade digitali. Permettere a tutti di poter vedere chi siamo, cosa facciamo, e poi ammirare le nostre opere e venire a conoscenza dei nostri progetti. La cosa che più sorprende è che più tu dai la possibilità di seguirci in maniera virtuale, più le persone sono spinte a vivere l'esperienza reale, a desiderare di vedere quel quadro dal vivo. Sembra strano ma è così.» in Ferrara, B., 2021, https://www.intoscana.it/it/articolo/schmidt-il-pragmatico-visionario-vi-racconto-gli-uffizi-del-futuro/.

the museum established its media presence as a virtual shelter for art connoisseurs, scholars, and citizens, on that moment constrained to stay at home. In launching this hashtag and cycle of online content, Schmidt presented it to overcome together the difficult period we are living since the pandemic broke out (fig.35).

Fig. 35 screenshot of the #UffiziDecameron launch, taken from the Facebook page of the Gallerie degli Uffizi.

By using the word *insieme* (together) in his original statement –which is possible to hear from the clip on the Facebook page of the Uffizi–, the director fostered the potential of social media in engaging the public, almost as if to present the online page of the Gallerie as real space for the community of visitors and admirers of the collections.

The third aspect a media curator and a social media manager must consider when developing the digital strategy of a museum is *newness* in terms of recent events, challenges, and trends. If we think that the social media of the Uffizi not only try to engage habitué visitors but also new ones, as for example young people, the reason why the institution has, in fact, chosen to apply an ironical or at least colloquial tone in its online pages becomes evident. Already the creation of a TikTok account – currently the most popular social network among the youngest – demonstrates this willingness of reaching a very broad audience and the flexibility of adapting to its requests. Ever since its launch, @uffizisocial on TikTok has used a very informal and "urban" tone and voice, familiarising with the needs of that particular social media and its users. In terms of online challenges and trends that @uffizisocial applies, one could find the use of "trending" sounds that is sounds that have gone "viral" and that often appear on the

TikTok personal page of the users ("For You page"). By using such sounds, the page engages users which have used or searched the same music, therefore it increases the number of views, likes, shares and, eventually, physical visits of that person who wants to see the painting that h/she firstly saw on TikTok.

Ilde Forgione, social media manager and member of the TikTok creative committee of the Uffizi, is the one responsible for having successfully engaged under twenty-five years old users to the Florentine collection:

> These videos are created using the currently more conventional language for the young public, allowing art to get closer to new generations and to transmit to them the message that art should not be considered necessarily boring. (Forgione, 2020)[21]

In an interview for *Forbes*, she explained how she and her colleagues had deliberately chosen to use the communication codes of their targeted audience in order to arouse a new interest and curiosity in art, making it feel closer to the museum (Maddalena, 2021). Additionally, it must be noted that on TikTok @uffizisocial not only posts fun content for educational purposes, but it also shares 15-seconds videos using works of its collection to discuss relevant topics as for example LGBT+ and women rights because younger audiences are keener to discuss these topics on social media and to compare personal stories. In technical terms, the Uffizi TikTok committee achieved the purpose of what is called "public engagement".

A further rule to follow for a good digital strategy is acknowledging and *answering* to the audience. All social media pages of the Gallerie actively embrace this "digital behaviour". As a matter of fact, interacting with the online audience by replying or "liking" a comment, is a simple and yet so fundamental action in engaging the audience digitally. Indeed, museums not only have to match the level of participation of audiences but also must invest time in "curating" such participation. If an institution "likes" the comment of a visitor, it gives him/her importance; therefore, it creates a good memory

[21] Personal translation from an excerpt of Carmela Adinolfi's interview to Ilde Forgione: «Questi video ideati e creati con il linguaggio al momento più convenzionale ai giovani, permettono all'arte di avvicinarsi alle nuove generazioni e di trasmettere loro il messaggio che l'arte non deve essere per forza noiosa.» in Adinolfi, 2020, https://firenze.repubblica.it/cronaca/2020/05/04/news/e_gli_uffizi_sbarcano_su_tik_tok_video_ironici_sui_capolavori_d_arte-255647403/, last access August 3, 2021.

for the user and it has more chances h/she will one day visit the museum as it boosts the "brand" of the museum (Anonymous, 2019). On the contrary, if an institutional page never replies or does not engage with its followers, then the possibility of encouraging more offline visits is reduced. @Uffizisocial greatly respond to this audience engagement – on social media – requirement as proved by the number of interactions that every day happen on their pages (fig.36).

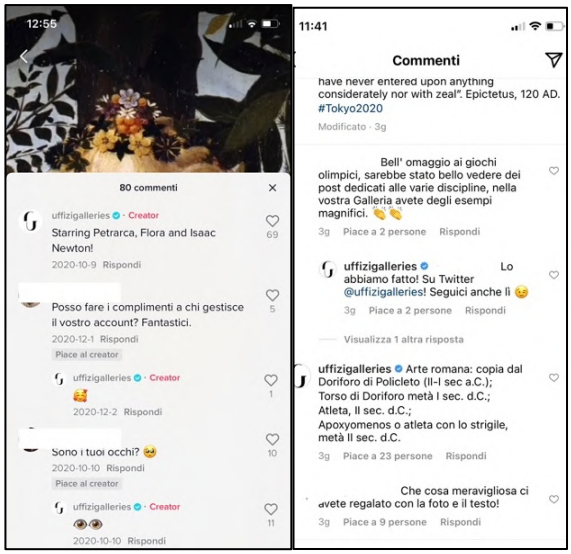

Fig. 36 examples of interaction with the audience/followers, screenshots from Uffizi's social page of TikTok (left) and Instagram (right).

2.2.2 *SENSING THE UNSEEN: STEP INTO GOSSAERT'S ADORATION*, NATIONAL GALLERY OF LONDON

Museums can also offer digital experiences that are not held online but that are *in situ*. Just think of augmented and virtual reality games or exhibitions. *Sensing the unseen* should originally have been an immersive experience for visitors of the National Gallery in London (fig.37) and should have been an interactive journey inside the oil-on-oak masterpiece by Jan Gossaert.

Fig. 37 rendering of the immersive experience *Sensing the Unseen: Step into Gossaert's Adoration*, 2020.

As a matter of fact, the project was structured together with a team of designers, sound artists, and tech specialists, who worked with a "target audience" through social networks, asking them questions to ascertain what moderately culture-curious eighteen to thirty-four-year-old visitors might look for in a display. By interacting through social networks with their audience, it became clear that a contemplative experience was the right answer.

However, when the British government announced the second national lockdown in November 2020, curator Dr. Susan Foister who was at the head of the whole project, had to reimagine it and find the most engaging and appealing approach to offer to target visitors throughout the lockdown period. Eventually, she decided to transform this physical-immersive experience into an online experience – the first of its kind at the Gallery – and to rename it *Sensing the Unseen: At Home*. Specifically, the new version of *Sensing the Unseen* was imagined as a mobile experience aimed at mobile users who can now simply launch the programme by clicking on a link that is on the National Gallery Website. Then, users/visitors can enjoy the digital exhibition wherever they are. Both the immersive and mobile experience offer users to be digitally accompanied through their "journey" by a narrator, none other than Balthasar in the physical version, one of the Three Kings, whose responsibility is to interpret and, most importantly, to describe the scenes of the artefact – from Balthasar's personal perspective for the narrator of the original event –, while interactive sounds bring them to life.

Here, indeed, sounds are key elements for visitors as they guide them to visual details they may have missed, immersing them in the world of the masterwork by Gossaert. They are so important that – exclusively – in the mobile version the user is strongly

recommended to use headphones, to somehow feel more engaged and immersed in the exploration of the painting.

Visitors who managed to live this event physically, visiting it before its forced closure, were greatly impressed. A blogger of the online magazine *Mouthing Off* wrote: «I'm not sure how long the film of the painting itself was, but it felt like a majestic eternity. I never wanted it to end» (Anonymous, 2021). The same blogger also stated that he would be pleased to know that the Gallery would launch other exhibitions with the same format for some time, to see how this new way of digital viewing could be applied to other works of the collection. Other comments regarded the colours of the painting, which were emphasised by the thirteen-minute-long video and the myriad of details that normally would pass unnoticed.

In a video posted on the Facebook page of the National Gallery, one can listen to various feedback from the audience. Amongst them, one can hear a visitor say:

> it was really cool, I really enjoyed it. Really see the detail, really get the other senses involved, like hearing it, imagining what the painting was trying to say to the viewer. So, I think it is really refreshing to be able to experience art at the National Gallery that is highlighted in that way. (London National Gallery, 2021)

The above-mentioned feedback and reviews prove that the National Gallery succeeded in engaging the audience through the immersive digital *Sensing the Unseen*, but I wondered whether it could flaunt the same triumph for the mobile version.

Clearly, virtual online exhibitions – as the innovation programme leader of the gallery Emma McFarland argued in an interview to the Museum Association – engages audiences with a collection in an exciting new space «which is not tied to a geographical location or a specific building or the materiality of the object» (Lister-Fell, 2021). However, I could not find any review of the mobile experience, thus I can only give my opinion as a "virtual" visitor about it, as I tested the mobile version. For me, stepping inside a room with the original masterpiece displayed and surrounded by a continuous interplay of videos, sounds and lights is usually more entertaining than watching a set of images and videos on the screen of a telephone. In fact, I am not immediately thrilled when a new "immersive" mobile experience comes out, because I do not feel fully

immersed in virtual reality if it is possible to distinguish what is real and what is not. Immersive virtual events should – by definition – let the user forget the sense of reality, therefore transporting visitors to a new world that, in this specific case, would be the *Adoration* of Gossaert. Therefore, when I launched the application, I was sceptical about it.

The first difference – besides the obvious non-physical attendance – in the mobile version is that scenes are recited by poet Theresa Lola who wrote six poems for the occasion. This might disturb the engagement, as it is supposed to be Balthasar to be the one speaking. However, I must admit that the tone of Lola was truly charming, and it was a pleasure to be "accompanied" by her poems throughout the experience. They added something "magical" to it. As it happened in the museum version, on the mobile experience one can zoom in and observe details that during a normal visit one would not notice. Perhaps, zooming on images in the mobile one is easier and lets visitors – at least this was my thought – focus more, without the unconscious sense of being in haste to move from the painting and let others see it. Moreover, it allows to get as closer to the details of the artwork as possible, which is not possible in a museum, nor in an immersive physical experience where distances are strictly defined by curators to offer the best possible involvement.

It must be said that in the mobile version the innovation team of the National Gallery tried to recreate the original project, so they re-used the sounds envisioned for the physical one. Since I had not experienced the physical immersion, it was an unexpected revelation when, for example, zooming in on the golden goblet, the sound of dropping coins began, or when I could hear the chatting and gossiping of people observing the arrival of the Kings behind a colonnade. It aroused surprise, amusement and even excitement and, in short, I found myself fully engaged by it.

Therefore, I believe that, despite the minor sense of immersion, giving the possibility to everybody – even to those visitors who cannot reach London for several reasons – to access the experience simply by clicking a link on the Website of the Gallery, can demonstrate to be a successful attempt at engaging audiences through new technologies.

2.2.3. *EXPERIENCE THE NIGHTWATCH*, THE RIJKSMUSEUM

The year 2019 marked the three-hundred-fiftieth anniversary of the death of Rembrandt. To celebrate this anniversary, the Rijksmuseum launched the "Operation Night Watch", a conservation and research project of the masterpiece which involved eighteen experts. Moreover, on that occasion, the museum together with Dutch public-service broadcaster NTR developed what they called *Experience the Night Watch* (fig.38).

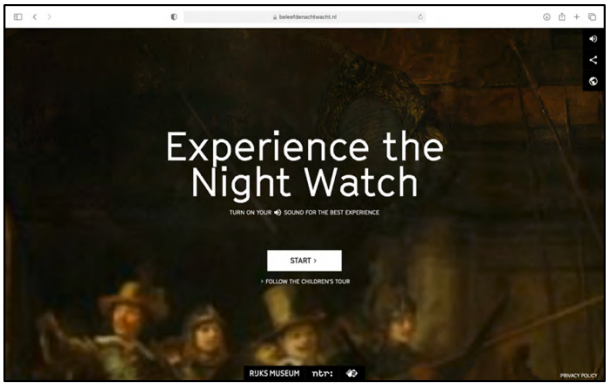

Fig. 38 screenshot of *Experience the Night Watch*, Web interface.

More than forty people worked together to realise this project, amongst them project coordinators, copywriters, designers, voice actors, animate editors, sound designers, and content creators. Just to mention some, Ingrid Walschots was the project leader for NTR, Tanja Hann for Fabrique and Jasper Kaizer for Q42. The project manager for the museum was instead Peter Gorgels, Website and App Manager at Rijksmuseum. All this team together won, for *Experience the Night Watch*, the most important European prize for online excellence: the Lovie Award.

Similar to *Sensing the Unseen*, users are here invited to dive into the painting through an interactive journey – here it is a proper documentary – which unveils hidden secrets of the work *Officers and Men of the Amsterdam Kloveniers Militia, the Company of Captain Frans Banninck Cocq*. Moreover, if the Londoner experience was dynamic as it physically involved the user to zoom in and out or to unveil details and sound effects by sliding the finger on the screen of the telephone, also the curators of this interactive experience involved some dynamism as well. In fact, it is not a single image that appears, but a composition of more than fifty-hundred digital photographs that have been

stitched together to give visitors a completely new view of the whole artefact. This option indeed shows how the whole team that worked on it cared about engaging a wider public as possible.

As regards engagement, indeed, in exclusively online digital experiences dynamism is needed to get the whole event memorable for the user. In *Experience the Night Watch*, the visitor is immediately called into action by the guiding voice that invites the listener to find out more and more. Additionally, the user can click and decide what h/she is interested in learning (figs.39-40).

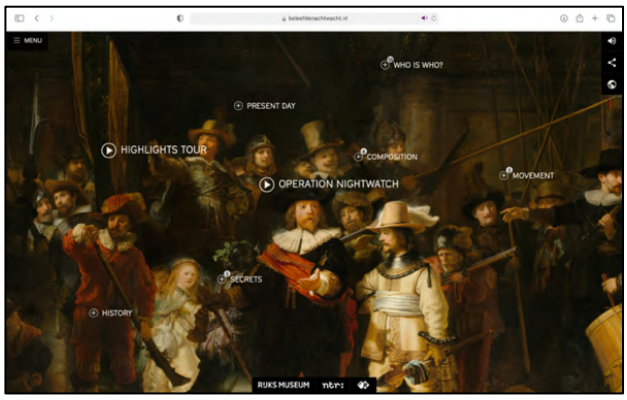

Fig. 39 screenshot from *Experience the Nightwatch, Home page.*

Fig. 40 screenshot from *Experience the Nightwatch*, Operation Nightwatch sidebar.

In fact, it is not only a description of the painting as its composition and iconography. On the contrary, it offers a full entertaining chronicle on its restoration attempts throughout the years, with certain parts of the painting being highlighted as the voice tells specific facts and with games of zoomed-in effects for the eye of the visitor to not get “bored”.

Furthermore, a mention should be made to the “Children’s Tour”. As for @uffizisocial,

they adapted the experience to the younger target, writing a more colloquial, ironical, and shorter script. Indeed, if one switches from the adult version to the one for children, one instantly hears the difference.

I have found it quite noteworthy and smart because in this way children are more inclined to visit the Rijksmuseum and therefore, they nurture their cultural – embodied – capital that is, ultimately, culture or, to cite Bourdieu (1986), *habitus*. This concept refers indeed to the process of incorporating culture that is connected to labor of assimilation that takes time to become "natural". So, in the case of children attending the "Children's Tour", one could say that their cultural embodiment starts from there and then becomes culture as soon as they, growing, continue to consume culture and art. Although being an interactive experience created for a specific painting as *Sensing the Unseen* and besides the engaging nature of both the projects, *Experience the Night Watch* is very different from the one of the National Gallery. In the Dutch one, the main purpose is to educate the public on the masterpiece and its last effective restoration and research journey. When "living" the British experience, indeed, the visitor – as also stated commenting my own experience – is primarily amused and only secondarily educated, precisely because of the potentiality of emotions in this sense, as proved by Tyng, Amin, Saad, and Malik (2017). Indeed, while the teaching purposes of the *Night Watch* are paramount, being an interactive experience in the form of a documentary, *Sensing* aimed at surprising the visitor, astounding it.

In the Dutch experience, for example, there is sound too. However, it helps the involvement and the attention in listening to the narration of facts, dates and anecdotes because of the zoom-in play and the figures which are highlighted as soon as the narrator mentions them. The bark of one of the dogs in the immersive *Adoration*, on the contrary, is "simple" amusement.

That said, both experiences have proved to be engaging even though their diverse purposes, demonstrating that organising digital projects for a museum can help reach more visitors and, moreover, get them to know the collection better.

3. CURRENT DIGITAL POLICIES IN EUROPEAN MUSEUMS

I have previously (chapter 2.2) discussed what are the advantages of digitising a museum, presenting some of the tactics commonly employed in a digital strategy. Indeed, as some research demonstrated, the advantages of being online for a museum are compelling. To prove the truthfulness of this statement, I might firstly comment on some data regarding the recent happenings due to Covid-19, and, secondly, I will present the digital plans of some European museums, showing how these museums chose to pursue their goals also by engaging the audience through "the digital". Before going into the case studies, however, I must make a clarification on the terminology used. Indeed, "digital policy" and "digital strategy" refer to two very different – but closely intertwined – aspects of a business, museums in this case. The first one refers to the general principles by which the institution is managed and how it operates, therefore its mission, vision, objectives, and general rules the staff must follow. The strategy instead is comprehensive of all those actions that must be taken to ensure the policy of the museum is respected and pursued. Usually, a business policy is a document that is not necessarily made public. In fact, many museums, when referring to their digital plan, usually present their strategy, rather than their policy[22].

As argued by the UNESCO in a report based on data provided by 87 institutions amongst the Member States, during the pandemic one hundred fifty-five institutions were forced to close temporarily, causing a 70% drop in attendance – some have reported a drop of 90% – and between a 40% and 60% reduction in revenue compared to the situation before the pandemic broke out, as showed in fig. 41 (UNESCO, 2021).

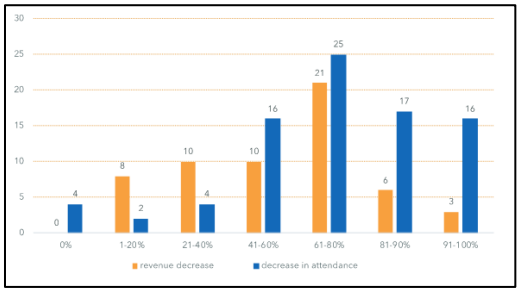

Fig. 41 effects of the pandemic on museum revenues and attendance, screenshot from UNESCO's Museum Around the World, April 2021.

[22] As a matter of fact, one could speak of digital strategy without worrying it is not the museum's policy, being based on that. However, it is important to know the difference between the two because, on the contrary, one cannot speak of "policy" to refer to the strategy.

Already in the report published by UNESCO the year before (UNESCO, 2020), some of the measures taken to adapt to the pandemic were mentioned, bringing the *digital issue* to the forefront. Among them, indeed, investments in digital technologies were presented as a necessary tool to keep up on assuring the positive impact of museums on education, research, and socialisation. In the 2021 report, besides the promotion of "the digital" as a tool to recover from the worrying situation caused by the pandemic, one can find some results of a scientific analysis conducted on the impact of the use of digital technologies during the pandemic. Indeed, many articles on the subject appeared in late 2020 and regarded the digital activities carried out by the Member States institutions. Over a hundred Italian museums were analysed, demonstrating how they doubled their digital activity compared with the 2019 one (fig.42).

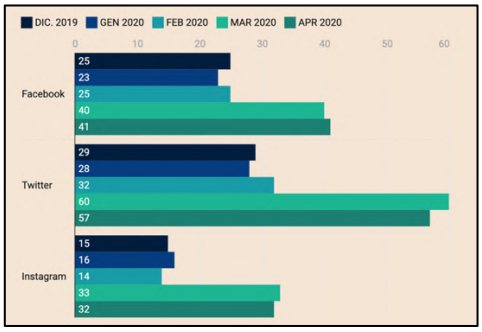

Fig. 42 Osservatorio Innovazione Digitale nei Beni e Attività Culturali, Polimi, average number of posts on the social pages of Italian museums, screenshot from Il Sole 24 Ore.

However, the studies have also shown that sometimes museums tended to lose sight of the main goal of implementing new technologies which was to reopen the institutions and help *in situ* visits (UNESCO, 2021). Moreover, some scholars as Rodriguez Lopez (2020) have argued that in many cases, the digital offer was used by institutions more as a simple communication medium rather than a tool useful to engage the museum audiences and promote further physical visits, or as a device to foster developing research and education.

In proof of this, in the study carried out by the Osservatorio Innovazione Digitale dei Beni e Attività Culturali (Pirrelli, 2020) what emerged is that only 24% of the analysed museums has a digital innovation strategy plan, showing they lack "digital awareness" needed to make the most of digital technologies (Pirrelli, 2020). In the following

sections, I will present some European museums that employ digital technologies within their institutional strategy. Eventually, I will analyse whether they use them only as a communication tool or, on the contrary, as an effective means to attract new visitors, engage them and foster institutional activities. Nevertheless, commenting on each policy – or strategy – and then comparing them, I aim at demonstrating how differently they attempt to create engagement and consequently ensure access to cultural consumption via digital technologies.

STÄDEL MUSEUM, GERMANY

The Städel Museum in Frankfurt, Germany, can vaunt to have been one of the first European museums to give the right importance to digital progress. Indeed, the institutional "Digital Expansion" had already begun in 2015, when the museum entered its 200th year.

Generally, it must be said that the digital strategy of the Städel was determinedly built on the idea of offering something that was not merely the digital version of the physical contents of its collection, but rather something that promoted the dialogue between the *physical* and the *online*, helping each area to give something more to the visitor. Already at the core of what one could call "digital department" there is, in fact, an interdisciplinary committee made of individuals of all divisions and not only Web-savvy members: Head of Education, Head of Public Relations, Head of Marketing and, finally, Head of Digital. Moreover, this committee meets every year to revise the digital strategy, goals, and projects of the museum. However, as stated by the Head of Digital Freya Schlingmann, there is not a written digital policy of the institution but only the strategy available for consultation on the Website of the museum (Schlingmann, F., Personal Communication, September 8, 2021).

As one can read about the digital strategy of the Städel Museum, its mission is to «continue doing justice to the institution's research, education and communication responsibilities in the digital age, and to spark enthusiasm in various target groups for engaging with art and culture» (Städel Museum, n.d.). The Webpage of the museum explains that its digital strategy does not involve the mere reconstruction of the museum in the online environment, rather it offers cross-linking contents by creating new methods of doing research together with communicating, presenting, and narrating

artworks. Specifically, the digital efforts of the museum do include different means that ensure both the online and offline consumption of the collection. Amongst them, a new Website, and the Wi-Fi connection throughout the institution, along with the online version of the digital collection of the museum. However, the variety of technological tools the visitor can use during, before, and after his/her visits include different options and true digital experiences. The visitor of the Städel can indeed download free apps with audio guides or listen to the podcast series *Finding Van Gogh*, or even play with *Imagoras*, a game app for tablets intended for children that accompanies them in a playful discovery of paintings, drawings, and prints of the collection (fig.43).

Fig. 43 *Imagoras*, screenshot of the presentation of the game on the Website of the Städel.

Furthermore, the digital "expansion", as called on the Website, also comprehends a vast array of *digitorials* – a series of multimedia groundworks on special exhibitions that, as in *Operation Night Watch*, illuminates the history of the artworks contextualising exhibits before their visit – and, furthermore, a virtual reality experience. The latter lets visitors see what the collection rooms looked like in 1878, the year of its construction. The museum gives both the opportunity to physically experience the historical reconstruction at the museum, wearing VR glasses, or virtually in the mobile format by downloading an app created exclusively for Samsung devices. This, however, automatically excludes all those virtual visitors who do not own a Samsung device, therefore lacks an engaging part of a possible "virtual" audience.

RIJKSMUSEUM, NETHERLAND

The digital development of the State Museum of Amsterdam, the Rijksmuseum, has a long history linked to its large renovation started in 2003. This included a modernisation of the spaces of the building and the broadening of its audience, resulting in both a fascinating physical space and online presence for visitors all over the world. When the museum reopened in 2013, after a ten-year renovation, its primary aim was to communicate that it was “open”, «not only in the sense of re-opening the building but also in the sense of opening up the collection in a mixed chronological display that evokes a sense of beauty and a feel for time», stated the Digital Team Director Martjin Pronk (Pronk, 2016).

One could summarise the Dutch digital policy of the museum by saying that it revolves all around audience engagement. Indeed, from early institutional reports to current ones, audience involvement has always been mentioned as a key point of all the activities of the institution. Already in 2007, Lora Aroyo analysed the Website of the museum and stated that its main purpose was to create personalised experiences for the visitor during both his/her offline and online visit (Aroyo, 2007). As a matter of fact, the vision of the museum is «the Rijksmuseum brings meaning to art and history for a domestic and international audience that is broad-ranging and contemporary» (Rijksmuseum, 2020) while its goal is «to expand and deepen its connection with visitors by telling stories that fire the imagination, and foster empathy and emotional affect» (Rijksmuseum, 2020).

The first step of the Rijksmuseum into the digital world was to set an open access policy. This included the high-resolution digitalisation of the collection, making it accessible to the viewer online and even downloadable for free. Moreover, the digital department contemporarily launched the “Rijksstudio”, a sort of personal collection that each visitor can create by browsing more than 727,625 artworks. The director of the digital team, commenting on this virtual “private” gallery said:

> we feel that the collection is not the property of the museum. It belongs to everybody in the Netherlands and therefore to everybody in the world. If it belongs to you, you should be able to do with it whatever you want. (Pronk, 2016)

From this statement, it is clear the "openness" the Rijksmuseum intended to communicate to the visitor once the museum re-opened its doors. Additionally, together with the digitalisation of its collection, the museum provided free multimedia tours available on the Rijksmuseum mobile app, which was later updated with new contents and functions, including a "family game". Furthermore, the museum promotes a series of workshops organized at the Teekenschool, where the use of the most recent digital media, for example, 3D printers, is included. Additionally, in 2016 the institution launched its institutional pages on social media platforms. Today, the museum has an extremely strong presence on such platforms: 663 thousand followers on Instagram and 494.733 on Facebook – with 562.018 checked-in presences. In addition, the museum holds two YouTube channels: RijskCreative and RijksTube, both part of the YouTube strategy of the institution. The first one offers three series in English – the *Rembrandt Course*, *Art Through Centuries* and *Watercolor, Ink & Blueprint* – which the viewer can watch to learn the painting techniques of Rembrandt and other painters like Van Gogh or Karel Appel. Such contents are free courses with real teachers that help anyone who is interested in mastering both the methods of old masters and modern artists. The second one, conversely, is specifically envisioned for the "millennials" who cannot physically reach the museum. This channel includes twenty-one videos of *Is This Art?*, a series that connects the modern pop culture of today to art forms from past centuries. For example, subscribers of this channel can find a montage that compares the TV programme *The Kardashians* to artworks of artists like Vermeer, Jan Steen, and Pieter de Hoock, showing how museum visitors are similar to those watching the American show, as looking into a painting is simply another way to look into the lives of the others. As also said in the case study of *Experience the Night Watch* in chapter 2.2.3, the orientation of the museum towards the visitor is clear: always trying to engage a broader and more inclusive public through digital strategies. However, there is one big difference between the digital policy of the Rijksmuseum and the strategy of the Städel. Indeed, as reported in Eirini Alexandrou's dissertation (2020), Natet Baumer, Head of the Digital Department of The Rijksmuseum, stated that they evaluate online visits as being equally important as offline ones, while the Städel strategy, on its Website, states the opposite. For the Städel professionals, online and offline are not the same, but the Web and its contents can surely add something more to the education and experience of the user.

GALLERIA NAZIONALE D'ARTE MODERNA E CONTEMPORANEA, ITALY

One of the first Italian museums to open itself to "the digital" was the Galleria Nazionale d'Arte Moderna e Contemporanea in Rome, under the directorship of Cristiana Collu. As soon as she began her directorship in 2015, she gave importance to digital technologies, prioritising digital development and the engagement of new audiences through it. Specifically, she implemented the presence of the museum on social media, as will be largely argued below.

Despite the relevance given to the digital sphere by the Galleria Nazionale, there is not a digital policy, but a digital strategy that can be found in the annual reports. In the 2016 report, one can read for the first time about the «digital & social-friendly Galleria Nazionale» (Galleria Nazionale , 2016, p. 94). Together with the architectural restoration of the museum, in fact, there was a true rebranding of the whole institution, beginning with its name – that was changed from "GNAM" to "Galleria Nazionale" – and a digital restyling. The latter began in 2016 when the new Website and the new Instagram account @lagallerianazionale were launched. The Website was renewed in terms of design, functionalities, and contents – now available in three languages – by the design studio *Designwork*. The new site was in fact made more accessible – it was translated in English and Chinese –, more engaging (as it changes its appearance daily) and mobile-friendly. Moreover, it was provided with a simple, intuitive interface. Additionally, the Website was conceived as an open-source platform, where contents could be easy to consult and share. In addition to the opening of an Instagram page – Facebook and Twitter had already been opened in 2009 and 2010 –, the Galleria launched its new page also on Pinterest and Google+ in 2016, showing a general increase in its activity on social media. The aim of this social media expansion was indeed to promote a continuous interaction with the online community of the institution and to share opinions and content with it. As a matter of fact, in an interview with *Vanity Fair*, Collu stated that her aim was to engage the audience with means it already knew well, that is social media (Spolini, 2014)[23].

Nonetheless, the digitalisation of the Galleria Nazionale did not stop there. Indeed, it included an online magazine, *What's on*, which entails weekly updates through the

[23] A community is a group of people that decides to follow an institution or, more generally, a brand, and which share some mutual interests with other members.

publication of new articles, interviews with artists and curators, and in-depth information boxes on events and activities of the museum. Unlike many other institutions which often opt for a digital version of the collection directly on their Website, the Galleria Nazionale in 2016 moved its collection on the platform *Google Arts & Culture*. Here, the museum has its collection displayed, as well as its online exhibitions like *L'artista dei due mondi* commented by curator Paola Ugolini. Additionally, the user who navigates on *Google Arts & Culture*, can furthermore virtually walk across the Galleria, and rapidly observe the collection as it is displayed in the museum (figs. 44-45).

Fig. 44 screenshot from Google Arts & Culture, street view of the Galleria Nazionale.

Fig. 45 Google Arts & Culture, screenshot of the options for the virtual tour of the Galleria Nazionale.

Besides mentioning the innovations regarding the collection and the Website, in the 2016 report one can read about a free App for Samsung and iOS devices that allowed to let users who downloaded it to discover sixty artworks and obtain information about them in augmented reality. However, this mobile app does no longer exist. More recently, in 2018, the Galleria opened its account on Spotify, where, in 2020, it included a podcast, *Due passi per Roma,* that not only discusses artworks of the collection but also offers talks on the city of Rome and its cultural treasures.

In 2020, the year marked by the beginning of the Covid-19 pandemic, the communication on social media did not increase, but as soon as the number of *in situ*

visits dropped because of the closures, that of the online visits expanded. Specifically, the blog of the museum *What's on* counted 95.145 visits in 2020 – in 2019 the visits were 37.261, with an increase of +255% – while the Website had 620.464 views, two hundred thousand less than the year before. Therefore, there was a change in the audience as it became an audience of readers, rather than an audience of "users" (Galleria Nazionale, 2020). Since the communication on social media remained stable during the pandemic, not offering content different than usual, the reason why the virtual visitor "moved" to the blog could be that h/she was in search of something different. The user, usually involved in "scrolling" and carelessly watching images on the "home page" of social media platforms (or on a Webpage), began looking for another type of cultural consumption, less superficial and more reasoned. Being locked in their homes, people increased their use of the Internet for the very first period of the Italian lockdown in March 2020 and, in general, of all those technologies that include a computer or a smartphone. This happened for a variety of reasons like the necessity to work, study, or, just for the boredom of isolation.

During the first lockdown period, people were keen to distract themselves from what was happening beyond their doors. This was proved by the increase of new users on social media platforms such as Facebook (8.7%) and TikTok (85.3%) (Statista, 2021) and by a report that claims an average of 26,4 minutes per day spent on Facebook by Italians in 2020 (Gasparello, 2021), with an increase of 49% compared to 2019 (a study published on Vox reports an average of 82 minutes per day on social media after the Covid-19 breakout in the United States) (Molla, 2021), showing that such increase was not only an Italian trend). However, after the Summer and the new lockdowns of October 2020, which only affected some Italian regions and partially conditioned the whole country with new restrictions and curfews, the newness of smart working, the spread of new social media platforms, and all the things one used to do with his/her telephone during the first forced closure, generated monotony, and dullness. Already at the beginning of Summer, an increase of un-subscriptions was recorded, though the high number of active users persisted (Signorelli, 2021).

In this situation, one can understand the change in the composition of the "users" of the Galleria Nazionale. Indeed, on the blog *What's on?* (Galleria Nazionale d'Arte Moderna e Contemporanea, n.d.) users - then "readers" – can select what to read and watch from

a huge range of contents: description of exhibitions, interviews to curators and artists, event Web series like *Breve videostoria di (quasi) tutto* or blog series like *Van Gogh a gogh*. Moreover, the blog offers further comments on the collection of the Galleria and even on past events such as the exhibition *van Gogh*, held at the institution in 1988. Therefore, the "reader" of the blog of the Galleria is not the typical user of social media, generally inattentive and passive. On the contrary, the new user is asked to "act", to take time to select one of the many "rectangles" (fig. 46) that populates the blog page and, paradoxically, to endlessly scroll – as the "user" does – through them until something interesting appears and decides to read it. Finally, the Galleria suggests the term "reader" for this new type of user, to which I would also add "listener" because *What's on* offers more than long, descriptive, texts and invites the viewer to listen to the videos included in its posts too.

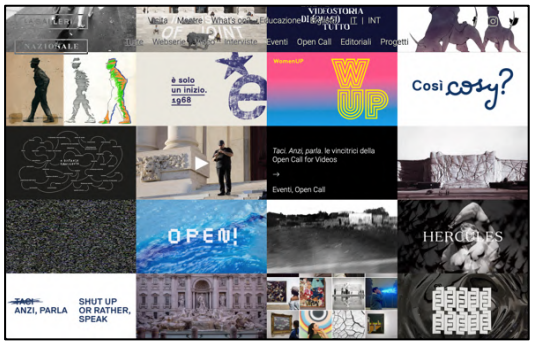

Fig. 46 *What's on?,* screenshot of the blog interface of the Galleria Nazionale d'Arte Moderna e Contemporanea.

MUSEU NACIONAL D'ART DE CATALUNYA, SPAIN

Although there is not a document exclusively discussing the implementation of digital technologies within the Museu Nacional d'Art de Catalunya – therefore, in this case, there is neither a proper digital strategy nor a policy –, great importance is given to such technologies in the three-year strategy plan of the museum (2019-2022). Indeed, between the main goals of the museum, one can notice that the digitalisation and online publication of the whole collection is among the first objectives. Digitalisation is, as readable in the plan, a goal which in turn is strictly connected both to the social and educational aims of the institution. Researchers have studied how digitisation can support art institutions like museums to pursue such goals, complementing physical

visits and enriching the experiences of the audience. A study carried out by the University of Taipei in 2014 (Chang, Sung, Liu, & Zhang, 2014) proved how digital technologies can add educational value to the experiences of visitors. In the experiment, 135 college students were organised into three different groups. Two of them were respectively equipped with an augmented-reality guide and a traditional audio guide, while the third was a non-guided group. Eventually, the study demonstrated how the first group had a higher engagement with the artworks, based on the time spent by each group on each painting. Indeed, as Enhuber claims (2015), it is demonstrated how digitalisation, which soon led to a spread of participatory strategies within museums, enhances institutions' art mediation and educational roles through a *co-creational approach*. This concept, introduced by Pine and Gilmore (1998), underlines the active co-producing role of the consumer – the visitor, in the context of this study – that is prompted by the emotional and experiential engagement that h/she has with the cultural object. In museums, this has been translated into a dynamic, active visit that can also happen on the Web as soon as the museum embraces "the digital".

Thereby, besides digitising the museum to obtain the advantages I mentioned in chapter 2.2, one objective of the three-year plan of the Catalan museum is to increase the participation and knowledge of the visitors, and this is possible precisely through digital technologies:

> the need to strengthen the digital dimension of the museum is intimately linked to innovation and the production and dissemination of knowledge. Both technological change and users' growing demands and expectations require a digital transformation aimed at connecting the museum with people (public + internal team) in a way that brings more value and efficiency. (Museu Nacional d'Art de Catalunya, 2019, p. 20)

To achieve these goals, the museum has introduced a vast array of digital offers, demonstrating how digitalisation and audience engagement exist together within this museum. Among the simplest tools employed, one can find social media. The Museu Nacional, indeed, offers daily content on almost every existing social media, having a *@museunacional* page on Facebook, Twitter, Instagram, Pinterest, Flickr, Vimeo, and YouTube, therefore adapting itself both to visitors who prefer videos to images, and to those who favour texts to spoken words.

However, the greatest digital effort to involve the audience is already evident on the Website. Here, visitors can access every information they need, from working hours and location of the museum to floorplans, multimedia contents, and current and past exhibitions. Furthermore, unlike most institutions – as argued in the previous examples – a visitor can even easily find and download the institutional strategy or, if h/she prefers, h/she can simply read the summarised version of it, which is in the "About" section of the Website. Therefore, everything is accessible to everyone. Additionally, the relevance given to the audience on the institutional site is observable in various divisions of the "menu" of the Website. Indeed, as one can observe in fig. 47, information is grouped on the basis of the type of audience that can be attracted and interested in the contents included in each subdivision.

Fig. 47 *What's on* section on museunacional.cat, screenshot.

Considering the other digital means employed, the digitalised collection needs mentioning. Virtual visitors can find it both on the Website, museunacional. cat, and on *Google Arts & Culture*. On the latter, visitors can take a virtual tour and build a personal collection by adding artefacts in one's "favourites", which directly go in the personal "gallery" of the user, as it happens in the *Rijksstudio*. Nonetheless, the museum offers another type of virtual tour, *Second Canvas*, that brings the visitor not inside the gallery, intended as the reproduction of the physical space, but, on the contrary, inside the collection, offering a detailed and high-quality vision of the most important artworks of the collection and a voice-guided tour which zooms in and out the picture as soon as the

narrator mentions details about it[24]. Moreover, for the visitor who is not interested in listening to the explanations, the app provides a textual description of the artworks (figs.48-49).

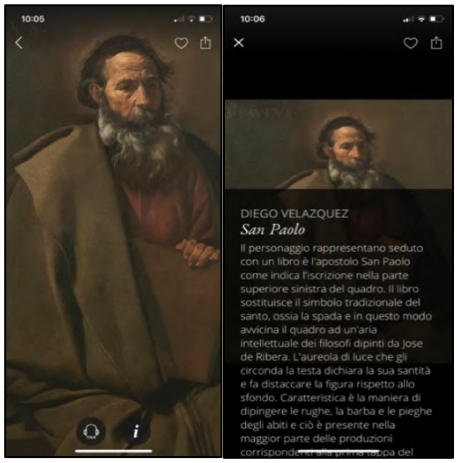

Fig. 48 *St. Paul*, Diego Velazquez, screenshot from Second Canvas, Museu Nacional d'Art de Catalunya.

Fig. 49 *St. Paul*, Diego Velazquez, information box, screenshot from Second Canvas, Museu Nacional d'Art de Catalunya.

Furthermore, the museum offers other free-of-charge apps that are suitable for carrying out different visits, depending on the desire of the visitor and "typology" (such as foreign or "culture lover"), each one proposing different methods to consume Catalan cultural heritage (fig.50). Again, one can notice the attention given to the visitor who is invited to use all the available tools to enrich his/her experience at the museum or, for those who cannot physically reach the institution, his/her knowledge at home.

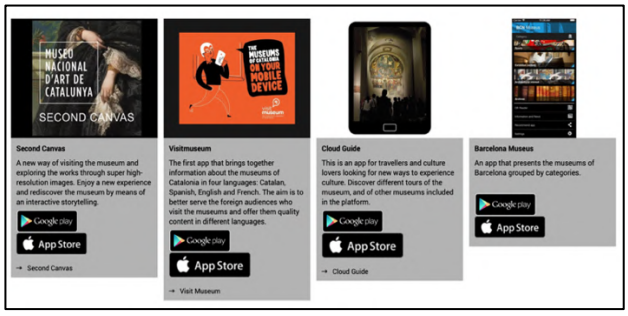

Fig. 50 *Apps* section on museunacional. cat, screenshot.

[24] Note that Second Canvas is an App now employed by many other national museums such as for Parisian museums, the Museum of Fine Arts of Boston (United States of America), the Museo Universitario Arte Contemporáneo (Mexico), the Mauritshuis (Netherlands), and many others.

Besides the apps, visitors can also find some online exhibitions that are digital previews of physical exhibits, through which visitors can get information about the artists involved and their artworks before deciding to visit the *in-situ* exhibition.

MAXXI, MUSEO NAZIONALE DELLE ARTI DEL XXI SECOLO

The Museo Nazionale delle Arti del XXI secolo, mainly known as MAXXI, is the first Italian institution entirely dedicated to contemporary art and culture. Its mission is to promote creative expressions in Italy, presenting itself as a place for cultural innovation and artistic research.

Although I could not find the digital policy and strategy of the MAXXI, many articles confirm the digital ambition of the museum. In an article on *FPA Digital360*, Prisca Cupellini (2018), Head of Communications and Digital, claimed the importance of renovating the museum institution in its space and language, transforming it into a dynamic, comfortable, and "living" site. When, in fact, the MAXXI was being built in 2007, the personnel were already at work to envision a place and a strategy that could involve the audience:

> From the beginning, the MAXXI put the audience at the core of its goals or, to be specific, the audiences: the real, the virtual, the potential and, also, the so-called "non-audience". This means that all the projects and activities, also the digital ones, are envisioned for those who will experiment with them. (Cupellini in Redazione, 2007)[25]

Therefore, from the beginning, Cupellini and the staff decided to implement digital technologies as tools useful «not only to communicate with visitors but to produce culture» (Cupellini in Redazione, 2007) while developing audience engagement and creating a relationship with the territory.

[25] Personal translation from an excerpt of the interview to Prisca Cupellini curated by *Exibart*: «Da sempre, infatti, il MAXXI mette al centro dei propri obiettivi il pubblico, o meglio, i pubblici: quello reale, quello virtuale, quello potenziale, ma anche il così detto non-pubblico. Questo significa che tutti i progetti e le attività, anche digitali, sono pensati attorno a chi dovrà farne esperienza», "Tutto il MAXXI su iPod. A Roma passi avanti nella tecnologia al museo", (Redazione, 2007)

Already in 2007, to show the worksite of the striking building realised by Zaha Hadid, the Museo Nazionale had launched its YouTube and Flickr pages, together with a first newsletter and the Website, for which the institution won the Lovie Awards in London 2015. Additionally, the staff placed some iPods (thirty in total) that visitors could use in the spaces adjacent to the worksite – and designated to host the first events of the museum – to discover ongoing and future activities of the MAXXI. It was one of the first times that an iPod Apple entered an Italian museum for educational purposes (Redazione, 2007). Moreover, seven short videos in Italian and English were realised that informed audiences about exhibitions and the worksite; in addition, all the audio-visual material was published and made available to download on the Website.

Besides winning the Lovie Awards, the MAXXI was awarded the ICOM Prize for social networks in 2012, delivered by the Italian Council of Museums, for its exceptional management of social media. Over the years, the Galleria opened its Facebook and Instagram pages, respectively counting 244.512 and 130.000 followers (two times the account of the Galleria Nazionale). Thus far, one can notice how the institution was "digitally driven" and how its strategy had been visionary since its foundation.

To name some of the digital tools employed by the MAXXI, one could mention the JACK Contemporary Arts TV, no more available today. This was a Web international TV launched in 2017, which aimed at fostering the co-experimentation between successful cultural organisations, overcoming geographical and physical limits, like FOAM Fotografiemuseum (Amsterdam), EMST National Museum of Contemporary Art (Athens), Istanbul Museum of Modern Art, MADRE Museo d'Arte Contemporanea Donnaregina (Naples) and many more placed all over the world. Specifically, the goal was to realise and technologically support the visual art, photographic, architectural, and dance projects of the MAXXI, and to ensure their international circulation (Ministero della Cultura, 2017).

Although the JACK TV project has ended, its Web strategy continues to include the use of sharing platforms like *Artbabble* where users could be able to select videos shared by the institution and which explored all the contemporary forms of art. However, I could not fully enjoy the contents shared by the MAXXI on *Artbabble* since it kept redirecting me to the homepage as soon as I clicked on a video. It would be appropriate to work on this malfunction or to recommend visitors which software it is necessary to use to let it

function, otherwise, they cannot access the published contents, causing a lack of potential engagement.

A further event exemplary of the digital ambition of this institution was the *VIRTUAL MAXXI*, an augmented reality exhibition held in 2017 that invited audiences to explore the Architecture Collection in a unique way, displaying building 3D virtual models which were not physically available, like those by De Feo, Sacripanti and Rossi. With regards to this virtual artistic experiment, one can also argue that the MAXXI is virtually accessible on *Google Arts & Culture* and that, additionally, it promotes events like *VRE, Virtual Reality Experience* festival, where dance, cinema, and visual arts are experimented within virtual and mixed reality environments. To expand the discussion on the impact of virtual and new technologies in the world, the MAXXI will soon host another exhibition, *Supernova*. This event, curated by Hou Hanru, Art Director at MAXXI, and Monia Trombetta, art curator, will open on December 16, 2021, and will display the internationally renowned digital artworks by Cao Fei like La Town (2014), Haze and Fog (2013), together with his newest works like Nova (2019) and Isle of Instability (2020). During this exhibition, visitors will explore concepts like reality, dreams, and the ways technologies have changed how we live, besides discussing the psychological effects the Covid-19 has been having on society.

Nevertheless, the digital strategy of the MAXXI does not end here. A good digital practice I would like to comment on is ton he *#iorestoacasa con il MAXXI. Liberi di uscire col pensiero* campaign launched during the first Italian lockdown in March 2020. Citing the – unfortunately in that period – very used hashtag #iorestoacasa, the museum proposed a massive cultural offer to its visitors via social media. Cupellini, in the recently held digital event of PA Social (set on Google Meet), explains this campaign and the success it had (Cupellini, 2021) [26]. One of the first aspects she discusses is how her department wished to transport the identity of the museum to the digital environment without modifying it. Firstly, the fundamental action was to involve the artists and all the people that worked for and with the institution. Secondly, it was important to plan how this could happen. Cupellini states how relevant it had been for the whole campaign that the

[26] The event *La voce digitale del MAXXI* is available on the following link: https://www.youtube.com/watch?v=7-uLzguAczQ, November 9, 2021.

entire staff, involving all the museum departments, cooperated with the communications and digital department to develop, create, and distribute all the necessary content to engage the audience.

Cini talks about a *transfer of digital competencies* between offices. Her department had to explain the tools, the basic strategies on social media platforms and, besides, it had to suggest the possible formats that could be implemented and those to avoid. Having only some weeks to create the campaign, all offices needed to be aligned. Indeed, the creation of content was only made possible thanks to the cooperation between the curators and the museum staff. Therefore, the campaign was based on a co-creative approach and caused a double engagement: on the one hand, the museum staff was involved to create engaging content for the audience – the numbers I will present shortly show that this aim was fully achieved; on the other hand, on the other the staff itself was engaged by its colleagues and their work, an aspect that Cupellini presents as key for the success the whole campaign had (Cupellini, 2021).

Specifically, the campaign included the publication of three contents per day, gradually encompassing fifteen categories related to the collection and mission of the MAXXI. Among these, #MAXXI10anni, a documentary series on YouTube offered by Sky Arte and Azioni d'Artista, original art pills curated by the artists themselves and presented by Bartolomeo Pietromarchi, Director of MAXXI Arte. All the contents were firstly promoted on Facebook, Instagram, and Twitter, and secondly made available on YouTube, where one can still find them today. A further aspect, important for achieving 6.6ML visualisations on Facebook, a total of 11.8ML views on the social media of the MAXXI, and an increase of 49% of foreign users on the Website (Cupellini, 2021), was that all the contents were subtitled in English, meaning that the campaign not only was engaging the Italian audience but also reaching an international one. Generally, during the pandemic lockdown, the audience on social media remained the same, with a prevalence of female users aged between 25 and 34 years old on Instagram and between 45 and 55 years old on the YouTube channel of the MAXXI (Cupellini, 2021). The Facebook page of the MAXXI, on the contrary, registered a small difference among its visitors, since the number of male users exceeded that of females. Additionally, it is worth mentioning that even during this campaign, the MAXXI offered content for people with hearing and vision impairments, respectively creating videos in sign language

(Italian) and audio descriptions. Besides, children had a series of contents expressly made for them, curated by Giovanna Cozzi, an art historian working as a coordinator at the Education office.

In short, the MAXXI has been trying to engage the audience with new technologies since its opening, keeping up with technological and digital progress. Thus, sometimes the audience was passively involved by the museum with contents made available by the museum curators like video and audio guides, or, still, with posts on social media; other times, on the contrary, the audience was actively engaged in AR exhibitions that would create a personal level of engagement in each visitor. Moreover, the MAXXI is always working to employ new technologies within its physical and online walls, organizing workshops, conferences, and Digital Think-In, which are annual events where all Italian cultural institutions meet and discuss technological innovation in their sector, sharing experiences and planning the future of Italian museums.

3.1. A COMPARISON of POLICIES and STRATEGIES

Examining the digital offers of some of the most representative museums in Europe like those presented above leads to a debate on how that institution and the country where it is hosted perceive the employment of digital technologies in the cultural field. Indeed, since the Städel, the Rijksmuseum, the Galleria Nazionale, and the Museu Nacional are museums that play a key role in transmitting knowledge on artistic and cultural heritage to local and international visitors, it is then clear that their digital strategy can be taken as exemplary of the cultural policy of their country. Therefore, commenting on the correlations and the differences between one another, one could see how such countries invest equally or differently in new technologies.

First of all, I will argue the main similarities between these institutions, and then I will consider the main differences. Reading the digital strategies of these museums, one could argue that they all have in common the *implementation of a participative behaviour* towards "the digital", considering it as a means to facilitate the engagement and the involvement of the public in the consumption and discovery of a collection. Nevertheless, besides encouraging a participative behaviour in their public, something which the analysed museums have in common, other similarities within their digital strategies also exist. Specifically, a relevant aspect one can observe in two of the

museums mentioned above is the *customisation* of the digital experience of the audience. The digital offers endorsed by the Rijksmuseum and the Museu Nacional d'Art de Catalunya are highly committed to promoting a personal digital involvement with the collection. Indeed, both these institutions give visitors the possibility to personalise their consumption online by deciding whether to attend a more general virtual tour of the collection of the museum or to listen to the explanation of a particular theme or, still, to net-surf in one language or another and to pick many other features to better tailor a personal experience. Moreover, offering mobile apps is an extraordinary method to help customise the online experiences of the audience, since this kind of mobile application often gives the user the possibility to virtually interact with the painting or the gallery space. Indeed, both the Dutch and the Catalan museums offer an array of free-of-charge mobile applications that visitors can download according to their intentions, where they can either "simply" book their visits, or be guided throughout the museum or, still, discover details that they would otherwise miss.

A further aspect that demonstrates how these museums care about their audience – giving it the ability to also customise digital visits – is offering visitors with disabilities the same opportunities to fully enjoy the collections but from home. For instance, the Rijksmuseum offers online tours in sign language, demonstrating surprising attention to deaf people and people with hearing loss needs. In this respect, in 2014, the Museu Nacional d'Art de Catalunya had used digital technologies, such as sound and audiovisual montage, in a program specifically targeted to people with cognitive disabilities or functional diversity. Today, people with special needs can rely on various tools to facilitate a complete and enjoyable visit, such as explanatory and subtitled videos of artworks in Catalan, Castilian, and international sign language. Moreover, the Museu Nacional has organised an online sign-guided tour on its YouTube page, where the masterpieces of the collection are fully explained in sign language.

Furthermore, a trait that is common to the digital strategies of all four museums is their *communication through social media*. Although I did not mention it for the Städel and the Museu Nacional, every institution I analysed has a social media page on Instagram and Facebook, at least. Nowadays, it is difficult for a museum not to be on such platforms, since they are important to attract new audiences and continue to involve older ones; they are implemented for marketing strategies too since they help create

brand awareness and reinforce the relationship with the audience. However, for these museums, the Städel and the Museu Nacional, social media is a tool useful to enrich their digital expansion, but it is not seen as the main one to engage the audience with their collections. For the Galleria Nazionale d'Arte Moderna e Contemporanea, on the contrary, social media are a different matter. As previously stated, the director Collu put social media at the heart of the digital renovation of the museum. Nevertheless, when observing the digital offers of other museums and the reports of the Galleria, it seems that the staff, and specifically the department of communications and promotion, focused slightly too much on social media platforms while, on the contrary, it appears lacking other engaging digital contents such as, for example, virtual tours or online interactive activities such as mobile apps. Curators and professionals of the other institutions examined here have, on the contrary, demonstrated to pursue a more forward-looking strategy.

We can hypothesize that the reason is the type of collaboration between the different departments of the museums. In fact, unlike the Städel, which invites all the departments to collaborate to write the strategy of the whole institution as Schilngmann said (Personal Communication, 2021), or the Rijksmuseum, that presents the same cooperative approach on its Website, or, again, the MAXXI where the successful campaign #iorestoacasa was the result of the co-operation between offices, the Galleria seems to have separate entities which exclusively work on specific sectors. In fact, the digital strategy of the Galleria, confirms the criticism of Lopes (2020) towards museums exclusively using "the digital", and specifically social media, as a communication rather than as a potentially engaging tool. The *community* of the Galleria Nazionale, however, although partially involved in its Instagram page, where photos taken by visitors are reposted, acts mainly as a receiver of information. Distinguishing the purposes of *reaching* and *engaging* the audience, typical of social media, I will briefly argue that only the goal of reaching is properly achieved. To introduce this aspect of the social media strategy of the Galleria, it must be noted that, if it is true that reposting pictures helps engage the community, at the same time the audience involvement is low, specific of those whose pictures have been reposted and that, consequently, "like" and comment their pictures, and their acquaintances, that, in turn, enjoy the temporary "fame" obtained by the person whose pictures has been reposted. Eventually, this strategy

lacks specific call-to-actions that encourage the participation of the whole community. If on the one hand, it is now a real "digital requirement" for museums to have a digitised collection available for online consultation, on the other it is necessary to curate institutional pages on social media and its followers; moreover, it is required to offer contents on such platforms in ways which can engage audiences with the stories about the collection they *post* on. Generally, its digital strategy does not offer many digital experiences to its visitors and does not compellingly use social media. Unlike the MAXXI, which has always proved to be keen at using new technologies to enrich the experience of its visitors and invites the audience to explore the collection in innovative and "experiential" ways, the digital engagement of the Galleria is for the most part limited to social media. However, it does not use social media to offer exclusive and additional content, but it rather uses them to communicate information about closures, ticket discounts and gives some short descriptions of artworks included in the collection. On the contrary, taking for example @museomaxxi, the Instagram page of the MAXXi, one immediately notices the difference with @lagallerianazionale (figs. 51-52).

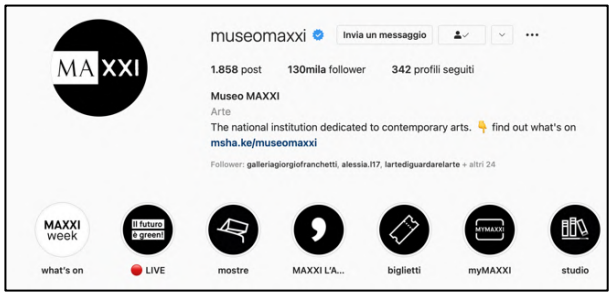

Fig. 51 Museo MAXXI Instagram description and highlights, screenshot.

Fig. 52 La Galleria Nazionale Instagram description and highlights, screenshot.

For instance, the MAXXI presents itself in English, introducing the institutional Instagram page to a broader international audience, whereas the Galleria chooses to describe itself

in Italian. Moreover, while the description of the MAXXI is simple and eye-catching, the other one, although simple, is not compelling. Many guides explain how to create an attractive Instagram profile, starting from an engaging description (Lester, 2018; Zote, 2021). Among the first aspects that are usually highlighted by social media experts, are the shortness of sentences, and the use of bullet points. The latter is a tactic that the Galleria does not employ. Since the media curator and the communication area want to underline that the museum hosts the «widest collection of Italian and foreign artworks from the IX century to the present» (@lagallerianazionale, Instagram description), then a description with two bullet points would surely appear more appealing. Another part missing in the "bio" of the Galleria is the category of the "business account". Since that is the page of an art museum, it is clear that the posts will concern artworks, artists, and artistic events at the museum. However, curating the details of a social media page is as necessary as curating the posts within it, that is why small features like this cannot be ignored. In addition, adding a *business category* helps the algorithm of Instsagram to find visitors that could be potentially interested in following the page.

As previously argued, the communication of the Galleria plan lacks a proper call-to-action. This can also be seen in its Instagram description, where the link redirecting to the ongoing exhibition is added without any line in the copy that invites users to click on it. Very differently, the @museomaxxi Instagram account uses an "emoji", a finger pointing at the link, as a CTA (call-to-action)[27]. A further difference between the two profiles is the use of the "highlights", stories that have no time limits once put in a folder on the page of the account. On the one hand, the content curators of the MAXXI decided to use this tool as a shortcut for visitors to ease the purchase of tickets or the research of information about the library, the shop, and the cafeteria, besides presenting ongoing and past exhibitions, giving space both to the Roman museum and the Abruzzese one at MAXXI L'Aquila. On the other hand, the Galleria in its highlighted stories focused nearly exclusively on exhibitions. The only informative group of stories regards the map of the institution. With regards to the posts of the two art institutions, if the Galleria uses its

[27] An *emoji* is an emoticon, or a pictogram, embedded in a text.

publications to deliver practical information to its users, the MAXXI uses its content to increase the knowledge about its collection and events.

Therefore, the Galleria does achieve the reaching purpose – that is to communicate and promote the activities of the museum – but only partially the engaging one proper of social media (Valeri in De Biase & Valentino, 2016). If one considers the social media of the other case studies, h/she will immediately notice how they succeed in engaging the audience. For instance, unlike the Städel social media profiles, the content of the Galleria is less curated and do not succeed in capturing my attention as a virtual visitor, nor do they let me "participate" like, on the contrary, happens on @rijksmuseum, where each post includes questions that invite me, as a visitor, to answer, or call-to-actions that encourage interacting with the page and its media content. Nevertheless, although the Galleria does not use social media content and tones in an engaging way necessary to create a connection with the audience, it attempts to let visitors participate in its virtual activity by *reposting* visitors' generated content on the Instagram feed of @lagallerianazionale[28]. Besides, the MAXXI also reposts the pictures of its visitors, though such contents are posted almost as if to "hide" them. In fact, also reposted pictures seem to have been purposely taken for the museum, by a paid photographer or by someone of the staff. Indeed, the @museomaxxi do not "tag" users whose pictures have been reposted, but rather include the credits at the end of the description of the post instead. The few user-generated-contents that the MAXXI reposts on its Instagram account are purposely selected to perfectly merge with its profile. Therefore, at first glance, the Galleria seems to be more successful in including its audience, since it is clear which are the user-generated contents, and which one is the materia of the museum instead. But then, again, the MAXXI exceeds the other Italian institution as it engages the whole *community* (see below) by adding, in every post, a call-to-action that blurs the boundaries between the digital platform, Instagram, and the physical visit, inviting every user to become, someday, visitors. The CTA is, in fact, a recommendation to «walk, listen, talk, shoot, take as much time as you need to visit this and all the Museum's exhibitions» (@museomaxxi, 2021).

[28] An Instagram feed is a sequence of contents ordered chronologically.

Lastly, I find that the social media of the Galleria Nazionale does not add anything more to what visitors could discover physically visiting the museum, while the advantage of using "the digital" should be presenting the information/artworks differently from how it appears in the gallery space. In brief, the Galleria lacks suitable digital storytelling, which is a fundamental aspect of using online platforms (Valeri in De Biase & Valentino, 2016). Generally, this term refers to the narration done through various means like social media and blogs, aiming at transferring values and experiences that influence the user and its consumer behaviour (Fisher, 2008). On social media, for example, telling stories about a museum or its collection encourages the interaction of the audience. However, storytelling goes beyond community and has an intrinsic value already studied by many in various fields: storytelling can serve different purposes that concerns marketing, education, socialisation, and engagement development and there is a long history behind it (Pesce, 2018).

After all, a museum is all about stories: the story of its foundation, of its collection, of the people who work there, and, of course, of the audience and its relationship with the museum itself. As Leslie Bedford, former Head of Exhibitions Research and Development and Director of the Comprehensive Japan Program Area at the Boston Children's Museum and Director of the Museum Leadership Program at the Bank Street College of Education in New York wrote in 2001:

> Museums are storytellers. They exist because once upon a time some person or group believed there was a story worth telling, over and over, for generations to come. (Bedford, 2001, p. 33)

As a matter of fact, storytelling has the power to transform the museum, commonly seen as a place of learning, into a place that arouses the curiosity of new audiences. In addition to this characteristic, Anna Faherty, writer, and museum consultant, in her article for Museum Next*, Why do stories matter to museums and how can museums become better storytellers?* (2019), claimed the idea of museums as places that share human experiences and which are «a bonding medium for our society» (Salort-Pons in Faherty, para. 3). Therefore, understanding why storytelling is important is not difficult. Besides, it does not only help museums reach new audiences and reinforce their

relationship with them, but it also has an impact on audiences themselves. In fact, engaging visitors in the practice of *storytelling*, by asking them, for instance, to share pictures of their visits on social media, or asking for feedback, foster their critical and creative thinking about the museum and encourage them to visit the institution again (Fisher, 2008).

A further aspect that all the five case studies examined here have in common is that they offer an engagement that is *didactic* and *educational*. Indeed, they all imply informal learning technologies in their strategies that exclusively carry an educational value, meaning that they foster the interaction between the artworks and the audience through educational content in the form of social media posts, virtual tours, mobile applications, etc. (New Media Consortium, 2016). However, the digital department of the Städel Museum has also planned digital experiences that trigger another type of engagement, which is more individual and creative. This type of involvement entails a purely experiential value and usually includes activities like games. This is the case of the virtual reality experience, Time Machine, that can be either experienced physically with VR glasses or at home, downloading an app. Therefore, the digital strategy of the Städel museum not only invites its audiences to explore the collection listening and watching to content that has already been organised (podcasts, digitorials, virtual tours, etc.) but also encourages them to act. For instance, either during the virtual reality experience in presence at the Städel or from their home, visitors learn about the history of the museum and its collection by "living" it. Hence, this experience involves the audience and educates it through the evocation of emotions such as surprise, curiosity, and fun. To recall the importance of storytelling, what the Head of Digital together with a research team created for this experience is a story for the visitor who creates, in turn, a sensory connection to the "digital story" itself.

With regards to what the case studies do not have in common, one could debate that each approach of the museums to digitalism pursues a different purpose. First of all, the main noticeable difference among these institutions is that both the Museu Nacional d'Art de Catalunya and the Städel Museum put the *dissemination of knowledge* at the heart of their digital mission, while the others prioritise the audience or the innovation. As a matter of fact, the Rijksmuseum focusses its digital strategy on giving its visitors the possibility to widely explore the collection to the point of making it their

own (Pronk, 2016) whilst, concerning the Galleria Nazionale, its digital expansion aims at keeping up with social transformation and at using new technologies as a means to better *communicate with visitors* (Galleria Nazionale, 2020). With regards to the MAXXI, its aim is to foster innovation and to act as an artistic laboratory. Therefore, on the one hand, the first two museums pursue educational aims through technologies, on the other, the same technologies are used by the others as a facilitator which connects, on the one hand, people to the institution, on the other to promote discussions on contemporary art and the modern world society and technology.

To summarise, each museum whose digital policies and strategies I have presented in this chapter employs different digital technologies trying to engage its visitors. However, in these case studies, the Galleria Nazionale d'Arte Moderna e Contemporanea seems to lack a proper digital offer, having only a social media and Web strategy, showing how it is different from the other Italian museum I have analysed, whose digital strategy is at the core of its institutional plan. Indeed, the German, Dutch, Catalan, and the other Italian museum have a digital strategy that involves different digital means to attract and communicate with their audiences not limited to social media. On the contrary, in fact, such museums experiment with new technologies through apps for mobile devices, interactive games for families, and, additionally, offer a vast array of experiences that involve "the digital" on the basis of the typology of visitors, therefore their age and interests. Furthermore, unlike the Galleria Nazionale d'Arte Moderna e Contemporanea, their digital approach seems to be adaptable according to whether such digital tactic succeeds in engaging more or less the audience, while the Galleria – as readable in the annual reports – appears stuck on the idea that social media and a modern Website are enough to achieve this purpose. Reading the available annual reports of the case studies (Galleria Nazionale aside), I could notice how they changed their digital strategies throughout the years, adjusting them to new technologies and requests from visitors through their feedback and reviews, sometimes ending offers like outdated apps and adding new features. That was the case of the Catalan museum, which has introduced many apps since the beginning of its digital expansion, in 2014. The first mobile applications, *Unique Visitors*, no more available today, and *Cloud Guide* were introduced in 2015, together with the development of the *Google Art Project*. Later, the museum launched newer apps, previously mentioned. The same happened to the MAXXI. As soon

as iPods became obsolete, the staff of the museum employed new tools like the most recently introduced mood guides. These are ambient music playlists, purposely intended to accompany visitors throughout their visit; they are accessible through a QR code that is placed in the Piazza. These mood guides offer another way of exploring the museum, with a new and unique sensorial and experiential approach. The Galleria, conversely, essentially stopped renovating its digital strategy in 2016, when its first and only app was cancelled[29].

In the following paragraphs, I will briefly explain why strategies change and try to find an answer to why the one of the Galleria remained unchanged. The first issue has a twofold explanation: new technologies soon become obsolete, and the audience rapidly changes its needs and tastes. Yesterday, Netlog was new, today, we barely remember it existed. Technologies quickly change together with societies and, therefore, audiences also change (Visser, 2014). In fact, cultural organisations like museums have to adapt to the continuous development of new trends and demands, in order to not bother or, worse, lose visitors. Specifically, not only they must consider technological developments, but also demographic and generational changes. To be, and stay, relevant, museums should pay attention to this macro-group of changes. Institutions should not stop focusing on the audience and its needs, moreover, there are some characteristics that regard modern audiences that every museum should take into consideration. Firstly, today, audiences are generally distracted, with an average attention span of eight seconds (Visser, 2014). Secondly, they are no longer passive, but active and participating both offline and online, as I have highlighted in the previous chapters. Therefore, it is necessary to find the right tools to keep them interested in those eight seconds and, to do so, it is desirable to offer them participatory experiences that not only will increase their engagement and attention span, but also will make their visit to the museum memorable (Jagodzińska, 2017; Chang, 2014). In brief, a museum cannot continue with the same strategy of ten years ago, but neither of five years ago, meaning that neither the goals nor the vision of the strategy of an institution have to change, but the means used to achieve and support them have surely to. To sum up, «if

[29] The podcast Due passi per Roma, added in 2020, in fact, was a tool circumscribed to the outbreak of the pandemic; it was no longer updated with new contents and no new podcasts were proposed.

museums do not change to respond flexibly and rapidly to changing public demand, that public will go elsewhere» (Jagodzińska, 2017, p. 76).

With regards to the second issue, it is more difficult to find an answer. In his article, Visser states that «some of the social and technological changes are local […]. For many museums it's more important to stay on top of local trends than to try to be at the forefront of the global ones» (Visser, 2014, para 11). For instance, if one navigates the Websites of the considered cultural institutions, h/she will have no difficulties in finding the information in English, at least. As for the digital offers of the Städel, the Rijksmuseum, the MAXXI and the Museu, they are mainly in English or with English captions, although there are some which are entirely in the language of the country where the museum is placed. Though, offering a huge collection of online and digital offers, the international consumer is not excluded by those native language contents because there are many others that are available and accessible to him/her. With regards to the Galleria Nazionale, however, a problem arises. As a matter of fact, basing its strategy exclusively on social media and using it in Italian, the Galleria does not succeed in involving a potential international audience, although this certainly pleases the local audience. Yet, the Website of the Galleria is translated into English and Chinese, thus the decision to not include English descriptions on its social media platform, at least, is hard to find reasonable. Perhaps, the reason lies beneath the organisational structure of the institution.

As previously argued, the other case-studies have a co-operational approach to strategy planning and executing, meaning that ideas are examined from different points of view and then shared, while, from what one can read on the Website of the Galleria Nazionale, the personnel is much compartmentalised. The lack of a general briefing of the whole staff could limit the entire vision of the museum. Competences are not shared and transferred from one department to another, but they remain the same as the knowledge of the staff. Furthermore, one aspect that constrains the overall potential of the museum is, again, the lack of foresight. There are, in fact, many simple and yet relevant digital tools that help make a visit more interactive and engaging. The cheapest one is the implementation of QR codes. Besides the time spent generating these codes and placing them throughout the museum, their creation is almost free-of-charge (printing labels excluded). Lastly, as a visitor interested in the collection of the Galleria,

I find that the worst part is that the online contents created by the curators and employees of the Galleria Nazionale are extremely well done, and, generally, its Web strategy is. Therefore, I wonder why they cannot ensure the same quality and valuable content to the institutional social media or why they do not enrich the digital offer of the museum, increasing the overall audience engagement that would follow such change.

4. DIGITAL CURATORSHIP AND ENGAGEMENT: INTERVIEWS TO CURATORS.

Hitherto, I have argued what is *digital curatorship* and outlined its origin from the institutional and independent curatorial practices, discussing its modalities – digital events and media curation – and offering some case studies of art galleries and museums exploring and focusing their activities on "the digital". In the previous chapter, additionally, I have presented a digital policy of important European museums, exploring the ways these institutions employ digital tools and, eventually, analysing whether they apply an engaging digital strategy or limit it to a communication and social media strategy.

In this section, I will reason on the professional – and personal – opinions of curators on the potentiality of digital curatorship and the use of digital tools to engage audiences, that is the question this research attempts to answer. Specifically, this chapter reports my findings from the interviews about *digitalisation* and *digital audience engagement* and is divided into three sub-sections: results, analysis, and conclusion. The first one briefly summarises the answers that the curators gave me during the interviews, while the second one analyses them, presenting their congruences and differences.

Precisely, the analysis I carried out included a semi-structured interview with five Italian curators, each specialising in a specific artistic curatorial practice. I have obtained the answers of three digital curators and two independent curators.

Among the digital curators I have interviewed, besides Virginia Bianchi, digital event curator already mentioned in chapter 2.1.1, there is Chiara Gesualdo, media curator and founder of OnStream Gallery, and Maria Chiara Iacona, media curator and founder of *Art in Pills*, Instagram account with more than seventeen thousand followers that presents Modern and Contemporary artworks in interactive, digital, ways. With regards to the independent curators, they are Elena Cantori, curator, and owner of EContemporary Gallery in Trieste and Monica Mazzolini, photography and contemporary art curator, writer, and photography historian[30]. A brief presentation of their careers is stated below.

[30] The qualitative research mainly required Internet-based interviews, due to the different places where curators live and their work commitments. For this reason, the interviews implied a text-based communication via email in the case of Gesualdo (September 10) and Iacona (August 24), while communicating in a Skype video-call was possible for Bianchi (August 5), Cantori (September 25) and Mazzolini (August 25).

Virginia Bianchi is a young cultural marketer and online events curator. Born in Italy, Verona, after graduating from the MA in Arts Management at King's College in London, she started to work at the Annka Kultys Gallery in London which let her get acquainted with New Media Art. After two years at Kultys Gallery, she decided to come back to Italy where she attended the School of Curatorial Studies in Venice and later opened the Virginia Bianchi Gallery during the Covid-19 pandemic in September 2020. Currently, besides continuing her job as an online event curator and gallerist, she is working for the Comune di Bologna as Social Media Strategist.

Chiara Gesualdo is an art historian and curator of OnStream Gallery, an online gallery that opened in June 2020. After obtaining her Master Degree in Museums, Galleries and Contemporary Culture at Westminster University in London, she began exploring the current art market by working in galleries like Trinity Art Gallery and NOW Gallery in London, besides assisting as a project manager in the Unity Arts Festival in London before returning to Italy where she founded OnStream Gallery, the first Italian art gallery opened 24-hours a day.

Maria Chiara Iacona, digital art curator, content creator for art institutes and founder of Art in pills.

Elena Cantori, from Trieste, began her career as an organiser of congresses for the Università di Trieste, where she worked in the Public and International Relations office. Later, she entered the Human Resources and Personnel Management department of Elettra-Sincrotrone Trieste. In 2006 Cantori started working in the artistic field as an independent curator, getting in acquaintance with contemporary art and its market. Since 2013 she has been curating her art gallery, EContemporary, for which she collaborates and promotes fifteen artists (both Italian and international). She has been participating in many national art fairs and organised exhibitions in Friuli Venezia Giulia, Veneto, Campania, Toscana, Umbria, and Slovenia.

Monica Mazzolini, after graduating in Biology in Genova, her hometown, firstly began working as researcher at the CBM, Molecolar Biomedicine Center, Germany, and then at SISSA, Scuola Internazionale di Studi Superiori Avanzati, Trieste. After obtaining her PhD in Neurobiology, she decided to focus almost entirely on visual arts. Besides publishing some books on the matter – where her scientific interest can be noticed since she often compares art with biology –, she also teaches and organises courses in the

history of photography and art. She works with universities, art galleries and cultural organisations, where she holds conferences and curates exhibitions. She does not own a gallery, therefore, but she began cooperating with Elena Cantori in 2018 for the curation of the international project *Naturografie di Roberto Ghezzi*, which was also part of ESOF, EuroScience Open Forum, 2020. Together, the curators have also recently launched the cultural organisation *START Cultura* in 2021. Moreover, she mainly curates exhibitions in Friuli-Venezia-Giulia, Veneto, and Liguria, which are the regions where she lives.

The aim of these interviews is twofold. Firstly, they explore how "the digital" is perceived by the experts who, although they all share the same profession, are very different from one another. Indeed, while Bianchi, Gesualdo and Iacona work in the online environment, Cantori and Mazzolini curate physical settings. Moreover, the curatorial practice of each digital curator I have interviewed is also distinctive from one another. Bianchi curates on the Web like Gesualdo, and they both work with augmented reality artworks and technology, therefore their work involves the exploration of computer vision[31]. Nevertheless, Gesualdo is a very different digital event curator from Bianchi, and her profession is between the white-cube gallerist and the content curator. While Bianchi exclusively works with New Media Art, therefore with art that only exists online, Gesualdo does not curate this type of art and, on the contrary, uses "the digital" only to host her online gallery space. Gesualdo promotes her artists by transposing them in the Web environment, where a digital exact copy of the physical artwork is displayed. Furthermore, the artists of the OnStream Gallery can be found in pop-up events or art fairs as it happens for traditional gallerists like Elena Cantori, while VGB exclusively exists online or on-screen viewing. Furthermore, Iacona entirely works on a very specific online platform that is Instagram. Therefore, she does not only use it as a social media where it is possible to promote events and artists like every other curator I interviewed but as a true digital exhibition space.

Secondly, the intention is to understand whether digital technologies are perceived as a tool capable of engaging the audience or, on the contrary, if they can be left out of the curatorial practice.

[31] Computer vision is a field of A.I., artificial intelligence, that enables computers to derive meaningful information from visual inputs like images and videos and to perform actions based on that information.

4.1 RESULTS

During the interviews, the curators were asked about their professional experience and personal opinion on multiple topics concerning "the digital".

The first result that emerged from the interviews is that they all convey that *digital awareness* is nowadays a fundamental quality that every curator should possess. It is a way that curators have to communicate with the audience, but also to promote their exhibitions and to get a broader exposure that goes beyond the city where the event takes place or where the curator comes from. The level of expertise in digitalisation that a curator should acquire can vary based on what use h/she means to make but it is nowadays fundamental to know how social media platforms work, at least.

The second goal of the interviews was, indeed, to discuss whether digital technologies are seen as a tool recommended to engage old and new audiences. Also in this case the answer was positive.

All five curators have confirmed to use at least one digital tool. Specifically, what came to the fore during the conversations with the curators is that digital technologies and, particularly, social media, *ease the process of engaging the audience*. Social media is - both for the digital and independent curators - a means that shortens the distance between the exhibition or content and the audience, that is accessible to everyone with an Internet connection and that is, for this reason, known by the majority of people. Social media lets everybody "participate" in the curatorial discourse, meaning that also an independent curator who posts on Facebook, for example, expects that post to be "liked", commented, and shared. Therefore, h/she expects published content to trigger a response from the audience that is firstly engaged at the very moment that the curator includes in her post a call-to-action that could be, for instance, an invite to come to visit the exhibition, or to comment on the post itself and, secondly, when the user/visitor decides to physically reach the event or click on the online exhibition or, in addition, to follow the Instagram business page of the curator, like in the case of *Art in Pills*.

Since only Virginia Bianchi has more comprehensive knowledge about new technologies, having dealt with augmented and virtual reality both in her past internships and current activity as the owner of the Virginia Bianchi Gallery, and having studied the basic principles of Web programming and development to realise her New Media Art gallery, one could state that curators do not have to possess a degree in

Computer Sciences to use “the digital”, as the interviews have demonstrated. In fact, with regards to audience engagement, such interviews have shown that social media cannot be avoided in modern curatorship. As a matter of fact, without it, curators would reach fewer people – mainly those living near the location where the event takes place –, therefore they would attract fewer visitors and engage less the audience. The audience would not have the possibility to experience some details about the displayed artworks that would have, on the contrary, on social media. Just think of the videos published on the Instagram accounts of the museums analysed in the previous chapter: they offer overviews of the exhibitions, together with curiosities on the artworks and the artists themselves. Moreover, social media has the power to let events persist, as Mazzolini greatly explained discussing the photography exhibition *Spazial-mente.*

Besides, if social media could cease existing, though causing a decrease of the engagement of the visitors, in the interviews it appeared that the lack of the Internet would be damaging for some types of art:

> a world without the Internet would imply that neither my profession nor the type of art I curate would exist. If the Internet had not been created, all the types of Digital Art would have never been experimented with and transformed throughout the years to what we call nowadays New Media Art. (Bianchi, 2021)

Although it would be possible, today, to curate gallery-based artworks exclusively offline, resorting to traditional means, the non-existence of the Internet and the Web would generate the impossibility to promote and create New Media Art that, consequently, would not exist.

Talking to the curators it emerged that, in their opinion, without the use of the Internet, events would attract smaller audiences, meaning that visitors would experience a certain level of involvement only during the consumption at the physical setting and exclusively when attending the event:

> without the circulation of posts on social media regarding my events, I would certainly engage fewer people as I would be able to involve only those I personally know or who often attend my events and those few readers of journals that are left. (Mazzolini, 2021)

Moreover, curators have argued the relevance of the curatorial use of the Internet to reach and involve younger visitors:

> The Internet and social media foster the engagement of a broader audience of all ages. In my specific case, working on the Internet mainly brought me young visitors who are more willing to adapt to the Web environment than a lot more adult users. (Gesualdo, 2021)

> If I had a physical space, perhaps the audiences would be very similar. Having a digital one, people are young, under 35. (Bianchi, 2021)

Therefore, without it, one can assume that curators would mostly have an adult audience; thus, again, one can discuss the importance of the Web as a tool capable to involve a broader and heterogeneous audience made of visitors of all ages and cultural backgrounds.

What is worth to be noted is that the curators have always referred to "the digital" as something not completely detached from the physical environment, but on the contrary as if it completes the latter and vice versa. Also, Bianchi, who underlines the fact that, for her, the "online" is the starting point of her curatorial practice, when curating her augmented reality exhibition *Warped Passages*, invited her audience to interact, digitally, in the real material space:

> […] we opened an exhibition in a physical space in Bologna which, albeit involving digital works, invites people to consume them by mixing the "real" (that is the setting) with "the digital", since they all are artworks in augmented reality. (Bianchi, 2021)

Therefore, this deep and strong connection between "the digital" and "the physical" suggests that being complementary, they cannot be avoided by curators but, on the contrary, they must be both adapted and adjusted to their curatorial needs.

Thenceforth, this shed light on another important aspect: today curators cannot just decide to exclusively work online or offline. In doing so, they would either lose a huge part of a potential audience they could engage and attire by using both traditional and digital tools. If on the one hand entirely focusing on the *in-situ* experience could limit

the promotional and involving drive of the latter, on the other, exclusively focusing on digital technologies would cause further hurdles.

Although Mazzolini increased her audience thanks to the digital tools, it must be noted that such means can also act as a barrier for some people that do not feel comfortable navigating on the Web or that simply do not know how these technologies work, as the curator herself stated when arguing that part of her usual audience stopped following her activity when, during the lockdowns, she could not organise in-presence events:

> The digital helped me create an entourage of people who daily follows my activities. As soon as I increased the use of the Internet, during the lockdowns, I noticed an increase of visitors and people who passionately began attending my (online) courses and events. However, if on the one hand this brought me many new visitors and confirmed the enthusiasm of some old ones, there were a few people who stopped following my activities, waiting for the physical ones. (Mazzolini, 2021)

Nowadays, almost everyone knows what a computer or the Internet is, but this does not mean they are keen to use it. Therefore, curators must keep this in mind and consider that exclusively working online could put some potential audience aside.

In the next section, I will present an in-depth analysis of the answers of the curators, comparing them to show how these differed according to the type of curation implemented by the experts and their personal experience online and offline.

4.2 ANALYSIS OF THE INTERVIEWS

In this part I will analyse the results of the interviews as it follows: firstly, I will comment on the similarities I could find in the answers of the curators, secondly, I will focus on the differences between an online environment and a physical one that was underlined during the interviews and, afterwards, I will comment the effects the pandemic had (and if) on the activity of the curators.

First and foremost, it must be noted that all five curators, therefore not only those working with digital technologies or online, agreed on the importance of being *digitised*. Each one of them, indeed, has underlined the necessity of having reasonable knowledge of digital tools not only because nowadays they invade our daily life, but also because

they will have even more impact on it in the future. According to Gesualdo, digital technologies will be more and more used in the future but, at the same time, they will also continue to be used in the physical environment. In her view, they will soon become complementary, more than they are now:

> the digital will always be more and more present and important in curators practice but both types of experiences (physical and online) will continue co-existing. Virtual and physical fairs, online exhibitions, and offline ones (will keep existing side by side). There are more virtual events now that NFTs have begun to become popoular, and there are more galleries that launch their physical exhibitions concurrently with virtual ones. So I do believe that these two worlds will always become more complementary. (Gesualdo, 2021)

Moreover, as reported by Iacona, digital curators would hardly exist without having a certain level of digital expertise, but the same is argued by Cantori that, although being a white-cube curator, acknowledges the relevance of new technologies in the modern curatorial practice. As a matter of fact, on the one hand, Iacona argues that having a digital education or experience is as necessary as having a general artistic and aesthetic understanding (Iacona, 2021), on the other Cantori states that every curator should master digital means or hire someone able to do it, at least (Cantori, 2021). Bianchi, furthermore, specifies that also in her field of New Media Art, advanced skill in programming or having a Master degree in Computer Sciences is not required, though it is highly recommended, it is necessary to possess a general and basic knowledge on the matter.

A second common factor that emerged from the interviews is the importance of *social media* in today curatorship. They all mentioned social media as a tool that they usually employ in their work to engage their audience. Mazzolini stated that «social media has been a fundamental tool to create a network and a first audience», Gesualdo argued that, according to her, «social media should be used more in curatorship» while, for Cantori «social media works as a window to the activity of the gallery and to keep the interest of the audience». Furthermore, the two most used are Instagram and Facebook

(exception made for Iacona, who exclusively works on Instagram and Mazzolini who mainly posts on Facebook and also publishes content on YouTube).

According to Mazzolini, it is nowadays impossible to avoid social media when curating exhibitions. She argues that such tools have not become important only with the spread of the Covid-19, which nearly forced almost every public and private art institution to consider the employment of social media, but have always been a strategic means for the projects she curated:

> In the exhibition I organised and curated in 2019, *Spazial-mente*, I decided to set both a physical and digital setting. While the physical display remained throughout the duration of the event (December 26th - January 6th), the Facebook page I opened for the same exhibition, remained accessible even after the exhibition had closed. (Mazzolini, 2021)

According to her, the Facebook page expressly created for this event was a useful method, on the one hand, to let those who could not physically reach the exhibition, visit it online, on the other as a way to continue the event itself, encouraging further debates on the artists and artworks that were displayed.

Another fundamental aspect that all five curators have argued is the massive capacity of using social media that are massively used as stated in the previous chapters, to *promote* their work. Beginning with Cantori, who thinks of it as «a true window into the gallery's activities and exhibitions» and continuing with Bianchi, who promotes on her Instagram and Facebook pages the artists she collaborates with, all the curators I have interviewed have highlighted the relevance of this trait of social media. Firstly, promoting via social media is less expensive than publishing advertising inserts on newspapers or Websites, or printing flyers and posters. Social media is cheaper than any other form of advertising since the goal of any promotional campaign is to reach the broadest audience at the lowest price (Anonymous, n.d.)[32]. Additionally, with regards to social media, there is an extra feature that other advertisements do not possess, and that is completely free-of-charge: the "share" button. Mazzolini reflects on this social media quality since, according to her, it makes people who are physically distant from

[32] It must be noted that this principle is at the base of any market. In the economy, it is called efficiency, and refers to the best allocation of the available resources, while minimising the waste and the cost.

the location where the event takes place partially live what is happening at the in-presence exhibition. She mentions it when discussing how curatorship would be like without the existence of the Internet:

> curators would engage a smaller audience and events would lack the "sharing" potential of the Internet that is fundamental to let visitors who are far from the location of the exhibition consume what those who are physically there are living. (Mazzolini, 2021)

Precisely, a curator who posts content on its exhibition or events automatically invites its usual audience to share the same contents on their private profiles, exposing the original post of the curator to new users – a potential new audience – and triggering a loop of "shares" and "views". This allows the original post to appear on the feeds of people, potentially getting hundreds –and even more– shares. Moreover, a post share of a "friend" works like a pre-screening, therefore one is more willing to read his/her friend posts on social media and interests and, instinctively, to follow suit. In marketing, this process is called "Word of Mouth", as it recalls the traditional act of transferring the recommendations to one, to another by word of mouth. This type of advertising, mainly on social media, has a greater impact than any other type of promotion influencing the intention to buy or, in the case of curatorship, to attend events and follow the activity of the curators (Anonymous, 2012), since «people trust friends, family (and even strangers) more than they do ads» (Glover, 2021). Additionally, word of mouth happens also when visitors share pictures of their visits on social media, which already Dodge had argued as an effective way to engage the audience:

> it is time, in 2018, to recognize that museums have an opportunity to leverage what their visitors do in their spaces. And more often than not, they take photos. This may be hard for some, but in my opinion, what our visitors do on their phones is more important than what we want them to do... what our visitors do on their phones is more important than what we want them to do... By simply encouraging people to share their visiting experience, our visitors started to generate terabytes of valuable word of mouth content. Our attendance has increased by 10–20% year over year since 2012. (Dodge in Giannini & Bowen, 2019, p. 553)

Accordingly, Iacona suggests the importance of social media as it effectively aims at *shortening the physical distance* between artworks, the audience and (digital) curators. Most of all, social media is inclusive:

> the one I use the most is Instagram: it is fast, trending and includes a wide range of people; you can find both Generation Z members and the public with the greatest purchasing power. The algorithm perfectly knows what it has to do and selects the niche of the potentially interested audience on its own[33]. (Iacona, 2021)

In this statement, Iacona specifically refers to "her" curatorial medium, Instagram. Her words focus on the huge possibility to reach a wide audience for curators of all sorts by using this particular social media. She also compares this new, easy, and almost automatic (algorithms help experts to expand their niche audience) way of reaching the audience with some past type of advertisement. In fact, in the near past (in the first decade of the XXI century), advertising reached fewer people and could not be used to precisely select an audience to refer to (Ahmad, 2018; Iacona, 2021). Therefore, curators use social media in their daily practice as every other brand or business that wants to keep up with the trends and the ever-evolving audience. Therefore, what the curators have stated is that, according to their personal experience, social media is feasibly able to *engage the audience*. It must be noted that, although social media is accessible to anyone with an Internet connection and a smartphone or a computer, every platform has its specific audience base. Consequently, when posting on social media, a curator has to consider both the typical user of the platform – thus the correct tone to use in the posts – and his/her target audience.

Generally, when dealing with "the digital" or, more specifically, with New Media Art, the usual social media community is mainly formed by young, female users, under 35, like Bianchi, Gesualdo and Iacona all specified in their interviews. In the case of Gesualdo, similarly to Bianchi, she stated that the audience of the OnStream Gallery is composed of «a young audience having no difficulties in accepting – and comprehending – a gallery whose setting is the online environment». Furthermore, although Iacona told me that her audience does not exclusively include "Gen-Z" members, it is precisely this category

[33] Generation Z, also known as Gen-Z, refers to that part of the population born between 1997 and 2012.

of users that predominantly access *Art in Pills*. We could then confirm, based on these interviews, that art in its digital form, whether it is digital photography or pixel artwork, is most welcomed and "attended to" by younger generations.

As for the independent curators I have interviewed for this research, the answers were slightly different. Both the audiences of Cantori and Mazzolini mainly consist of art admirers and artists aged between 35 and 80 years old, therefore a more adult audience than the typical one observed with the digital curators. While the audience of Elena Cantori is mainly constituted by women, the audience of Mazzolini differs based on the type of art she curates: when she deals with paintings or "naturografie", visitors are mostly women, while, when she curates photography exhibitions she has observed a prevalence of male visitors.

Moreover, Mazzolini, concerning her visitors, told me a phenomenon that is worth mentioning for the purpose of this thesis. As soon as she began employing digital media to share her content, her audience increased.

> My arrival on Facebook happened very late, to be honest, but as soon as I began using it, I used it systematically, obtaining a fairly good group of people that faithfully follows all my activities and social media contents. During the lockdown (in March), there was an increase in likes and followers ("friends"). In addition, not being allowed to continue my usual work, I began organising online lessons…The pandemic gave me great satisfaction, resulting in the engagement of many more people, even students from Austria! (Mazzolini, 2021)

Mazzolini is not only a curator but –as she likes to be called– she is a populariser. Thus, besides her curatorial practice, for which she uses social media to promote the exhibitions she curates and the artists she promotes and collaborates with, Mazzolini employs digital platforms to share her knowledge on the history of photography, art and science, another topic she greatly masters thanks to her PhD in Biophysics and Neurobiology. As soon as the Covid-19 pandemic broke out, she systematically began to post on Facebook, not only gaining new "followers" and "friends" on this platform, but also new visitors willing to attend her events. Being a polymath, as I have just mentioned, these events are not only visual art and photography exhibitions but also conferences and courses in the history of art that often explore the strong correlation

between art and science. Moreover, noticing that Facebook was having success Mazzolini opened a YouTube channel, where she began sharing some content, thoughts about contemporary art and extracts of some of her conferences. However, she is not obtaining the same success as on Facebook. While she counts more than thousands of followers on Facebook and hundreds of likes on Instagram – though it is the social media platform she uses less –, her YouTube channel is limited to 291 subscribers and an average of twenty likes per video. Furthermore, since during the Covid-19 lockdowns it was not possible to host *in situ* events, Mazzolini decided to organise her courses online, some of them also free-of-charge. What she argued is that some of her pre-pandemic visitors had already asked her to host some lessons on the Web, thus demonstrating that part of her audience was already keen on using digital technologies to enrich its artistic knowledge. Hence, having a broad-minded audience surely eased the passage from the "offline" to the "online". The curator speaks of «great satisfaction» given by the employment of social media since she had also counted attendees from Austria, Germany and Slovenia, while in her physical events the audience mainly comes from Italy (predominantly from Liguria, Friuli-Venezia-Giulia and Veneto, depending on the location where the events take place). Although she has also mentioned that some of her past visitors (and students) have stopped following her works once she brought them on the Web – while waiting for physical events to re-start –, Mazzolini had such a positive result in terms of audience engagement due to the digital approach (YouTube aside), that she remarked that she is willing to continue her work on the Web, both concerning the curation of her exhibitions on Facebook and YouTube and the organisation of her courses.

Differently, Cantori was not as enthusiastic as Mazzolini when talking about "the digital". Though, a premise must be made: Cantori is a gallerist, besides being a curator, specifically a white-cube one, therefore, to read this comparison, a diverse approach is needed. This curator as previously argued is not contrary to the use of digital means. On the contrary, she believes that some of them are truly necessary to engage the modern audience and to build a relationship with visitors and customers. Moreover, there are some inconsistencies between the interviews of the two independent curators. If on the one hand, Mazzolini believes that today curating without using the Internet is possible – although the promotion would be more expensive and less engaging (Mazzolini,

personal communication, August 25, 2021) –, despite her eagerness to use digital technologies to enrich her work, on the other Cantori states that «today it is very difficult to imagine working without the Internet since «it is an unrivalled source of information and working possibilities» . Therefore, although Cantori trades very carefully with "the digital" in general, she ends up being the first one to recognise its utility.

In addition, Cantori had to adapt to the situation caused by the Covid-19 lockdown and increase her use of Web tools for working purposes, like Mazzolini and many other independent curators. Therefore, although Cantori is not completely contrary to the employment of new technologies, she thinks that their use should be limited according to what is necessary. If on the one hand, increasing the use of platforms like *Artland*, besides the use of social media, helped her remain on the market and helped in terms of visibility, on the other, it created an «invasion» of contents, because everyone working in the artistic field – Cantori refers specifically to white cube curators and gallerists – had moved to the Web. According to her, the inevitable digital surge due to the social distancing norms and national lockdowns left the audience disoriented and even overwhelmed, a fact that, furthermore, made the consumer (and visitor) more superficial, as if «anaesthetised» by this multitude of artistic and cultural contents. Additionally, she noticed that the reaction of her audience was different after each lockdown. After the first one in March 2020, people were keen to buy artworks and go to the exhibitions, but after the second one, she observed a market uncertainty and a great hesitation to attend events. Possibly, the strategy she had implemented during the lockdown was not so engaging to guarantee her that the audience would actively follow her events once back in the gallery and physical space; on the contrary, Mazzolini speaks of a reasonable level of participation throughout 2020. The digital activity of Cantori was –and still is – limited to social media and, precisely, it is centred on promoting her ongoing exhibitions, lacking call-to-actions and engaging content regarding, for instance, the artists she works with.

Additionally, the interview with Cantori differs from the ones I carried with the other curators in all the answers concerning the difference between the "online" and the "offline". In fact, since three curators work thanks to the Web 2.0 and, especially, in the digital environment, and since Mazzolini does not own a place of her own (like a gallery) and is capable of adjusting her work also online, the only curator who negatively thinks

of the possibility to host exhibitions only online is the only one who, not only possesses a physical space, but that also curates exclusively gallery-based and physical artworks.
A first, huge, difference in the answers of the curators regards, in fact, the possibility of having an online gallery to overcome the "taboo" of the white-cube gallery as a place where visitors are put in awe. Certainly, the answer of Cantori cannot be the same as the one of Bianchi and Gesualdo, that both opened their art galleries on the Web partially to overthrow this invisibility but yet present obstacle put between the physical gallery space and the visitor:

> you do not have to ring the bell and ask for permission (to enter), while many (physical) galleries are like this. (An online gallery) is always open, you can comfortably sit on your sofa and enter the gallery through your smartphone. There is no one that as soon as you enter scans you to understand if you are a potential buyer or not. (Gesualdo, 2021)

The view of Gesualdo is shared by Bianchi, Iacona and Mazzolini who have all felt – at least once in their lives – excluded by the gallery environment because of a wrong approach of the gallerist or curator. Moreover, they all mentioned the prejudice one has on the gallery seen as a place not suitable for all, another aspect that often stops visitors from entering the physical space. According to Mazzolini, people are often scared by the belief that once in a gallery, they mandatorily have to approach the gallery or curator; this fear is thus rapidly overcome by an online gallery (Mazzolini, personal communication, August 25, 2021). Nevertheless, Mazzolini also shares the opinion of Cantori that underlines the importance of physical interaction and communication with the audience. Precisely, Cantori accepts the online gallery as a tool able to offer an overview of the exhibition but also argues that having somebody – the curator, the gallerist or the assistant of the gallerist – explaining each artwork that guarantees visitors have the answers to their questions, is fundamental in her job. Moreover, she thinks this interaction between the visitor and the curator or gallerist is the exciting part of visiting the white-cube gallery and physical exhibition. Mazzolini additionally stated the relevance of the empathy that the physical interaction creates, arguing how this is the participative aspect that makes each event memorable.
As for Maria Chiara Iacona, she mentioned a word that even Mazzolini used: *confidence*. To be specific, Iacona states that the feeling of being put in awe by arts (a gallery and its

artworks) depends on the level of confidence a visitor feels with them. The media curator argued what is, according to her, the goal of a digital curator:

> to prepare the visitor for what is awaiting him/her, with no surprises, trying to surpass that initial embarrassment and to let him/her familiarise firstly with artworks and then with the gallery itself. (Iacona, 2021)

Iacona, indeed, with her work, wants everybody to familiarise themselves with visual art and its artists and she achieves this goal by establishing a direct relationship with her community, replying to questions and requests, and offering it what it needs or wishes to know. In marketing terms, she engages them using *social listening*. Besides answering the questions of the users, this approach involves tracking and monitoring the online audience to know its trends and likes, using the insights of a social media platform or other additional platforms.

Furthermore, Monica Mazzolini speaks of *linguistic confidence*. She, indeed, commented that gallerists and curators sometimes use a vocabulary that decreases visitors attention and even interest and finds the reason for the success of social media in the simple «but not superficial» tone that is often used (Mazzolini, personal communication, August 25, 2021). To know the opinion of the curators on using digital means to engage the audience, another topic I discussed with them during the interviews is which experiences the Internet can exclusively offer the visitors. Amongst the relevant aspects that emerged from the answers of the curators, the most prominent was the possibility to overcome *physical distance*. For instance, Iacona claimed the importance for a museum of having a digital collection available for consultation. As previously discussed, offering the digital display of a whole collection is a great achievement in terms of audience engagement, since it lets museums reach people that live thousands of miles away. Gesualdo, moreover, commented on the myriad of information one can access thanks to the Internet. She insisted in underlying that it is exactly giving users the option to choose what to read and watch that enhances their experience online. Curators, in fact, curate each information, picture, video and, in general, every content they publish/let somebody publish, but leave the digital visitor *the choice of experience* (Gesualdo, Personal communication, September 10, 2021). This discourse opens itself to the modern form of museum communication, that is the *two-way communication*

(Barker & Angelopulo, 2005). This principle was created for the so-called “relationship marketing”, for which businesses, museums in the example made by Gesualdo, should communicate *with* their consumers and not simply *to* them, tailoring information to visitors based on their interests. Therefore, museums applying this type of approach via the Internet, are likely to make their digital users faithful visitors (Barker & Angelopulo, 2005).

A further aspect that I wanted to investigate with the curators, was whether the Covid-19 pandemic had an impact on their curatorial practice or not. Beginning with Virginia Bianchi, as stated in the second chapter, the pandemic marked the right moment to open the Virginia Bianchi Gallery and to plan its overall strategy:

> the gallery was opened in September 2020, during the pandemic. We were coming out of a "positive" summer but still in full pandemic and we often saw online exhibits that were focused on recreating a physical space online. We had therefore noticed that many galleries had created this stratagem of making 3D models of their spaces and were interested in transposing it online, inserting works in digital format. (Bianchi, 2021)

In fact, during the pandemic, she had the time to study the development of New Media Art in Italy and, in general, how the Italian audience was responding to the spread of digital artistic content due to the lockdown closures. While the first curators were launching their online galleries, Bianchi was reasoning about how she did not want her New Media Art to look like: «…I never wanted to use the “online” simply as a ploy just to recreate a physical space» (Bianchi, personal communication, August 5, 2021). Very differently from the Virginia Bianchi Gallery, one finds OnStream Gallery, opened by Chiara Gesualdo in June 2020. Amongst the digital curatorial projects started in 2020, there is also *Art in Pills*, which now counts more than 17 thousand followers on Instagram, and which was opened in 2020, precisely in October.

Therefore, one could say that the pandemic facilitated, in some ways, the launch of these curatorial activities. These curators have reinvented, in the case of the independent curators, and experimented, in that of the digital ones, their usual practice in a period that saw the closure of many cultural organisations and that forced everybody to stay in their homes. Precisely, on the one hand, the pandemic accustomed the audience to consume art and culture online, on the other it helped gallerists to

rapidly gain visibility.

An additional aspect linked to the pandemic is the *increased use of Web and digital technologies* of the curators. As just stated, all three digital curators launched their current occupation in 2020 and, doing so, they all strategically planned their use of the Web tools like social media, maintaining their amount of published content constant. It was, however, a new thing for Cantori and Mazzolini who, as mentioned in the previous paragraphs, were forced to embrace "the digital" to continue their work right during the Covid-19 pandemic.

Therefore, what we can argue about the effects that the pandemic had on every type of curator (museum, independent, digital event, and content curator) is that the whole situation invited them to rethink their work and exhibiting in general in digital terms/towards a digital direction.

4.3 CONCLUSION

Since the previous analysis draws some conclusions, in this final section I will group the answers of the experts in a few bullet points that will be briefly commented on below:

- digital technologies cannot be done without in the art field anymore;
- social media has strong engaging potential;
- interaction adds value to the experience of the visitor;
- the Covid-19 pandemic fostered digital curation.

In general, as the curators have discussed throughout their interviews, it is nowadays impossible to avoid using any type of digital tool. As mentioned before, in fact, the curators have thoroughly argued that digital means, being a Website or a promotional campaign spread via the Internet, help them develop (in the case of Bianchi) and transmit their curatorial discourse. It is necessary, for modern curators, to know the existing digital methods either to engage with the audience and to promote their exhibitions and to be digitally updated to remain in the market. Using obsolete approaches would penalise curators in reaching a broad audience.

The interviews have demonstrated that social media is a simple, intuitive, and powerful tool to use to create a network of art lovers and increase their curiosity and that, using the correct communication strategy, these can easily become visitors. Indeed, it

removes physical obstacles, first and foremost distance, and successfully achieves the involvement of a wider audience. Social media lets curators build a relationship with their audience, communicate with them, listen to their feedback and opinions on the artists and exhibitions and, finally, it includes people of all ages and territories.

Moreover, what every curator highlighted is that interacting with the audience is fundamental to offer an individual and personalised experience to it. According to the independent curators, physical interactions have more impact on visitors that are somehow involved in the curatorial practice. Letting them question the artists or the curators themselves physically, in fact, let the audience enrich its experience and make it memorable. As for the digital curators, only Iacona mentioned the importance of interaction, not meaning that this is less important in the digital environment, as I have commented in chapter 2, but probably suggesting that, on the one hand, it is an implicit action on the Web, since the Web itself was created to communicate information between people (precisely, scientists), on the other that digital interaction accompanies the physical one. Better explaining the last statement, I would cite the point of view of Iacona. When asking her whether she could imagine a valid substitute to a physical event, although being a digital curator, she replied:

> I think digital curation might be a valid help, but it must not exclusively be that. Physical presence is important too… it should be, on the contrary, a "gentle push", not a substitute…social media and the Internet come to help, and people can rely on pages like mine when they simply need to find an exhibition or a museum of their interest, or even simply a few moments of leisure to dedicate themselves to art. (Iacona, 2021)

Her answer is important to show how digital curation does not always imply a total substitution of the physical experience, but rather a completion of the latter, an aspect already argued by Gesualdo, Cantori and Mazzolini. Therefore, by having discussed with five curators, and only one asserting the superiority of the digital environment, we can say that, generally, new technologies can enrich curatorial discourses but not fully substitute traditional practices.

Lastly, besides having already mentioned the strong impact that the Covid-19 had in terms of digitalisation, driving every (or almost) business to reconsider the employment of digital technologies to survive the closures and social distancing norms, one can say

that it had an evident consequence on artistic projects, determining their opening and rebranding. With regards to the curators I have interviewed, they could have not launched their galleries, nor continued their online exhibitions and not even kept connecting with their audience. Briefly, they would have stopped their job as curators.

CONCLUSION

The recent Covid-19 pandemic has stressed the digital issue of art organisations, making the problems of not being digitised come to the surface and, simultaneously, underlining all the successful efforts in terms of engagement made by digitally developed institutions to overcome the forced closures. Thus, this context fostered the discourse on digital curatorship and its engaging potentials. By empirically analysing the audience response of the observed case studies – and, when such data was missing, commenting on them as a digital visitor myself – together with the study of five in-depth interviews with curators, it emerged that digital efforts can indeed improve the engagement of the audience.

The first output that emerged from the research is that the *engagement of the visitors is strictly connected to the possibility of feeling emotions and participating during their online or offline visits*. As for digital event curation, the data collected demonstrated that digital event curation is potentially engaging, but research and education should debate it more, giving people the reading keys to understand this practice and cast-off prejudices. The interview with Virginia Bianchi has indeed revealed that the extremely interactive heart of New Media artworks supports achieving a positive reaction by the audience by giving it an active role in the consumption and distribution of the artworks. However, it also showed the flaws of this type of curation and consequently of New Media Art: this appears to be a niche art, meaning that most people do not know it or, worst, misjudge it. People are not accustomed attending New Media exhibitions in general but tend to ignore the ones held online, while New Media Art (especially immersive) physical events count a higher number of visits. In the case of the gallerist Virginia Bianchi, she stressed the unreadiness of her audience to entirely "move" online, showing the necessity of spreading knowledge on New Media Art and the feasibility of "visiting" exhibitions online.

Regarding digital media curation, the analysis proved that it can effectively engage the audience when it includes means to interact with it. This might be achieved by providing the audience with an experience it can fully live by immersing in an artwork via virtual reality glasses or via mobile applications or, still, by commenting or liking the comment of a visitor on social media. All these different digital mechanisms help trigger the emotional response of the audience and its experiential learning that both make the art

experience memorable. However, an aspect that emerged is that, concerning social media, curators must pay attention when envisioning their strategies and not forget to connect with the community. If my research demonstrates that social media is now a fundamental tool to build a strong relationship and to effectively communicate with the audience, exclusively relying on a social media strategy can sometimes be inappropriate and fail to engage a bigger, online, and sometimes "offline", new audience. As suggested in chapter 3, a proper digital media curation, and strategy thereof, should entail an array of digital opportunities to engage and be accessible to as many kinds of visitors as possible.

A second output that confirms the engaging potential of digital curation is the *cause-effect relationship between a successful digital media curation and the increase in the number of visits* to a museum or gallery. As soon as the visit of the audience is made "memorable", the latter is encouraged to return and share positive feedback about it that, again, fosters the visits of new visitors. Once more, the case studies have shown that the audience is engaged when it is experientially engaged, therefore museums should promote initiatives involving informal and experiential learning technologies able to let visitors be a part of the institution, not merely external viewers.

Lastly, what emerged from the empirical research is that curating "the digital" cannot entirely replace the physical visit and that «it should be, on the contrary, a "gentle push", not a substitute» (Iacona, 2021). What the case studies and especially the interviews have demonstrated is that *digital curation improves and broadens the physical experience of the audience*, making it more valuable and engaging.

Finally, it may be concluded that visual art audiences do not wish to exclusively attend online exhibitions or watch online content, yet they search for unique experiences that only digital technologies, online and offline, can guarantee them.

FURTHER RESEARCH

Digital technologies and the Internet have a huge impact on our lives, also in the art field. Visitors download mobile audio guides, use informative iPads instead of exclusively reading wall labels, visit virtual exhibitions and yet research on digital curation is limited. Scholarship researched Digital Art (Chan, 2012; Goriunova, 2012) and the existing digital means to make the museum (or art gallery) more interactive and

accessible to the audience (Cook & Graham, 2015; Cairns & Birchall, 2013; Evans, 2015; Kelly, 2013) but a very few studies have been carried on the practice of curating online events and contents or digital experiences. In particular, Cultural Media (Chan, 2012; Kelly, 2013) and, most of all, Digital Media and Computer Science scholars (Goriunova, 2012; Kalfatovic, 2002; Chang et al., 2014) analysed the specificities of the Web, but little research in Curatorial Studies concerns this practice. Besides some articles discussing the specificities of curating on the Web and, particularly, New Media Art (Connor, 2020, 2021; Droitcour, 2010, Ghidini, 2019), there are only a few studies on the Web as a valid environment for hosting art exhibitions or to use it to propose alternative contents to the audience, thus continuing to let New Media Art be considered as a niche trend and not let the mass contemporary art audience discover the potentials of "the digital".

Moreover, the analysis carried in this thesis showed that digital technologies contribute to making the experience of the visitors memorable and interactive, but research focused more on the importance of participative experiences in the white-cube environment (Bagnall, 2003; Evans, 2014; Jagodzińska, 2017; Fisher, 2008; Kelly, 2013) therefore more research should concern the participatory and interactive core of digital online curation. Additionally, debates on the potential of digital experiences to engage more the audience and to encourage future visits have begun to be conducted (Maddalena, 2021; Redazione, 2020; UNESCO, 2021) but it should be furtherly carried out since there is not sufficient debate on this contemporaneous actuality.

My research attempts at filling these gaps, but studies should address the mentioned above topics in the future. Defining the practice of digital curation is of primary importance since the lack of studies about it creates confusion. Notwithstanding carefully analysing the case studies and answers of the curators, the limitation of my research is that it involved only a small number of case studies and interviews. Therefore, the observations of this thesis need to be implemented with further analysis on the effectiveness of digital curation in engaging visual art audiences.

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