

(DIS)AGREEMENTS

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**THE PAST AND PRESENT  
OF VIRTUAL WORLDS:  
ILLUSION AND IMMERSION  
IN EARLY CINEMA**

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**introduction**

**THE ARCHAEOLOGY OF VIRTUALITY**

David Ferragut

Cèlia Cuenca

**discussion**

**PERSPECTIVES**

Sonsoles Hernández Barbosa

Guillaume Soulez

**conclusion**

**THE VIRTUALISATION OF THE WORLD**

Cèlia Cuenca

David Ferragut



# introduction

# THE ARCHAEOLOGY OF VIRTUALITY

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We all know the story: virtual worlds are the culmination of a long technological and artistic process that is effectively supplanting nature as a producer of images (or at least aspiring to). As Román Gubern explains it, “new image technologies, such as the hologram or VR, are new answers to a very old question in Western culture: the question of mimesis and referential illusion, and the aspiration to produce perfect perceptual duplicates of the world’s appearances. The seeds of VR were already present in the legend of Zeuxis’s grapes and Parrhasius’s curtain, in the visual trickery of geometric perspective and in the invention of photography and cinema [...]” (Gubern, 1996: 177). The grapes and curtains mentioned by Gubern were paintings that looked so real that they convinced viewers that they would be able

to pick a grape off the bunch or pull the curtain back, but the unsuspecting hand that tried came up against the wall. The anachronistic nature of this hypothesis is obvious: we can turn away from a present that we scarcely understand and look back to a past that provides the key to its interpretation. How can we make sense of virtual worlds? By searching for their starting point, even if it is a cliché. This is what Gubern tells us but a few lines later: these virtual worlds will reproduce the shadows of Plato’s cave.

Whether we accept this cliché or not (technically, our perceptions inside the cave are at odds with our cognition, which is capable of grasping the truth of Ideas, while what VR shows us are not Ideas but merely other appearances, those of the real world), it is founded on the same hypoth-

esis on which this issue of *L'Atalante* is based: was virtuality already present, even if only in some kind of potential state, in early cinema? Is there a connection between today's virtual technologies, the optical devices of the 19th century and the first years of film? From this perspective, the most obvious answer is that early cinema and virtual reality effectively share the same impulse to replicate the real world, and furthermore, that this impulse even predates the invention of the cinematograph. The question then becomes to identify the previous incarnations of this impulse: the devices it gave rise to.

This edition of *(Dis)agreements* is structured around two basic objectives. First of all, we believe an analysis and definition of the basic concepts to be discussed is needed. The *virtual worlds* considered here cannot refer to the same thing as fictional worlds, for example. Novels are works of fiction in general, but intuitively we do not think of them as being virtual. Moreover, there are other problematic terms that are nevertheless in common use, such as illusion, simulation and immersion. Are they distinct categories or can they overlap? Can they exist simultaneously on the same device?

This first objective leads us to the second: if these concepts do occur simultaneously in each medium, it means that the unique quality of each medium lies in the ways that illusion, fiction or immersion occur, in their relative importance. It seems reasonable to suggest that a VR video game is more immersive than a film, and that a film is less immersive than a Mareorama. Yet paradoxically, the effect that a Mareorama aimed for was the feeling of movement on water, of imbalance, while this same imbalance is unintentional in VR video games, which can cause motion sickness.<sup>1</sup> The immersion offered by VR, more sophisticated than that of the Mareorama, can end up exhausting the user. Considered in this way, immersion is like an axis that allows us to move from one medium to another, in a long-distance race to achieve a complete virtualisation; it presents varying images

(static or moving) and involves the viewers to varying degrees, impacting on the reproduced world in different ways or allowing us to intervene in it to varying extents (Krajewski, 2015). With painting, particularly when it makes use of the Renaissance perspective, viewers are located in a given space that anchors their body to a predetermined position in order to achieve the desired effect. It is a perspective that only involves the gaze.<sup>2</sup> Immersion here is subject to very precise conditions. As cinema evolved, sound was introduced to films, and then surround sound, and panoramic screens (which in fact reuse a 19th-century device), along with multiple-dimension technologies that have enjoyed sporadic moments of success at different points in film history. While cinema created an appearance of reality in its early years, technological innovations have sought to make that appearance more convincing, more immersive. This seems to confirm the hypothesis posited in this issue: that virtuality, the replacement of the real world with its double, needed nothing more than to be unleashed, and that it has been in various ways.

Put simply, what this edition of *(Dis)agreements* presents is both a conceptual analysis and an historical review. These two objectives are pursued in a dialogue with Dr. Guillaume Soulez (Université Paris III – La Sorbonne), a specialist in film theory and aesthetics who in recent years has researched the question of virtuality, its meaning and implications for both cinema and digital technologies, and Dr. Sonsoles Hernández Barbosa (Universitat de les Illes Balears), a specialist in visual studies and sensory studies who has researched the phenomenon of synaesthesia in late 19th-century art and, more recently, the way that optical devices of the 19th century shaped the sensory perception of individuals in the development of capitalist consumer society. This discussion leads to a reformulation of the proposition outlined above: if we can look back to the past to understand today's technology, if we can draw on studies of early cinema to understand virtual worlds, the approach can be inverted

as well, because it is the latest use of a technology that enables us to make sense of it (McLuhan, 1996: 33-34). Ultimately, it is the very obsolescence of a technology—cinema, in our case—that brings its dimensions into better focus. Our analysis of virtual worlds, insofar as they share the same productive impulse as cinema's various manifestations, will actually enhance our understanding of cinema, just as we can now better understand other optical devices of the 19th century by subjecting them to an archaeological analysis.<sup>3</sup> ■

## NOTES

1 For example, in the video game *Half Life: Alyx* (Valve, 2020), there are two ways to move around: naturally, with whole movements; and artificially, with leaps from one point of the setting to another, like editing cuts in a film. The first makes the user dizzy while the second does not.

2 A detailed description of this restriction on the body can be found in Brunelleschi's commentary on a comparison between a painting and the real image on which it is based, in 1425:

The comparison is not left to the judgement of the experimenter; he does not simply look at the thing, but examines it under strictly determined conditions: he must be positioned in a precisely calculated location, about nine feet inside the cathedral entrance, hold the device at a height of about five feet, look through an aperture in the centre of the image and place the mirror at a precisely calculated distance. In its lower half, the mirror reflects the painted image, and in the upper half the clouds, so that the viewer can see a combination of art and reality. The mirror then moves away, and the impression is that what is seen is not altered, yet now it is 'reality' (Feyerabend, 1996: 126).

3 We would like to thank Dr. Martin Barnier, lecturer of Film Studies at Université Lumière Lyon 2, for contributing to this section with his patient reading and pertinent comments.

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# discussion PERSPECTIVES

**I. In recent years, fields such as media archaeology—we are thinking in particular of Huhtamo's studies of "peep practice"—have highlighted the variety and complexity of immersive technologies of the past, from peepshows to stereoscopes, and the ways they seem to re-emerge in contemporary technologies (Google Glass, Oculus and VR in general). In order to analyse or understand them, we believe it necessary first to develop clear definitions of those elements that seem most characteristic to you. With this in mind, could you introduce or clarify the concepts of immersion and illusion?**

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## **Sonsoles Hernández Barbosa**

For this terminological question I usually refer to the definitions established by two theorists of immersive devices. The concept of immersion has been defined by Oliver Grau as "a 360° space of illusion [...] with unity of time and place," which therefore offers "a completely alternative reality" (Grau, 2003: 13). On the other hand, the media theorist Alison Griffiths introduces a more experiential component into the definition, although she omits the idea of illusion, referring to immersion as "a space that immediately identifies itself as somehow separate from the world and that eschews conventional modes of spectatorship in favor of a more bodily participation in the experience, including allowing the viewer to move freely around the viewing space" (Griffiths, 2013: 2). These definitions related to a physical immersion, however, are discussed from the perspective of literary theory, as the experience of reading can itself be considered an act of immersion because it involves placing the reader inside a particular imaginary world—a reader who, through a text, surrenders to that world and is provided with sensory references specific to a particular setting.

Historically, immersive physical environments simulating reality were created using paintings. In the 19th century, the enormous circular galleries known as panoramas, which attracted millions of

people, created simulated settings that over time introduced technological elements in addition to paintings that gave the immersive experience—in the sense provided by Griffiths' definition—an increasingly physical component, engaging more than just the sense of sight.

The panorama belongs to what the theorist Jean-Marie Schaeffer calls "mimetic immersion", where "preattentional attractions cannot be blocked by a conscious cognitive process, resulting in a (false) perceptual belief" (Schaeffer, 1999: 286–289). In this sense, immersive devices such as the panorama employed the same logic as the *trompe l'œil* to elicit a suspension of disbelief, preventing the spectator from having to take that first step of accepting the spectacle as a representation. This does not mean to suggest that panoramas were not always conceived of as spectacles whose appeal was the way they tested the limits of their constantly renewed capacity to make people believe the impossible, even in the awareness that it was pure illusion.

The term "illusion", on the other hand, was already used in the 19th century with reference to panoramas in the sense of their simulation of a real environment. It would therefore be understood as a universal natural phenomenon, distinct from "illusionism" as a cultural practice aimed at creating illusions. Illusionism is thus a practice

limited to a specific environment using cultural elements (Mitchell, 2009: 285). The cultural meaning of “illusionism”, as opposed to the natural and universal dimension of illusion, reflects the constructed dimension implicit in the concept.

### Guillaume Soulez

To understand the notion of immersion, in sensory terms, it is necessary to distinguish it from the notion of “normal” behaviour –when we have control over our senses and our actions. We can already see the central problem appearing: it is very difficult to define “normal” behaviour insofar as, for example, when we watch a film or listen to music, we are partly “taken up” by this activity to the detriment of other activities. But is this really immersion? I don’t think so. Some viewers manage to watch a film on their phone while doing something else, and many manage to read while (actually) listening to music, following the melody for example or identifying the style, the musician. This means that they are not completely “immersed”. Even in VR, which is a very all-encompassing device for the senses, moments of “immersion” alternate with moments of “emersion” when one encounters technical difficulties, for example, or when one bumps into a wall! The studies of Huhtamo and others rightly emphasise the scopic impulse, i.e. the motor of our desire for immersion, which makes the problem even more complex, but also the discourses as much as the devices, which allow us to approach this dimension of desire. Other impulses are also at work in video games, such as in *Shoot’em All* video games, which strongly contribute to immersion by compelling the player to cling to the controls so as not to miss an opponent.

We can see from the example of the video game that it is the internal system of the world in which we are immersed that prevails: in addition to an encompassing of the senses that mobilises them in a single direction (whereas we are used to keeping our senses and our attention in

several directions at once), there is a system that envelops us in its system to the point of making us act within it. In some ways, embryonically in other devices such as film or television, and more fully in video games or VR, immersion in an environment is confirmed, validated by what we do in that environment. We validate it not only by our senses and emotions, but also by our actions (and our actions validate our emotions in the process).

Conversely, not every interaction is immersive: we can very well click a mouse to view a video, progress through an article or an interactive documentary without being “immersed”. Everything therefore depends on the reason for the action—what the French researcher Geneviève Jacquinot (1998) called *intransitive interactivity*, the reason why we perform actions in a system (*dispositif*) that asks us to do so, as opposed to *transitive interactivity*, which concerns the technical instrument. This is why my position on this issue is that fiction (which is only one of the possible reasons to justify intransitive interactivity) favours immersion, rather than the opposite, because it “suspends our disbelief”, according to Coleridge’s well-known formula, i.e. we tend to eliminate all that can spoil the pleasure of fiction, whether it be internal problems of the narrative (implausibilities) or problems coming from the technical device. It is noticeable that genres other than fiction do not require us to “immerse” ourselves as much as fictional devices: for example, in the official VR of the Lascaux caves, it is simply a matter of exploring an environment as in a scuba dive.

It is striking to note that the spatial dimension is particularly active in immersion, especially when it comes to linking the material space of the experience with the reconstructed space inside the VR headset. Olivier Asselin (2018) distinguishes very clearly between two strategies: one that aims to propose a “monumental” device (one that goes beyond us) in which we are included inside the image (starting with the panorama), and the other that aims to “bring the image closer” (as in

optical views, or peepshows, video games, etc.). The removal of the screen, from VR to implants, of course favours the inclusion of the viewer inside the performance. But we all have had the experience of being able to “immerse” ourselves in maps by imagining the spaces themselves from names, symbols, colours, representations or previous experiences, not to mention the play between maps and fiction, as in Tolkien. Amusingly but logically (rules of the game), the more coherent the world and the more precise the map, the more the imagination—and therefore the immersion—works.

The last dimension of immersion is the loss of control. This is undoubtedly linked to other impulses, but it should be noted that it is possible to be sensorially immersed, without it being an immersive fiction, when all the senses are mobilised by a sensory vertigo, of whatever nature (proprioception, sound or light saturation, etc.). The inclusion of the viewer in the image of which Asselin speaks is of course a factor that facilitates this loss of control. From this point of view, through its own means of creating vertigo, cinema has a long tradition that links it to the carousel, as Thomas Elsaesser showed. In a related sense, a possible origin of the notion of “experience” in VR might be linked to hippie experiments with psychotropic drugs; in fact, I noted that one VR experience seemed to be directly inspired by them during a VR festival at the Forum des images in Paris (see photo).

The notion of illusion seems even more difficult to grasp, as it can fall into even more disparate domains. To make a heuristic use of it, we can start with the proposal of the research programme “Les arts” (directed by G. Pisano and J-M. Larrue), which, based on the reflexion of the futurologist and writer (and scriptwriter of 2001:

*A Space Odyssey*) Arthur C. Clarke (1984), considered three (historical) stages of illusion linked to the cultural incorporation of a viewing technique: the “magic moment” (wonder), the “magic mode” (rhetoric), and “secularisation” (trivialisation). Rather than conceiving of it only from a diachronic point of view, I think that it effectively describes, from a pragmatic point of view, different modes of relations to the viewing techniques (moreover, the shift from the *magic moment* to the *magical mode* already makes this change in a way), different ways in which spectators position themselves within a viewing apparatus (*dispositif*) according to their knowledge and their customs. Thus, to the kaleidoscope, one must, of course, add the “discursive” (Huhtamo, 2014) but also the *perceived kaleidoscope*, which allows for cultural variations, unequal competences and different positioning of spectators. Illusion can therefore be encouraged or even required by a system of intransitive interactivity (for example, one has to believe at least a little that fictional characters “exist” in order to take an interest in them, and in what is going to happen to them, which is perhaps easier than being a “vic-

Image 1. NewImages Festival, Paris, June 23, 2019 © Guillaume Soulez





tim” of an optical illusion when one is aware of the technical device) or, conversely, challenged by it (a Brechtian perspective), without always being able to be certain of the spectatorial reading that will be made by an individual, a group or an era.

One can therefore be immersed (like a diver) without an illusion, and, symmetrically, be fooled by an illusion without a strong immersion in sensory terms (as in a traditional magic trick).

## **2. To refer to fictional worlds, terms such as virtual, simulation or even fiction are often in fact used interchangeably, but do they always refer to the same thing? What is the difference between them?**

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### **Sonsoles Hernández Barbosa**

Although authors such as Jean-Marie Schaeffer suggest that “all mental representation is a virtual reality” (1999: 10), strictly speaking virtual reality is not considered to have existed until the development of computer technology. It therefore involves the creation of an illusory, computer-generated environment, and in this sense it was not until 1968 that the first truly virtual experiences took place (Gubern, 1999: 156). Prior to the development of computer technology, there were environments that simulated real settings or situations. Fiction normally requires a narrative component, based on “acting as if”. If we accept Schaeffer’s proposition, we can conclude that for fiction to exist two conditions have to be met: “the existence of a pragmatic framework of shared pretending, and the fact that we access the representation through the specific variant of mimetic immersion that is fictional immersion” (Schaeffer, 1999: 290). Fiction thus requires the involvement of the audience in representational imaginaries, what Walton calls “make-believe” games, which generate worlds where a particular situation must be imagined (Walton, 1990).

### **Guillaume Soulez**

Guillaume Soulez: Yes, there is a great deal of confusion, which is linked to the importing of an English vocabulary when Latin languages like French have a different semantic tradition around *virtù* and the virtual, not to mention the fact that

Deleuze has also proposed a very powerful opposition between the possible and the virtual that opens up other questions, based on the opposition between real/possible and virtual/actual. “Virtual reality” should be translated as “simulated reality” or “quasi-reality”, as the *Oxford English Dictionary* clearly defines it as (thank you to Lisa Zaher who sent me the reference a few months ago): “9. B. That is a computerized or digitized simulation of something; spec. (esp. in earlier use) simulated in virtual reality.” By extension, virtual and digital are almost synonymous, as the rest of the definition indicates: “Also: established or conducted using computer technology rather than more traditional means.” I do not use this second extensive definition, even though it is of anthropological interest (it shows how we transfer actions from the physical world to the digital world, as with remotely piloted killer drones, for example), but I am interested in how Deleuze’s virtual interacts with the virtual as simulation.

The virtual-simulation is related to the question of immersion as inclusion in sensory terms, which makes us feel—especially with the disappearance of the screen and the ability (however limited) to act in the synthesised environment—that we are *almost* in a reconstructed reality (if we move our head, we see another aspect of the landscape; if we move forward, it looks like walking in the real world, etc.). With the exception of some rare experimental productions, from a Deleuzian point of view, as I have tried to show

(Soulez, forthcoming), VR has very little of the “virtual”: rather, it tends to enclose the action within a few possible scenarios. This distinguishes it from interactive documentary, for example, in which inventive or *creative abduction* often plays a role in the investigation, with very interesting back-and-forth between tree structures and actualisations (geolocated concrete places, for example). See, for example, the production of the Raspouteam group on the Paris Commune in 1871 and its re-actualisation in contemporary Parisian space. By definition, indeed, simulation belongs to the realm of the possible, so VR is not virtual-friendly from a Deleuzian point of view (except to try to hack the VR system itself), but it may be interesting to ask, on the one hand, how simulation dismisses the Deleuzian virtual, and on the other hand, whether the Deleuzian virtual, linked to creativity itself (from the biological to the human), can be completely dismissed and how it “comes back”.

Fiction, as we have already seen, is a problem of a different nature, but it may be interesting to study the relationship between fiction and immersion: it is a matter of artificially entering a system (we often say a “world”) in which anthropomorphic entities act (especially from an emotional and moral point of view, as we can quite empathise with neural entities—as in Pixar’s *Vice-Versa*, 2015). Just as we can immerse ourselves in a simple map found in a book, so we can fall into a fictional story with two pieces of wood on a beach as a child. As mentioned above, fiction favours immersion: for example, while playing on the beach, I discover a pebble that reminds me of a promontory that I will integrate into my story, so I increase my immersion in a space that becomes more and more the place of my experience.

In the opposite direction, immersive codes (“Once upon a time”, the three blows in French classical theatre, the establishing shot, etc.) remind us of previous experiences of fiction and favour the passage through affective and cog-

nitive thresholds, leading to the setting up of a fictional reading, or, as Roger Odin puts it more precisely, “fictionalising” reading (Odin, 2001). But it is not the immersion that makes the fiction: if these are codes, it is because they are already associated with a fictionalising function. In fact, as immersed as I am in a fiction film, I can “drop out” and start thinking about a café in St Mark’s Square where I have drunk a delicious espresso (while I am watching Visconti’s *Death in Venice*) during the film sequence. Similarly, the feeling of familiarity (with places in particular) that a “universe” (the *Buffyverse*, for example) can give me, such as those that TV series manage to develop nowadays, is a “fiction effect” produced by the repetition and above all the continuity of the diegetic space (the fact that we find again, but as if approached from another *side*, a space that we already know). It is not an effect of immersion but a fictionalisation of space.

We can also see this dependence of immersion on fictionalisation in the question of genres in cinema: a certain spectacular immersion is expected of a science fiction or superhero film, but we would be very surprised if Rohmer expanded the mechanisms of immersion in his films. In the same way, it was to give a certain sense of *epic* that Abel Gance expanded immersive research to include the spectator in the action, etc.

But isn’t fiction also a simulation? It seems to me that it is not, from an Aristotelian point of view (and in Latin, *ut* - like, which has a logical function - *ut pictura poesis* - is also opposed to *similis* - resembling, which is a simple observation). Mimesis presupposes an actor and therefore an a priori distance and a game (which Jean-Marie Schaeffer calls “*feintise ludique*”). Simulation, which some elaborate immersive devices manage to produce (whether it is learning to fly a plane or playing a game in VR), does not presuppose a logical leap of this kind. Rather, the simulation device is an extension of our own world (the closer the system is, the closer I will be to the actual conditions of flying an aircraft, which is

truly better!) On the other hand, it is quite possible to “plug in” a fictional system to a simulation system (I will then be able to do extraordinary things in VR such as climb mountains like Puss in Boots, while I am just quietly walking around a room). But it is not because I act (the higher stage of immersion), instead of simply watching (and experiencing) as in the cinema, that the boundary between mimesis and simulation disappears: I have to accept that I cannot do everything, for example, but only what is foreseen by the diegetic world (the possible) in which I evolve. As soon as we leave behind what we might call the “double realism” of our habits (photorealism and realist fiction, which are very closely linked historically in cinema and audio-visual media), things become clearer and easier to understand: photorealism is a simulation, whereas realism is fiction, even if one relies on the other (as in the neo-realism that has been so influential for this reason).

It is also necessary to debunk the false idea that the more (immersive) means are deployed,

the stronger and more complete the experience of fiction is (we are completely “caught up” in the story), as the history of optical devices points to a “progress” of fiction that is always more captivating because it is more “complete” (theatre is more captivating than a story told in the evening by the fire, cinema is more captivating than theatre, and VR is more complete than cinema). That cinema is more sensorily “complete” than the novel or comic book (as seen in a so-called “faithful” adaptation) does not mean that the film experience is stronger, as there are many other parameters that make an experience rich. This idea of the immersive “multiplier” is proved false by the fact that one can experience very strong emotions with a very simple and almost abstract device (like the emotions one feels when watching the series *La linea*,<sup>1</sup> for example), while sensory saturation tends to detract from fiction in favour of the spectacular (this has already been studied in relation to the so-called “post-modern” cinema of the 1980s).

### **3. In view of the discussion so far, did virtuality exist in early cinema? Or when did the notion of virtuality really come into play in the history of media or cinema and its devices?**

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#### **Sonsoles Hernández Barbosa**

As I pointed out above, virtual reality involves the creation of immersive environments using computer technology. What this means, as argued by the man whom many consider to be the founder of the field, Jaron Lanier, is that virtual reality is a direct creation of reality that the spectator interprets without codes. This is what Lanier refers to as “post-symbolic communication” (Lanier, quoted in Ryan, 2001: 59). Along the same lines, the new media specialist Jay Bolter argues that virtual reality is a “medium of percepts rather than signs” (Bolter, quoted in Ryan, 2001: 10). From this perspective, virtuality cannot really exist when analogue media are used, which in turn would mean there is no virtuality in early cinema. In any case,

the genre of the panorama, particularly the multi-sensory panorama, is closer to what could be considered “analogue virtuality” than cinema itself, given its aim to create an alternative immersive universe, with its own understanding of time and space, covering a broad sensory spectrum.

#### **Guillaume Soulez**

Yes, of course, especially in the Deleuzian sense: I have shown that Robertson’s phantasmagorias, which pre-date cinema, are also a form of actualisation of a virtuality linked to Parisian history, notably located in the Capucines district where the cinema is said to be born (Soulez, *ibid.*). This also works in contemporary films that take an interest in this power of actualisation: I studied it in the film

*La Vierge, les Coptes, et moi* (2012) by Namir Abdel Messeeh. In her work, Olga Kobryn finds forms of Deleuzian actualisation in Tarkovsky's films (Kobryn, forthcoming). I think this is a continuous thread to be explored, from the first spectacular optical devices to contemporary "post-cinema". It is particularly present in the form of multiple spectralities in early writings on cinema before the standardisation of the 1920s (including in its "realist" form: cinema is so much a "bioscope" that one thinks one has seen one's neighbour passing in the street on the screen). We could test the hypothesis of an actualisation of the impulses (*Triebe*) in surrealist cinema and writings, even if the Deleuzian model is not very favourable to psychoanalysis, with the idea that creation goes beyond the highlighting of a (latent) impulsive "possible" to produce psychic *figurations* with a certain dimension of novelty. Several critics have noted that there is no dog in *Andalusian Dog*: one might say that this is Bunuel's way of drawing our attention to what is actualised (from the virtual) and not to what can (possibly) be expected (according to the conventional function played by the title). When Dupieux (*Incroyable mais vrai*, 2022) takes up the motif of the hand full of ants (invented by Dali for *Andalusian Dog*), he is undoubtedly playing with the *possible* (an expected cinephilic reference system) but he also designates an actualisation that "comes out" without warning from the body and the image, an erratic actualisation linked to the temporal and psychic disorder studied in the film. It is an "unbelievable" that is obviously different from the performance of superheroes, technological overkill or even narrative implausibility according to rationalist principles.

If we understand virtuality in the English sense of simulation getting closer and closer to the physical reality experienced by the body, we can say that there is no linear "progress" in the history of cinema and optical and visual media. At various times, and very early on, attempts were made to enrich sensoriality and to include the spectator in the spectacle.

The greatest success is still talking pictures. But all sorts of mobile or encompassing devices try to give us the feeling that we could fly like a bird, feel the rain, smell the sea, etc. Of course, with the elimination of the screen or even implants, we are taking things a step further, but for the moment we can see that despite the increasing sophistication of the machines, we are still essentially consuming a film/ audiovisual document or playing a video game on a screen, even if the screen fits into our hand. It is often said that the theatre has a social function, which is what keeps cinema going; the same could probably be said of the screen: people often gather around a screen, gamers have been known to film their games for others to watch, etc. Even in VR, when you don't put on the headset and wait your turn, you often see on a screen what the immerser is seeing (or experiencing), which helps to socialise the experience by making it shareable (as well as observing how others act). This is obvious in the case of television, which combines networks and screens, but even in the case of cinema, it is clear that the social dimension of the screen must be taken into account: I see on the screen not only what others in the room see at the same time as me, but I see a replica of what other spectators have seen or will see on a screen of the same type. It is likely that two obstacles combine to limit full audio-visual simulation: the physiological issue of having sufficiently stable reference points during the experience to be able to free oneself from the initial physical space (or to encompass it in the experience) and the social issue of which the screen is one of the paradoxical supports (since it is designed to "immerse" us in another environment/world). But one can imagine a party at which immersed friends, sitting cross-legged and forming a circle, pass a headset around, offering each other a powerful "experience" like one passes a joint, or perhaps they all put on headsets at the same time linked to the same content of a fixed duration, and then discuss it together.

**4. Watching a film in a darkened theatre, peering through a visor into a new world and walking around a panorama are all classified as immersive experiences, but what characteristics and delimitations should we apply to define a device as immersive? Can we define degrees of immersion? What distinguishes one type of immersion from another?**

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**Sonsoles Hernández Barbosa**

I described the concept of immersion above as an environment that provides an alternative reality. This reality may block preattentive attractions, as in the case of the panorama, which aims for an immersive *trompe l'œil* effect, or it may not, as in the case of cinema, where the darkness of the theatre predisposes us to concentrate on what is happening on the screen.

From what I have been able to find in my research on the panorama, the evolution of this genre over the course of the 19th century seems to have been based on the conviction that to create an immersive environment it is not enough to appeal to the sense of sight alone. This was the reasoning behind the multisensory panorama (Hernández, 2017), whose creation coincided with the first years of cinema at the end of the 19th century. The multisensory panorama offered a degree of immersion that was greater than the original version of the spectacle—and greater than cinema as well—through a stricter level of control of the dimensions of time and space into which spectators are inserted, using stimuli targeting all five senses in an effort to situate them in a simulated environment. Cinema, even taking into account that it was conceived of quite differently in its early years from how it is today, offered an experience targeted primarily at our sense of sight.

Regarding the different types of immersive experiences, in digital media we have virtual reality and augmented reality, as well as mixed reality, a combination of the first two. Virtual reality environments allow spectators to immerse themselves in imaginary worlds with no reference to the real physical environment. Augmented reality, on the other hand, enables them to locate digital objects in real environments. An example of

this is Google Glass. As Sergio Martínez Luna puts it, “while in virtual reality the spectator enters the representation to participate in it, in augmented and mixed realities the representation enters the world to act on it,” with mixed reality being defined as “a hybrid reality that combines virtual reality, augmented reality and physical reality in real time” (2021: 150).

**Guillaume Soulez**

Following on from my answer to the first question, and as I am taking a pragmatic perspective on film studies, I would tend to think that the competence and positioning of the spectator plays a very large role in the *feeling* of immersion: where novices will feel “immersed”, more experienced spectators will only have the feeling of evolving in an environment whose rules and main coordinates they have mastered. Once someone has “gone round and through” a device, immersion is much less effective, including devices based on vertigo (the experienced may keep their cool).

So, we could have a purely technical definition (if it exists) of immersion, allowing us to distinguish between the different technical processes of inclusion (from the place where we stand to the editing system, including the screen or its absence), without always being able to be sure of their effectiveness (the panorama undoubtedly works much less effectively on us than it did on our ancestors). But it also seems interesting to me to “explode” this notion in order to see the different issues it covers and to understand the interactions between the different levels (for example between sensoriality, fiction and environment) without confusing them, studying them case by case, especially as a fiction story can also help us to understand an optical mechanism, and vice

versa of course (like Stendhal's diorama and Georama, which I have studied; see Soulez, 2021).

We could say that there are two main thresholds on a pragmatic level (activation of reading): *mobilisation*, i.e. the moment when the audiovisual activity takes precedence over all the others (corresponding to the opening credits, for example), and *involvement*, i.e. the moment when I find my feet in the new environment proposed by the images (the entry into the story, for example, when we start to take an interest in the characters). Traditionally, it was thought that the focus of attention preceded the switch to the new environment, but we might ask whether the opposite is not true, especially today: I play my usual series on my (small) screen while I'm finishing up writing a message: I connect to it cognitively, but it is only when the action becomes really interesting that I leave behind my other activity (writing a message). This is not necessarily related to new technologies but rather to a larger and deeper audiovisual culture, as evidenced by the pre-credits sequence, which launches into the action straight away to engage a more or less available viewer at home.

Conversely, if I put on a headset, I voluntarily separate myself from my initial environment (it is difficult to do anything else at the same time), but I have *not yet* entered the new environment. Some devices are more demanding in terms of cutting off from the initial environment, but if they are too difficult to use, or if they are boring, they can make it difficult to cross the threshold of involvement.

This is why we can always say that depending on the device, there are "standard" thresholds designed by the inventors according to a given visual culture (a "technical" version of the pragmatic logics mentioned above), but that there is also, in parallel, a lot of individual and socio-historical variation in thresholds, such as the fact that we feel less immersed in a panorama today (it seems to us a "poor" experience) or even in optical views: we are always eager to see what is hidden or distant just like people in previous centuries, but we can also have a disappointing feeling because we find the scene very "static", accustomed as we are to "moving images" when we position ourselves in front of images (moreover, we know how easy it is to animate images with a slideshow).

**5. Continuing with the previous examples, we often find stories in news archives about the motion sickness suffered by some spectators when using devices designed to simulate the movement of a train or the rocking of a ship, such as the spectacles presented at the major World Fairs. This reaction is not far from what some of us feel while watching 3D movies at the cinema or while on amusement park rides (even some VR games, such as Half-Life Alyx, include interaction modes that forego certain movements, thereby eliminating the risk of dizziness). In this sense, and based on those theorists who remind us to go beyond the purely visual and consider the corporeality of the gaze, could you reflect on how such devices condition or prepare the spectator's reaction? Which senses do they trigger and which do they switch off in order to present their particular images or spectacle? And when does the immersion fail to happen or the expected response fail to occur?**

#### Sonsoles Hernández Barbosa

The evolution of the panorama reveals how throughout the 19th century it was understood that in addition to the sense of sight, illusion had to

involve corporeality in a broader sense (Hernández, 2017). Thus, the devices of this type that initially appealed to our vision alone gradually gave way to other devices that appealed to our other

senses as well. A prime example is the Mareorama presented at the 1900 Paris Exposition, a device that simulated a ship's voyage on the Mediterranean by stimulating all five senses, according to what I have been able to reconstruct.

In an upcoming publication in the journal *Early Popular Visual Culture*, I argue that in addition to this component of innovation of technological methods that rendered earlier simulation devices obsolete, the experience of simulation combined a series of codes specific to the period, which point to a rhetoric of illusion, and which would have been recognisable to the audience. This rhetoric of illusion meant that the Mareorama mobilised various types of references to the visual culture of the time. The use of these signs constituted an element that distinguished the immersion mechanism of the Mareorama from the immersion of virtual reality, which, as I noted above, involves a form of post-symbolic communication. In the case of the Mareorama, the paintings that represented the different stops on the journey (Naples, Venice, Istanbul) were considered by critics to be lacking in realism. It is important to bear in mind that this

device was contemporaneous with other attractions that integrated filmed moving pictures (cinema), which left the paintings wanting in terms of realistic representation. This would reinforce the idea that the success of simulation attractions is conditioned by the level of public expectations.

### Guillaume Soulez

Yes, one of the paradoxes of certain devices is that they play on a certain disorientation (to take advantage of the new sensory potential of these devices compared to the previous ones to which we are "accustomed") but while trying to avoid creating a discomfort that would break the experience (and therefore the immersion-involvement). It is likely that with algorithms, which partly personalise the experience (but following behaviourist standards that escape us; see Urrichio, 2022), devices will be able to manage this question of thresholds better and better: since skills differ greatly from user to user, our way of responding to audiovisual productions will perhaps determine a profile for the machine, an adequate "level of immersion" depending on our bio-cultural data.

**6. In relation to the cinematographic device and the introduction of elements that enhance immersion (panoramic screens, 3D) or individuality (for example, the game in the *Bandersnatch* episode of *Black Mirror*), is there any point at which we might consider that it is no longer cinema but something different? Is the collective experience and passive viewing (compared to the active participation involved in a video game) an essential characteristic of the medium, or can we continue to consider it cinema when it appears in other contexts or cultivates other attitudes? In short, do such innovations alter the specificity of cinema?**

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### Sonsoles Hernández Barbosa

Cinema has less of an interactive component than other contemporary visual devices, such as multi-sensory panoramas. This would include the aforementioned Mareorama, in which each member of the audience moved around the "ship's deck" pretending to be one of the "actors" in the show. The experience of the ship's voyage in this attraction included various episodes, such as storms at sea,

or an attack on the ship by a gang of sailors when it docked at Naples. Indeed, the press of the day highlighted the fact that the audience "participated actively" in the action (Malet, 1899: 19). The spectators were thus immersed in a setting and a story with an established timeframe, making them part of the action, although without being assigned specific roles. This implied a certain degree of interactivity between the audience and

the story, where “interaction” would be defined as “an activity that extends an invitation to the spectator to insert their bodies or minds into the activity and affect an outcome” (Griffiths, 2013: 3). The Mareorama thus combined mimetic immersion with another status of representation: the representation of fictional acts.

Nevertheless, we need to bear in mind that what we consider specific to cinema today has not always been considered that way. Cinema was not always an experience of fiction in which the audience acted as basically passive spectators. Primitive cinema entailed a different way of understanding the viewing of a film. As art historian Lynda Nead suggests, the objective was by no means to have audiences “sit in rows in relative silence and regulate their responses and interactions” (Nead, 2007: 25), as the experience of going to the cinema is understood today, but to engage spectators with the spectacle in a freer and more improvised way. This means that the supposed “specificity” of cinema cannot be understood as a fixed category.

### Guillaume Soulez

It all depends on how one defines “cinema”, which is a question I addressed recently in the issue *Le cinéma éclaté. Formes et théorie* (Soulez, 2018). In general, we have a certain definition of cinema in terms of what we consider to be the “cinema experience”, which we can try to “find” in other devices than those of traditional film-going (Casetti, 2012) but at a certain point we would rather think in terms of the video game experience or virtual reality, etc., even if there are “cinematic” sequences, or “cinema moments” within that experience. For a researcher, there are two ways of approaching the question: studying the way

spectators use *the notion of cinema* to speak and/or elaborate about their experience (this varies depending on the spectators and the different types of cinephilia or cinemania); and reflecting on the tools of film analysis and film theory in order to identify the extent to which these tools and theoretical frameworks manage to account for certain audio-visual-corporal phenomena. The meeting point between these two approaches is the fact that “cinema” is a cultural construct (articulation between devices, sensations and discourses) that has produced a recognisable “language” even in devices that are not cinema in the traditional sense (starting with television and video, long before VR). The theory, which is not “ungrounded”, can itself be observed as a specific discursive construction that has aimed to account for a shared social experience, but there may also be elements in the theory that can be reused to think about new experiences. I was recently reading a rather amusing text by Pierre Schaeffer (1985) which indicates that there are eight forms of sound (noise, music, speech, etc.) and eight forms of image (photo, writing, drawing, etc.), including sound without image and image without sound, making a total of 63 combinations (8x8 minus one: the absence of both sound and image) between sound and image, but he points out that not all audio-visual combinations are used, which is a very interesting way of looking at audiovisual balances and standards. This approach can be used to understand *what combinations are used* in immersive devices (and why some are used rather than others, as in cinema) and one can add the part of corporality, which should also be split into various actions (picking up, pressing, walking, etc.), and therefore analyse the real combinations between sound, image and action.



**7. In recent years we have seen an individualisation both of the visual experience through the devices we view content on (tablets, smartphones) and of the content itself, which is being increasingly personalised by the platforms we use. How can we speak of a shared visual culture if experiences tend increasingly towards the individual? Was the collective practice of cinema paradoxically idealised, as although it was social in appearance it isolated spectators in the darkness of the film theatre?**

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**Sonsoles Hernández Barbosa**

To answer this question, I would like to start by talking about the historical objects I have worked on. I can say that in their early years, cinema and panoramas, as collective experiences, shared the stage with other optical devices for use inside people's homes that allowed a more intimate relationship between the individual and the object (such as thaumatropes, kaleidoscopes, phenakistoscopes and stereoscopes). The private use of these objects facilitated interaction and experimentation with them, turning bourgeois households into veritable schools for the senses, where people would learn, for example, how to operate different types of optical devices that required good hand-eye coordination for their effective use (Hernández, 2022). The simplest of these objects would have been the thaumatrope, which consisted of a disk that bore a different but complementary image on either side and had two little strings attached to each side that would be used to make it twirl. When focusing on the twirling movement of the disk at a certain speed, the user's retina would superimpose one picture over the other to generate a third image existing only in the mind. The correct operation of the thaumatrope required twirling the disk at the right speed so that the two images on each side effectively merged.

Interactive devices for individual use are therefore not exclusive to our contemporary world but began being marketed in the very first years of modernity. Despite their individual use,

the popularisation of these objects in the 19th century contributed to a shared visual culture. On the other hand, the supposed incompatibility of interactivity with the collective nature of visual experiences has been radically questioned in our times by the group video game experience. Similarly, the alternative virtual reality offered by the metaverse would include this possibility of interaction between members of a whole community.

**Guillaume Soulez**

Yes, I mentioned algorithms above. Indeed, the shared culture of cinema has individual limits, as we say in French, "*on se fait son cinéma*", i.e. we all make our own cinema (in our mind). But in the opposite direction, we talk a lot about the cinema, about the films we have seen or would like to see, and the way we look at them calls for words (to put into words what we have seen, understood and felt) and sometimes for other images (in particular, photographs of spectators during a screening to capture their emotions). It will be the same for the new devices; a novel that has just come out in France, *Chien 51* (2022) by Laurent Gaudé, includes parts where the narrative recounts the immersion sessions of a character (halfway between taking drugs and Marker's *La Jetée*). Between the discourses of 'immersion-philes' and the reworking of these experiences in other media (novels, films, video games, etc.), a visual culture is being formed.

**8. The use of 3D in both film and photography has seemed to return in cycles over the course of media history (the first 3D film was *Bwana Devil* in 1952). What does it tell us about the eras when it makes a comeback? What does it tell us about society (the public, the industry) when it tries to bring 3D films back again? Is 3D doomed to come and go repeatedly?**

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**Guillaume Soulez**

I don't forecast the future... but one can imagine, indeed, that this cycle will continue, unless, as the dream of television that has inhabited

cinema since its beginnings has been realised in a new, stabilised and popular device, the immersion industry somehow fulfils this desire for 3D by giving it a privileged medium.

**9. In relation to the previous question, what elements or what characteristics can you identify in emerging technologies that had already been explored in pre-cinematic media? Conversely, what devices of the past that have been abandoned (the Kaiserpanorama, holographs, the Mutoscope, the Kinetoscope, etc.) might be able to satisfy contemporary demands?**

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**Sonsoles Hernández Barbosa**

As I mentioned before, ever since their origins visual technologies have always included the component of interaction with the device. I pointed out that panoramas contained a certain element of interactivity that today might seem specific to video games or virtual reality. Even a device as simple as the thaumatrope establishes a relationship between the object and the individual. Despite their simplicity, which might suggest that their operation was obvious, some of these devices came with instructions on one of their faces indicating how they should be used. The operation of the device was thus essential to its correct use, to make the third image appear. This required proper hand-eye coordination and a certain degree of learned skill. Interaction with the object is one of the elements that have always been present in optical devices, even in the simplest ones.

In relation to the second part of the question, I tend to think that computer technology has marked a before and an after in optical simulation media. The devices that offer the creation of immersive universes today mainly involve virtuality, so the new features they introduce have to do with digital innovations.

**Guillaume Soulez**

It all depends on how you define virtual, immersion, etc., as we have seen above. Technology is nothing without its use. One of my doctoral students (PhD in creation-based research), Rémi Sagot-Duvaroux, recently reinvented a virtual phenakistiscope with two other young researchers.<sup>1</sup> It is the desire to see (peep) that makes the link between the old technology and the new, with the same didactic dimension that we find in phenakistiscope.

**10. It could be argued that there are media that demand a particular cognitive approach, and vice versa, ways of thinking that are explained by the type of media concerned. In relation to the impact of new technologies on our way of conceiving, describing, thinking about and conceptualising the world, what changes or trends can you identify running through the course of media and film history? How have they altered or shaped our way of looking at and understanding the world?**

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**Sonsoles Hernández Barbosa**

Ever since they first appeared, visual technologies have always constituted a way of transforming the imaginaries that human beings use to project themselves into the world. Some 19th-century panoramas constituted material formulations of imaginary situations similar to those that Jules Verne created in his novels: trips to the moon, journeys to the centre of the earth or around the world. In our times, the settings designed for video games are giving rise to interesting phenomena. For example, while the cities depicted in video games reflect the most futuristic versions of existing architectural buildings, their architectural designs are serving as inspiration for architecture in the real world (Pérez Indaverea, 2022).

In the case of trends in audiovisual consumption, I can see changes in recent decades that point to a more fragmented and simultaneous approach to audiovisual production. For example, it seems that the “single-sitting” viewing that characterises cinema is being replaced by the consumption of series on streaming platforms, resulting in a more spontaneous, fragmentary and individual viewing approach. Moreover, new generations are getting used to the interactivity of screens (which involves the coordinated use of the senses of sight, touch, hearing and movement) at increasingly younger ages, resulting in video game consumption starting earlier on and, at the same time, continuing until older than in the past. It is also possible to identify transformations in the

very conception of the audiovisual, where cinema for the masses tends towards a faster rhythm, with sequence shots abandoned in favour of short shots that increase the pacing of the film.

**Guillaume Soulez**

Painting is a good example of how the other media shape our way of thinking. The exhibition *Enfin le cinéma ! Arts, spectacles et image en France (1833-1907)*, at the Musée d'Orsay in Paris in 2021-22, effectively showed (among other things) how cinema, through its effects of diving, framing, sequential cutting, addressing the audience, etc., had a certain effect on painting. In a chapter already mentioned above (Soulez, 2021), I proposed thinking about this issue by distinguishing between “imagineering” (*imagénierie*) and “rediscovery” (*retrouvaille*, based on *trouvaille*, which means something ingenious, either verbal or technical, that someone has discovered by a mix of chance and perseverance, based also on the ancient notion of *trouvère* or “troubadour”, the poet): “imagineering” is the way in which a new device express a new “paradigm” (pertaining to both perception and intelligibility of the world), which is the role played by the Georama for Stendhal, while “rediscovery” is the way in which one medium will try to rediscover the sensations of another medium in its own language (I give the example of a Boris Vian song about cinema where anaphora and prosody aim to “rediscover” the hectic alternate editing of the Western).

**II. With the combination of opera and cinema (Wagner, Canudo), some emphatic statements were made about the absolute dimension of the artwork. Can immersive devices be included in this trend where all artforms, but also all human senses, can be integrated? What room does this leave for products that deny this absolute approach, favouring minimalism, austerity, distance from the image?**

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**Sonsoles Hernández Barbosa**

Over the course of history it is possible to identify two basic approaches to inter-artistic relations, both in the form of the artworks themselves and in theories about the arts. On the one hand is the “integrationist” approach, which tends to advocate a convergence of the arts or the senses. The Wagnerian concept of the “total work of art” (*Gesamtkunstwerk*) is a paradigmatic example of this approach. The explorations of synaesthesia in the art of the late 19th century sought this same kind of convergence of the senses, although with nuances that distinguished them from the *Gesamtkunstwerk*. This is the approach that immersive devices fit into. In fact, the multisensory panorama known as the Mareorama was conceived by its creator, Hugo d’Alési, as a “total work of art” for the masses. In the 20th century, explorations of ways to integrate the arts even gave rise to the appearance of new artistic genres, such as performance art or installations. On the theoretical level, in visual studies, vision is understood as a phenomenon that is always embodied. This is a point where we find common ground among many contemporary visual theorists (such as W. J. T. Mitchell, Mieke Bal and Elisabeth Edwards, to name just a few of the most influential). Even historians with a more Warburgian perspective, such as Georges Didi-Huberman, tend to reject the division posited by Lessing between artforms of time and space, pointing to the temporal dimension implicit in the image.

On the other hand are the propositions that could be described as “isolationist”, which assert the specific nature of each artform. This was the view taken by Leonardo da Vinci when he highlighted the specific differences between the visual

arts and poetry in his treatise on painting, and also by Lessing when he distinguished between arts of time and space. In both cases, the intention behind the distinction was to vindicate the art of painting, which in the early modern era sought to shake off the stigma of its labelling as a craft. By the 20th century, this perspective was taken up by authors who argued for “pure opticality”, such as Clement Greenberg, who drew on Lessing’s ideas in an effort to identify the specific qualities of painting, or, more recently, Michael Fried. Propositions that stress the specific nature of vision compared to the other senses would also be included in this approach.

**Guillaume Soulez**

In part, no doubt, when mobilising all the senses is at stake, and therefore all the previous media that have worked on these senses (painting, theatre, photography, recorded music, moving images, etc.): in such a case the construction of “worlds” (metaverse) lends itself well to this. But the opposite quest is possible (the quest for a specificity, a “pure” art), which would be based on what the new devices manage to develop in a particular way. In this case, the greater difficulty will be to develop forms and sensations that do not resemble (or no longer remind us of) theatre, radio, cinema... or even video games! In 360° cinema, for example, filmmakers start from the body of the viewer (*ego-centration*) to lead them, as the audiovisual narrative progresses, towards a form of splitting and separation from the initial anchorage.<sup>1</sup> I think that this is a whole space for experimentation, particularly in the relationship between touch and vision, which is an immense field of new experiences. ■

## NOTES

- 1 Cavandoli, O. (direction) (1971). *La linea*. Italia: Rai. Retrieved from <https://www.dailymotion.com/video/x1inwk>
- 2 Ensadlab. (2022). «Participation de Loup Vuarnesson, Dionysis Zamplaras et Rémi Sagot-Duvaurox à l'exposition Laval virtuel Recto verso». Retrieved from <https://www.ensadlab.fr/fr/francais-participation-de-loup-vuarnesson-dionysis-zamplaras-et-remi-sagot-duvaurox-a-lexposition-laval-virtuel-recto-verso/>
- 3 Katharina Fuchs (PhD student at Paris 8) recently analysed Jan Kounen's *7 Lives* (2019) in that perspective at the Afeccav's doctoral conference (Association française des chercheurs en cinéma et audiovisuel), September 5, 2022, Université Paris Cité: <http://www.afeccav.org/v3/5-septembre-2022-journee-doctorale-de-lafeccav/>

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# conclusion

# THE VIRTUALISATION OF THE WORLD

CÈLIA CUENCA

DAVID FERRAGUT

Virtuality and its immersive worlds appear today bathed in an aura of originality and future promise that effectively obscures the great debt that the new devices owe to the technologies of the past. In this respect, media archaeology has been able to question the linear, teleological perspective that has traditionally characterised media history, rejecting any idea of technological progress as a starting point. Instead, it takes the view expressed by Siegfried Zielinski, that “the history of the media is not the product of a predictable and necessary advance from primitive to complex apparatus,” and that therefore “the current state of the art does not necessarily represent the best possible state” (2006: 7). This points to a need to rethink the idea of technological innovation, to redefine

the relationship between old and new media, and to abandon presuppositions. This conversation with Guillaume Soulez and Sonsoles Hernández about the concepts of immersion, illusion, simulation and virtuality has highlighted the connections that many contemporary devices (video games, Google Glass, VR) share with media and technologies of the past, and especially the scope of the notion of virtual reality in relation to early cinema.

To underscore these reflections, it is worth bringing the concepts of immediacy, hypermediacy and remediation developed by David J. Bolter and Richard Grusin (2000) into the equation. These concepts shed some light on the ways that both our contemporary devices and the technolo-

gies and spectacles of the past evolve and perpetuate the ideas discussed here. The notion of immediacy refers to the desire for transparency in the representation of reality, i.e., the desire to erase, ignore or even deny the presence of the medium and all traces of the act of mediation in the interests of creating the illusion of being in direct contact with (the represented) reality. This idea could explain our tendency to embrace the devices discussed and their immersive capacity, suspending our external perceptions to take the opportunity to step almost physically into virtual worlds, augmented realities or parallel stories. The concept of hypermediacy, which acts as a complement to the notion of immediacy, refers to our fascination with the mediating devices themselves and to the multiplication, accumulation and diversion of their tools of representation. It has to do with the seduction and visibility that the device acquires in certain cases and the possibility of revelling in the act of mediation and the technology that sustains it. A clear contemporary example of this would be Instagram filters and the possibilities they offer to nuance reality by rendering the act of mediating and sharing it visible, wherein lies their appeal. But we also find this fascination in pictorialism and its exploration of the aesthetic and expressive possibilities of the photographic medium. Finally, the concept of remediation involves an understanding of the processes by which new media absorb, adapt and reshape certain characteristics, practices, themes or content of previous media, and vice versa. One medium is always the content of another medium, as McLuhan (1996) points out. For example, the GIFs of today cannot be explained without the popularity of sitcoms since the 1990s, while contemporary cinema has absorbed the instability and mobility of the cameras on our mobile devices, while also being influenced by the aesthetics of video games.

These notions can help us to understand the recurring desire for the illusion of reality as well as the fascination with new technologies that

has characterised our society since the dawn of modernity. It is only by placing ourselves in the coordinates that governed the desire for immediacy and the fascination for hypermediacy that we can fully understand the appeal that panoramas, dioramas and georamas had for spectators in their day, as in the case of Stendhal mentioned by Soulez or the Mareorama discussed by Hernández. Moreover, what is interesting about Bolter and Grusin's concepts is that the notion of immediacy is constructed not on the basis of reality, but on its reproduction. Each medium, they explain, constitutes a promise to enhance the relationship with the reality being represented. Of course, we had no idea that our experience of that reality was incomplete or imperfect until the introduction of the new medium effectively raised the level of our expectations. Optical views thus offered the possibility of immersion in wide perspectives and European monuments when they were viewed through zograscope or optical toys. Spectators in the 18th century frequently remarked on the device's ability to transport them to the place depicted. When stereoscopic photography burst into bourgeois salons of the mid-19th century, its success resulted from its presentation as a new tool for virtual tourism that could reformulate the illusion of reality by adding the richness of all three dimensions. Similarly, our VR devices attempt to exceed our expectations established by films or video games. Paradoxically, new technologies, trying to reformulate—remediate—the old ones at the same time ensure that the old devices continue serving, at least for a time, as a benchmark against which the illusion of reality is measured.

Meta recently launched a new advertising campaign with the slogan: "the metaverse may be virtual, but the impact will be real" (Meta, 2022). This may perhaps be one of the simplest and yet most illuminating definitions of the significance of virtual worlds, and of the importance of analysing, conceptualising and historicising them. This campaign reignites the desire to reproduce





Puede que  
el **metaverso**  
sea virtual, pero su  
**impacto será real.**



Image 2

reality in alternative spaces and also keeps alive all those virtual worlds of the past created by panoramas, cinema, optical devices and video games, whose impact was equally real.

To conclude, we would like to thank Sonsoles Hernandez and Guillaume Soulez for so generously sharing their reflections. We also recommend reading Sonsoles Hernández's *Vidas excitadas. Sensorialidad y capitalismo en la cultura moderna* (2022) and the journal issues coordinated by Guillaume Soulez, "Le cinéma éclaté. Formes et théorie" (*Cinemas*, vol. 29, no. 1, Autumn 2018) and, together with Kira Kitsopanidou, *Le levain des médias. Forme, format, média* (2015), for further exploration of the questions discussed here. ■

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## THE PAST AND PRESENT OF VIRTUAL WORLDS: ILLUSION AND IMMERSION IN EARLY CINEMA

### Abstract

This (Dis)Agreements section aims to explore the different ways in which we can understand the notion of virtual in Early Cinema. The dialogue between Guillaume Soulez (Paris III University – The Sorbonne) and Sonsoles Hernández (University of the Balearic Islands) is a developing process reflection and definition of the key concepts involved in the construction of virtual worlds (immersion, simulation, fiction, illusion, as the notion of virtuality itself). On the other hand, it has been an opportunity to draw meeting points, recognize strategies and establish affiliations between Early Cinema, current technologies (VR, AR, videogames) and the optical shows of the past (panoramas, mareorama, optical views).

### Key words

Early Cinema; Virtual Reality; Immersion; Illusion; Media Archaeology; Visual Culture.

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## PASADO Y PRESENTE DE LOS MUNDOS VIRTUALES. ILUSIÓN E INMERSIÓN EN EL CINE DE LOS ORÍGENES

### Resumen

La presente sección de (Des)encuentros tiene como objetivo explorar el modo en que podemos entender lo virtual en (y desde) el cine de los orígenes. El diálogo que hemos mantenido con Guillaume Soulez (Universidad París III – La Sorbona) y Sonsoles Hernández (Universitat de les Illes Balears) nos ha permitido, por una parte, desarrollar un trabajo de reflexión y definición de los conceptos fundamentales que permiten entender la construcción de los mundos virtuales (inmersión, simulación, ficción, ilusión, así como lo propiamente virtual) y, por otra parte, trazar puntos de encuentro, reconocer sus estrategias y establecer filiaciones entre el cine de los orígenes, las tecnologías actuales (la realidad virtual, la realidad aumentada, los videojuegos) y los dispositivos ópticos del pasado (los panoramas, el Mareorama, las vistas ópticas).

### Palabras clave

Cine de los orígenes; Realidad virtual; Inmersión; Ilusión; Arqueología de los medios; Cultura visual.

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#### Article reference

Ferragut, D., Cuenca, C., Hernández, S., Soulez, G. (2023). The past and present of virtual worlds. Illusion and immersion in early cinema. *L'Atalante. Revista de estudios cinematográficos*, 35, 141-168.

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#### Referencia de este artículo

Ferragut, D., Cuenca, C., Hernández, S., Soulez, G. (2023). Pasado y presente de los mundos virtuales. Ilusión e inmersión en el cine de los orígenes. *L'Atalante. Revista de estudios cinematográficos*, 35, 141-168.

Edita / Published by



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ISSN 1885-3730 (print) / 2340-6992 (digital) DL V-5340-2003 WEB [www.revistaatalante.com](http://www.revistaatalante.com) MAIL [info@revistaatalante.com](mailto:info@revistaatalante.com)

