# Designing Authenticity in Virtual Museum Tours

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## Abstract

The paper focuses on the virtual tours that major institutions feature as part of their sites. As these tours often promise an authentic experience, the question of what means here arises. Since such programs do not simply serve to show digital images of museum objects but also convey a quasi-presence, the paper proposes to examine the authenticity of the experience of the virtual tour in comparison to the physical one. On the other hand, it also looks at the possible authenticity of museum exhibits in the virtual space. To do this, not only the notion of authenticity needs to be clarified, but also that of the virtual. Following Walter Benjamin's approach, the paper examines what conception of time can constitute authenticity. Upon the concept of authenticity remaining the same in the case of the virtual, the paper opposes two positions: one is the historian's view, and the other is that of the postmodern cultural critic. A comparison of their possible arguments aims to show that whatever we bring up against the virtual can also be played off—at least partly—against the traditional museum. In conclusion, it argues that these two museum forms are still part of the same museum paradigm.

**Keywords:** virtual museum tour, authenticity, originality, actual vs. virtual, materiality

## Introduction

As the time of the pandemic has turned our attention much more to the digital world, the number of people visiting museums and galleries online has increased dramatically, and more and more people are experiencing the different ways in which collections are represented online.[1] These include virtual museum tours, which not only allow visitors to view digital images of individual museum objects but also give guests a chance to "walk around" the museum galleries and see how objects are exhibited. It is not a new

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phenomenon, 3D virtual technology is 28 years old, and it was the museum environment that gave birth to the genre of "virtual tours." Its first use was made possible by an English developer in 1994 in England for the commission of Dudley Castle.[2] As the phenomenon is by no means new, there has been plenty of scholarly research on the subject, and much more on the digital and "postdigital" condition of museum practices (Parry, 2013).[3] Museum professionals have long been describing and conceptualizing what the digitization of collections and archives means for their profession in general, leading to international efforts coalescing around the term "digital heritage," which has already become a professional commonplace (Parry, 2005). Even the International Council of Museums (ICOM) has set up special committees to look at how to make digitized, networked, and searchable collections more useful to the museum profession. There are also those within the profession who see digitization as more than just a new and more far-reaching tool for preservation and archiving, so they experiment with innovations for new perspectives of the profession (cf. Dewdney, 2013, pp. 167–188). Philosophers and media theorists have also been asking what technological virtualization means for our traditional cultural practices. We already understand that the computer has transformed the image, and we also know that it suggests that it is possible to enter it. Now we are witnessing virtual reality becoming the central medium of an emerging society. The analysis of recent virtual museum tours may not be only interesting for museum theory because it provides a model of what will perhaps soon become our shared experience; the distance of representation, of mimesis, connecting with the experience of a quasi-presence.[4]

## The Virtuality of the Museum Tour—Insufficient Definitions Using Referentiality

Surfing through some major museums and galleries, we often meet the promise on the museum sites that the VR tour offers an authentic museum visit. We now understand that these interfaces promise not only to transmit images of the museum objects

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[2] I will not distinguish between the concepts of virtual tour and 3DVT—I could not do that beyond the surface level due to the complexity of the technique. Generally speaking, 3DVT uses 3D models, video footage, and 2D panoramic images.

[3] Postdigital refers to the stage of development when it no longer makes sense to separate the digital from the traditional divisions of museums, and embeddedness in the digital network has become full (Parry, 2013).

[4] Zoom meetings have become quite common in the last two years, guarantee simultaneity but do not attempt to simulate the abolition of distance. The local situatedness of the participants is not concealed. However, the conversation itself has no locality; it occurs "somewhere" in between, without a stable point of location. VR tours do not necessarily show the state of the museum where the user is taking the tour—sometimes, one can read warnings about the VR tour no longer showing the actual exhibition arrangement. Therefore, by diminishing the experience of distance, the tour creates a sense of here and now—the time layers are always different though.

but provide a quasi-presence too. We might question the validity of our conceptions of the authenticity of museum visits and ask whether our expectations move along other qualities or whether we construct a different kind of authenticity from the experience.

To answer these questions, we have to investigate what virtuality means in this context. We need to look at what we mean by authenticity in general and how we attribute this quality to objects and museum walks in real and virtual space. To decide whether to assess the virtual presentation as authentic, I oppose two possible standpoints: one is that of the historian—the devil's advocate—when faced with the new phenomenon, and the other is the voice of—let us call it—the postmodern critic of culture. Undertaking this comparison already means that I would rather be careful identifying VR simply as the latest in a line of imaging technologies devised to copy and distribute collections and, as such, dismiss virtual museum tours as simple marketing tools. Of course, they are, but I would not support the other side either, which claims that VR is not an add-on technology but a profound change that transforms everything. For example, in Darren Peacock's (2007) succinct formulation, "virtualization, networking, syndication and user-created content have shaken the sector's foundational constructs of authenticity, ownership, authority, and audience."[5]

In what lies the novelty offered by the experience of a virtual tour? Besides appreciating public access and the democratic distribution of culture, the usual answer to what makes virtual reality so fascinating compared to other forms of copies is the simulation of presence. Though the psychological mechanism by which a virtual site leads to presence is unclear, according to research, motion and depth play the definitive role (Sundar, 2015). Since users are not simply exposed to images of the exhibits but are able to navigate through the museum halls, let us first see how museum space functions in the real and in the VR museum.

Moving around with the help of navigability features is clearly a simulation, we could say, as virtual visitors do not enter the real space of the Rijksmuseum. At the same time, it is not *fooling* someone with what is only imaginary. Exactly this double feature, not being real and not being fictitious, is what characterizes the virtual, as Anthony Bryant and Griselda Pollock (2010) define the term:

> Virtual suggests something that is effective, operating in parallel to, but at a distance from the concrete, actual, material, or lived reality. There is similarity with the actual thing;

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[5] As we can see, Peacock lists the key components that form the basis of a cultural collection. He is right, of course, in that there are museums to which the traditional interpretation of these concepts does not apply. However, for most of our museums, that is not the case.

but it is not the thing itself. It is not the real; yet it is not false. It displays, none the less, similar enough traits for our interactions with the virtual to function as if they were indeed real. This is not only at an imaginative or fictional level. (p. 14)

This description uses a restricted notion of referentiality, as it distinguishes between virtual and simulation based on which one has a "concrete, actual, material" referent in the present.

One often meets this, or similar, distinction between the virtual and the simulation, which builds on the different referential modes. One problem with this approach, as Seregi writes (2019), is that by the same logic, "we might as well take not only the digital images but all paintings or sculptures depicting something as virtual. But we do not" (p. 116). On the other hand, all pictures without "concrete, actual, material, or lived" referent—not only abstract but, for instance, allegorical or mythological scenes—would be deemed to be simulations.

Kris Paulsen (2013) partly adopts the approach of Bryant and Pollock but translates it into semiotic terms, which leads to a more precise distinction. He emphasizes that the common understanding of the virtual as "not really existing" should be supplemented by indexicality; that is, the virtual behaves, on the one hand, as the icon since it is similar enough, and on the other hand, it functions like the index, since "it has existential relation to its referent" (p. 100). Along this line of defining the virtual, we return to the old definition of photography. In the case of analog photography, indexicality was the term that described the direct influence of the physical relationship between the object; more photographed and the resulting image, the ability of photography to capture reality through a chemical process. Precisely, the photographic image can be explained as a trace that, although not simultaneous, is physically causally related to its subject. If we were to adopt this distinction between simulated and virtual, we would conclude that VR is indeed the correct name for museum tour applications. No matter how sophisticated techniques they use to simulate presence, they are virtual, not because they have a referent existing in the physical world but because digital images can be interpreted as traces. This reading is possible not only because we could enter the galleries of the Rijksmuseum in Amsterdam but because a photographer must have been there taking pictures of the artifacts, and it does not make a difference that his camera was digital. Here, all that differentiates analog photography from VR is that, in the latter case, computer modeling enables a person to interact with the artificial three-dimensional visual (or other sensory) environment.

These definitions do not address the question of digital technology's ability to fake this indexicality. In other words, it would be possible to create a virtual-looking museum that would be purely a simulation—it would have no material collection of artifacts

but a website from which a virtual museum tour could be launched. Nowadays, one can create images without a camera that look identical to photographs—in the absence of the causal link, these images become pure iconicity, and one need not trust what one sees. This image production is minimally involved in VR museums where pre-existing images are digitized with a scanning process. However, even in this case, there is much room for flexibility because it exceeds its exact causal link to the scanned original. Crowther (2008) calls this relation to the reality of the digital "transcausal" rather than causal (p. 167). Both Mitchell (1992, p. 225) and Manovich (2001, p. 295) talked about the death of the index concerning the digital image. They see an ontological difference between the two modes of image-making because the "immateriality" of the digital image degrades the existential link of analog photography. That is, the pre-existent material entity and its direct influence on the sign as a defining condition of the virtual is a matter of trust. In addition to this, for those like Manovich, who regard the digital icon as the forgery of the index, the indeterminate, always-dubious status of photography now seems nostalgically secure. Friedberg (2009) in her definition emphasizes that "virtual" can be simulacra and mimetic, and both

> imply a separate ontological register, an immaterial form that is functional but not effectively material. … the term 'virtual' serves to distinguish between any representation or appearance (whether optically, technologically, artisanally produced) that appears 'functionally or effectively *but not formally*' of the same materiality as what it represents. Virtual images have a materiality and a reality but of a different kind, a second-order materiality, liminally immaterial. (pp. 9 and 11)

## Space as a Source of Authenticity—Simulation

Even if we accept this distinction and rely on our prior knowledge, we trust the tour as virtual and not pure simulation—the question remains whether this "similar enough" is enough for an authentic experience. Now, let us ask our two critics: the historian—whose main interest is the artwork, the tangible experience with the physical artifact—would probably answer that no matter how big the attraction of the museum building is, the museum should try to be a neutral space subordinating itself to the objects and act as a pedestal. Contemporary museums are not so modest, perhaps they have never been. We will return to this later. Historians would object that virtual museum space cannot act as a neutral backdrop since VR technology has to apply strong elements that invoke spatial order to create the illusion of it (Hillis, 1999). To achieve this illusion the visual emphasis is sometimes placed on insignificant items like info signs, sometimes on characteristic and orienteering architectural elements—like huge windows and vaulted ceilings as in the case of the Louvre's VR tour—to produce the reality effect (McTavish, 2005).

It should need a historian of architecture to appreciate the presentation of the building, while the art historian would assert that this overemphasis of spatial movement directs attention away from the art objects, thus definitely thwarts the experience of an authentic tour. In short, the virtual spatial movement is overemphasized to make an authentic experience of the walk in the building itself, but precisely focusing on that which we pay just a small part of our attention prevents real authenticity.

However, the postmodern critic would react and claim that we have been aware, at least from the 1960s, that museums are far from being revered containers fading into the background, letting viewers have an immediate experience of the artworks. The physical museum space also mediates experience in many ways, from reframing artworks to making objects visible, accessible, and understandable through the very concept of art in which they are positioned. The original environment and context of the objects are exchanged for something else in the museum space, saturated with the cultural meanings of the present. As the identity of any cultural object relies on cultural concepts and classifications to be recognized as such, the spaces we create for our artifacts—either real or virtual—always reflect the spatial, taxonomic imagination of the present that creates sites of proximity and distance, of being side-by-side and dispersed at the same time.[6] He would probably refer to Foucault (1984/1986) saying that museums are heterotopias since they are real places but, at the same time, products of the imagination. In short, during a virtual walk, attention is diverted by technological means, whereas during a physical walk, it is controlled by space. If we now balance the two positions, we can summarize that, in both cases, space plays an active role. In one case, it directs us conceptually and, in the other, technologically. The physical museum seeks to make this endeavor imperceptible by showing the artworks as genuinely fitting into the natural experience of space, thus reinforcing the authenticity of the artifacts and the whole museum. Whereas virtual space must draw attention to itself so that the movement itself appears authentic, then this authenticity is projected onto the artworks and their arrangement. In other words, the authenticity of the museum experience is created as a derivative of the authenticity of the spatial movement. What is important here is that the conceptual framework provided by the museum space, together with several other factors, is represented but not altered by VR technology. The "only" difference is that while the physical museum space is a given for our perception and movement, in the virtual tour, it is the simulation created by the interface that makes the percepts feel real by creating immersion.

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[6] For example, how the ideal museum should reflect in its layout both historical references and the cultural connections defining art itself is described in a very exciting way in the mid-19th century by Gottfried Semper (1852/2007).

In other words, the VR tour belongs to the series of optical representations that have endeavored to break down the sense of the boundary between representation and physical reality, as have tried to do so many forms of immersive images since the 19th century, like Baker's panorama in London (1801) or the ballooning pictures. The "simulation" techniques of representation require distinctions of historical and media specificity (cf. Vidler, 2000, pp. 7–8).

It is a simulacrum, and as Seregi writes (2019), "tries to conceal its own frame, which is always there in one form or another, and tries to bring the percept (and not the reality) as close to the beholder as possible" (p. 121).[7] Thus, we can conclude that the VR museum tour can be considered as virtual only if a limited definition of virtuality is applied, and the desirable authenticity of the tour derives from it being a simulacrum. We can conclude here that the everyday vocabulary, which mostly follows computer discourse, and which was also helped by popular publications,[8] conflates "virtual" with "computer generated" and links the virtual with the effects of a constructed simulacrum, be it mimetic or unhinged from a referent in the real.

## The Other Definition of Virtuality—Virtual vs. Actual

We have found that the experience of space induced by the technological process, described as the main depository of authentic experience, does not actually change the essential function of the museum space to interpret the works of art placed in it in a particular way. The VR tour of the Rijksmuseum can be called virtual in the sense that its digitized collection is dissociated from the definition of particular space and time.

The time and location of digital images cannot be precisely anchored, they have an unassignable space, and they are not "here" or "there." We do not know whether they exist in the same form as when they were born digital, so their temporality cannot be determined either. However, this does not make them any less real or imaginary. In other words, their mode of existence changes, and, strictly speaking, it is not real existence that they do not have, but actual existence. A Bergsonian approach differs from the concept of virtual as a technical simulation since there the virtual is not modeled based on the real or its simulation but on the possible. Deleuze promotes this idea based on Bergson's discussion of the problem of the possible and the real in *The Creative Mind* (1934)

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[7] It is the frame itself that marks a separation—an "ontological cut"—between the material reality, like the wall surface, and the image contained within its aperture (cf. Stoichita, 1997).

[8] For example, one like that was Howard Rheingold's book *The Revolutionary Technology of Computer-Generated Artificial Worlds and How It Promises to Transform Society.* New York: Simon and Schuster, 1992.

and the virtual and actual in *Matter and Memory* (1907).[9] Deleuze (1969/1994) changes the terminology from possible to virtual as part of a broader conceptual shift and writes:

> The possible is opposed to the real; the process undergone by the possible is therefore a 'realization.' By contrast, the virtual is not opposed to the real; it possesses a full reality in itself. The process it undergoes is that of actualization. (p. 211)

Virtual images are not completely independent of referential space–time, not in the sense that they are the virtualizations of some physical objects or pictures, but in the sense that they must bond to some physical substrate, a computer or a screen, to become actualized. Virtualization of artifacts through digitization means that their actual constraints—their existence at a given time, in a given museum, in a given room—become contingent variables. As Pierre Lévy (1998) says, "deterritorialization, the escape from the 'here' and 'now' is the royal road to virtualization" (p. 31). He appeals to a model of evolution, the arrow of direction pointing from the actual toward the virtual. If we do not mistake the virtual as the opposite of the real, and as in Lévy's words (1998), take it as a powerful mode of being that expands the process of creation, opens up the future, injects a core of meaning beneath the platitude of immediate physical presence (p. 16), then the identity of the objects should change from their actualities—that is, as part of a given collection, displayed in a given way based on this and that concepts of art and museum—to something that bears all these problematic. The virtualization of a company, as described by Lévy, can equally refer to the museum: "The virtualization consists primarily in transforming the spatiotemporal coordinates into a continuously renewed problem rather than a stable solution" (2019, p. 16). As Friedberg (2009) claims: "The terms 'original' and 'copy' will not apply here, because the virtuality of the image does not imply direct mimesis, but a transfer—more like metaphor—from one plane of meaning and appearance to another" (p. 11).

Identity formation of museum objects has long been one of the most dominant areas of museum theory. Museum experts have already realized that when they allocate a certain, fixed location in the museum space for an artifact, what they do with their collection could be called actualization through interpretation. Actualization here is not the type–token problem but identification. Virtualization could be a reciprocal process, and through the interactive capacities of the interface, we could project new plasticity into the concept of the museum. Interactivity in a limited scope will not make it, that is,

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[9] Only to give a short hint, according to Bergson, memory is by definition virtual, it necessarily turns into something else, namely into an image in the widest sense of the term, in the process of its actualization. "Virtual, this memory can only become actual by means of the perception which attracts it. Powerless, it borrows life and strength from the present situation in which it is materialized" (Bergson, 1890/1990, p. 127).

consider the growing number of interactive platforms of the physical museum spaces. Most of the times, they offer visitors free choices and routes, from the digital storage, to display some of the potential visual and textual information so that they create their own "virtual museum" conforming to their interests. Here the dichotomy between the real and the potential can be used to describe the process. The museum visitor is presented with a predetermined, finite set of possible information in a freely composed combination. However numerous the potential variations can be, they are, by definition, predetermined in number and logically closed. Giving museum visitors control over the flow of information is undeniably customization, which can contribute to a higher sense of agency. However, this is not a new actualization of the virtual but a new realization of the potential.

## The Authenticity of the Artwork—Time and Age

If we acknowledge that museums represent a complex reality of space in which physical and cultural reality interact, mutually forming each other, then we can ask whether one can have an authentic experience of artworks without the tangible experience of authentic, original, physical artifacts. You usually come across a version of this question, and it is not surprising that there is huge interest in what is authentic and original in the age of VR and perfect copies. The historian would rather have a materialist approach arguing that there is a basis for authenticity that largely rests on an object's material substance. Besides that, it is the intrinsic qualities of the object, its cultural biography, and life throughout history linked to its materiality that gives it the special status of being authentic. He would probably cite Walter Benjamin's famous lines: "The authenticity of a thing is the quintessence of all that is transmissible in it from its origin on, ranging from its physical duration to the historical testimony relating to it" (1936/2006, p. 103).

Authenticity is then a span of time gathered into the instant of an aesthetically perceptible present. The time of the authentic work of art is, on the one hand, immersed in the linear, successive order of time. On the other hand, its time is free from the order of time, situated outside of it, where past and present are in a virtual co-existence; the past being real without being actual, ideal without being abstract. However, as we know, this formation of time splits in two directions, and, according to Deleuze, though concealed by normal, empirical time, it is not the quality of the artwork alone but, let us say, the transcendental form of time which makes the passing of time possible. To make it more understandable, he invents the crystal image:

> since the past is constituted not after the present that it was, but at the same time, time has to split itself in two at each moment as present and past, which differ from

each other in nature, or what amounts to the same thing, it has to split the present in two heterogeneous directions, one of which is launched towards the future while the other falls into the past (1985/1989, p. 108–109).

If we find the authenticity of the work in its temporal structure and then recognize that this structure is fundamentally a characteristic of time itself, not just of the work of art, then it is impossible to distinguish between the real and the VR museum experience.

However, this apprehension of the special time experience that a work of art offers may not give the real age of the object its due. Because pastness, as the pledge of authenticity, is more directly related to the materiality of the artwork. This quality of being from the past, that is obvious from the traces of decay and disintegration, is what Alois Riegl called the age-value. He says it has universal validity and claims mass appeal because the sensory perceptions on which it relies are "not restricted to the educated, but also touches the masses independent of their education. It manifests immediately through visual perception and appeals directly to our emotions" (1903/1982, p. 33).

The visible traces of destruction and degradation of the object's material can be inter-preted as a manifestation of age, transience, and, thus, authenticity. Then again, the post-modern critic would come up with a constructivist point of view, from which authenticity can be wrapped around any object, irrespective of its history and materiality. Pastness is the result of a particular perception or experience, and as such, it is firmly situated in a given cultural context. A building may acquire pastness because its architectural style matches what we expect of a Baroque building, irrespective of when it was built. The emotional reactions can be prompted by objects that are not as old as they appear. Georg Simmel (1911/1959) knew this when writing about ruins and acknowledged that the ruins would strike us "no matter if we are deceived in an individual case" (p. 265). Thus again, the drastic dividing line between the real museum and VR tour diminishes if we consider pastness an aesthetic quality, which lies more in the imagination than in the chronological system.

## Authenticity and Matter

Should we altogether forget about materiality? Far from it. Though materiality as a con-cept has been relegated to the dark fringes of art history since the 1960s with the "dematerialization of art," perhaps partly as a reaction to digitization, it is bouncing back. Do we take materiality as seriously as possible in the real museum? Sure, art historians have a vocabulary with words like instant brushstroke, facture, and impasto, which are the embodied marks in a painting that become disembodied on a computer screen.

The attention of critics often does not focus too much on the material presence of art-works, instead gives way to production of meaning. The dividing line does not need to be the representational materiality of the artwork since, on the one hand, we are already used to the many art forms that do have a medium and are without corporeality, for example, some conceptual art or performance art. On the other hand, we are also used to turning to high-density copies to observe "closely"—zoom in—the material qualities of artwork, like the many shades of the Night Watch, which are not visible to the naked eye. The dema-terialization of the art object has just been one side of the tendency that conceptualism entails. The other side was the materialization of the art experience. In theory, it meant the emphasis on embodied, corporeal perception; in practice, it meant the spread of installa-tions, performances, and participatory art. Now, perhaps the "material," bodily presence of the observer is more important than that of the art object. No wonder this is exactly what VR wants to simulate the most with immersion technology.

Looking at the internet's *materiality*, and its quality as a medium, the historian would say, that, unlike many traditional media of art, the digital homogenizes differences. First, let us take the broader context of the whole museum, where we encounter objects, pictures, texts, and graphics in space; these, despite their relatedness, occupy different communicative frames. In the online museum, it is always an array of media that jostle synchronously in one space, though these media are already semi-homogenized by their digitality. In conventional media, differences are "flattened" in the (meta-)medium, or, as Kholeif calls it, trans-media of the online digital (2014, p. 85). The digital images on the screens are physically flatter than conventional media. It is exactly this flatness that makes them capable to project three-dimensional content in a very illusionistic way, as physical flatness has no overtones of material or autographic presence. The hyper-precision, extreme clarity, and complexity of the digital image, to some degree, express the characteristic visual style of the present age. The historian would say that the danger lies in the supporting technology because the medium is becoming so familiar that they are unnoticed. We are not aware of the (semi-)artificial origin of the digital museum—semi-artificial, since the information is derived from the scanned source of already existing images that have been converted to computer-ready data—thus, all historical differences are dissolved in the high-tech visuality of the digital present. On the other side, the debater could emphasize here that we did not have to wait for the use of digi-tal technology and VR in museums to see that reproductions always reveal the age of their creation; in the case of forgeries, this is one of the sources of their detection.

Moreover, restoration works always bend the qualities of the work towards the taste of the restorer's time.[10] Art history itself not just restores but also constantly recreates artworks according to the taste and imaging routines of the day, and ours is no exception. Perhaps the order has already begun to reverse and—as our eyes become more accustomed to the quality of digital images, which they perceive as authentic—museums are putting more and more effort into lighting their spaces so that the pictures shine as if they were backlit, that is, illuminated through a screen.

## How to Be the Servant of Two Masters

After this short debate between these two people, the historian and the postmodern critic, I would say that actual and virtual museums can be seen as different entities residing on the same continuum of culture and not in opposite corners in the construction of realities. One can justifiably hold the view that VR museum tours are sophisticated replications. Their main functions are precise documentation through digital duplication, closer access to the objects—like looking at them from all angles—creating a system of interconnections among different museum collections, adding scholarly information, literature for using the sites for teaching purposes. We can summarize it as putting more history into the project now with the help of new imaging devices. This view means that the personal experience of artworks in real space cannot be replicated no matter how sophisticated images and spaces we can create for virtual presence. A valid direction that follows from this is that of the historian who sees the real and the virtual as congruent, where the latter serves the earlier.

However, as the virtual museum deals with art history, history is just one of the aspects that one can emphasize. The other one is art, of course. From this perspective, we can ask, must VR serve art? I would rather say that it should provoke art. This other approach would not use technology merely as something to be added to existing practices. Not to talk badly about those forms of internet museums that are not linked with either a specific location or collection and establish new "relational" forms of the museum, where the content is partly user-generated or with cutting-edge technology they create mixed reality exhibition with new content. For example, the Nibelungen Museum in Worms, or the MUVI project—Virtual Museum of the Collective Memory of Lombardia (cf. Giaccardi, 2006)—which is much more interesting than VR gallery tours.

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[10] Let us recall the debate over the restoration of the frescos of the Sistine Chapel. There were art historians who said that the age of the paint was taken away, and thus, we can add, the whole color scheme of the work miraculously perfectly fit into our present taste.

What does provocation within the confines of VR museum tours mean? An analogy is the debates of the '90s between new architecture and the museum—with the lesson drawn from it. Like architecture did then, now VR should dispel its own definition as service oriented. However, unlike then, art and VR should not become rivals in the fight for visual attractiveness and popularity. The new technology should serve as a critique of the museum practice—and let me add that I do not consider the possibility that visitors can follow their own paths instead of the one preset by the curator—should reconsider the relationship of the exhibits, should open new possibilities of construing the meaning of art. For this, the internet should be taken more seriously as an artistic and cognitive medium. VR tours should not intensify voyeurism, the reduction of the work of art to a simple sensual form of experience but used to invent new methods of producing meaning. If more emphasis is put on the experiment than on the metaphysics of presence, it may easily cause a conflict with the rights of the exhibited. But I am sure it is worth it. This risk is more evident in the case of AR—augmented reality—when real and virtual elements blend into a seamless composite scene. In the real museum space, the newly formed sites may be called heterotopias (Rousseaux & Thouvenin, 2009, p. 186). Like when the MoMAR guerrilla takeover of the Jackson Pollock Gallery of the MoMA, where a group of artists, with the help of their own AR app, freely downloadable to smartphones, showcased their own works by remixing or replacing Pollock's paintings.[11] Phenomena like this, "virtual trespassing" raise a host of new questions for the art world. I am convinced that after the sensational period of virtual, mixed, and immersive realities, both valid paths for the VR museum—the historical and the artistic experimental—will both find their own ways, neither of which is the bridging of the gap between art and entertainment industry.

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[11] https://www.wired.com/story/augmented-reality-art-museums/

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