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Beyond Simulation As Substitution: From Mixed Reality To Ego-Shots

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Abstract

The dominant formulation of simulation theories in the 1980s and 1990s (Baudrillard, Lévy *et al.*) suggested a theoretical and technological paradigm based on the impersonation (when not substitution) of the real by the virtual. The present article explores the recent emergence of an integrated, mixed or altered conception of virtualisation in regards to the real, but no longer a substitutive one: a conception that is related to a significant set of digital technologies and current audiovisual uses (mixed reality, augmented reality, locative media and ego-shots). This conception pushes the importance of visuality –and the image- to the background in favour of mobility and ubiquity, which also suggests an understanding of emergent simulation practices and devices rooted in the real.

Keywords

simulation, virtual reality, mixed reality, augmented reality, social network, ego-shots

Más allá de la simulación como substitución:
de la realidad mixta a los ego-shots

Resumen

La formulación dominante de las teorías de la simulación en los años ochenta y noventa del siglo pasado (Baudrillard, Lévy y otros) proponían un paradigma teórico-tecnológico basado en la suplantación (cuando no substitución) de lo real a manos de lo virtual. En el presente artículo exploramos la emergencia reciente de una concepción integrada, mixta o alterada de

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la virtualización en relación con lo real, pero ya no substitutiva de ésta, afín con un conjunto significativo de tecnologías y usos audiovisuales actuales de naturaleza digital (realidad mixta, realidad aumentada, locative media, ego-shots). Una concepción que desplaza a un segundo plano la importancia de la visualidad –y de la imagen– en favor de la movilidad y de la ubicuidad, y que propone una comprensión integrada en lo real de prácticas y dispositivos de simulación emergentes.

Palabras clave

simulación, realidad virtual, realidad mixta, realidad aumentada, ego-shots

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1. Introduction: visual culture and suspensions of perception

The omnipresence of the visual in contemporary culture dates back to technologies popularized throughout practically a century: photography, cinema, television or video are media where image and representation play a fundamental and influential role. The idea that the pre-eminence of the image in our society might lead to a substitution of reality –or, to put it in other words, the fact that we feel a continuum of simulated experiences that are ontologically equivalent–, is based on the same genealogy of modern film discourse, and has the emergence and development of the -already classical- systems of virtual reality throughout the second half of the last century (that is, helmet, stereoscopic glasses and gloves) as a corollary, as proof of a same tendency being present in the whole modern culture, towards a sensory experience separated from the physical environment where it takes place.

The process of socialization of film as a medium already guaranteed the perceptive attention of modern audiences by prescribing environments that encouraged the spectators 'suspension of perception' (Crary, 2001), the hiatus from his/her environment (darkness, silence, physical rest, etc), and thus, finally, the concealment of external reality. That is to say, a perceptive experience which favoured the access of the spectator to a psychological state of enchantment and active creation of verisimilitude, socially legitimated and perceived as pleasant "by transporting the spectator to a new place where they can develop the audio-visually perceived story as a full experience" (transl. from De Pablos, 1989, p. 11).

The institutionalisation of the audiovisual diegesis, which is closely related to the genealogy of modern narrative fiction film, is thus founded on and from its common subsumption and identification as a fictional substitutive illusion of the real. The diegesis, according to Gerald Prince (1987), is able to disguise both its fictive and antinatural character (diegetic illusion) and the identification of the spectator with the camera to the point of living the audiovisual representation as real experience (diegetic experience).

But we no longer live in the times of 'photocinematic' technical reproduction (Benjamin, 1936), but in those of digital simulation.

Contemporary visual culture is increasingly developed apart from the mimetic abilities attributed to film, television and photography in modern times (Virilio, 1994), thus promoting a thorough redefinition of the dominant vision and representation modes of the modern era towards a new visual digital order which tends to be conceptualized in terms of simulation and virtualisation.

2. Simulation logic as substitution

Although simulation is not a concept that can (and must) be associated to a sole author, the ensemble of Jean Baudrillard's (1929-2007) thinking is particularly significant –when not determinant- to the dominant conceptualisation of simulation as substitution in a significant set of contemporary cultural theories.

In 'The Ecstasy of Communication' (1983), Baudrillard suggests to think of the action of mass media as 'pathogenic agents' that lead to the mutation of the real into a simulacrum of itself. The contemporary ecstasy of communication, the current unlimited profusion of communicative messages of every order and condition we are surrounded by every day, reduces any event to the level of ephemeral scenery. We approach reality conditioned by the previous filtering of media. The signs of what happens, of what it is, of what occurs in the world, precede and go before, on countless occasions, our direct experience with it.

Reality is thus increasingly supplanted by images and communicative signs. Simulacra –the signs that hide an absence, the absence of necessity of our direct experience with reality according to Baudrillard's theorisation- have become part of our world. This is epitomized by the case of the Lascaux caves as set out by Baudrillard himself: "With the pretext of saving the original, one forbade visitors to enter the Lascaux caves, but an exact replica was constructed five hundred meters from it, so that everyone could see them (one glances through a peephole at the authentic cave, and then one visits the reconstructed whole). It is possible that the memory of the original grottoes is itself stamped in the minds of future generations, but from now on there is no longer any difference, the duplication suffices to render both artificial" (Baudrillard, 1995, p. 9).

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Where does the omnipresent 'déjà vu' we increasingly feel wandering through any emblematic Western city come from? Baudrillard's answer will delve into the substitutive logic of the real at the hands of its simulacra: "We are in a world where the essential function of the sign is to make reality disappear, and, at the same time to mask the disappearance. Behind each image something has disappeared. It is the same with the illusionism of information and memory: behind every news item an event has disappeared" (Baudrillard, 2002, p. 115).

In this respect, the ideas and theses of Gianni Vattimo in his work 'La società trasparente' (1992 [1989]) equally converge and relate to Baudrillard's thinking: "It may be that in the world of the mass media a 'prophecy' of Nietzsche's is fulfilled: in the end the true world becomes a fable. If we, in late modernity, have an idea of reality, it cannot be understood as the objective given lying beneath, or beyond, the images we receive of it from the media […] Reality is rather the result of the intersection and 'contamination' (in the Latin sense) of a multiplicity of images, interpretations and reconstructions circulated by the media in competition with one another and without any 'central' coordination" (Vattimo, 1992 , p. 7).

This simulation logic as substitution –which until now has preferably been exposed through Jean Baudrillard's thinking- is one of the most prominent materials of a wider theoretical and technological paradigm dominant in the last two decades of the 20th century, based on the supplantation of the real at the hands of the virtual as commonly shared and diagnosed by other contemporary authors.

Thus, Pierre Lévy will claim in this same respect that the emergence of digital culture involves a 'problematization of the real' carried out by the general movement of virtualization: "Virtualization can be defined as the inverse movement of actualization. It consists in a passage from the actual to the virtual (…), in a displacement of the center of ontological gravity of the object being considered: instead of being mainly defined by its actuality, the entity thus finds its essential consistency in a problematic field" (Lévy, 1998, p. 68).

This diagnosis is brought to a hyperbole by Philippe Quéau: "It is no longer easy to be present. And becoming ever more present seems impossible, whereas becoming ever less present seems much easier. The evolution of contemporary civilization increasingly encourages spreading oneself, to disseminate oneself, to delegate oneself, to use someone to stand for oneself. We look for every means of substitution for the real presence" (transl. from Quéau, 1993, p. 103).

Not only has all this theoretical and technological paradigm appeared in science-fiction cinema and literature such as the Matrix trilogy (or the recently 'remaked' Total Recall), but it has also influenced the conceptualization of cyberspace as an incorporeal space separated from 'real' life, and it has prevailed during the first years of the 21st century in the field of social research in new media.

Several authors have tried to contradict it through empirical studies proving that there was not such separation, and preferring to make a distinction between the 'physical' and 'virtual' space, since the experiences in virtual environments or the Internet are equally 'real' for the users. As Miller and Slater claimed, "only understanding this connection we will be able to understand that the openness or the possibilities of being interconnected is part of the same experience" (Miller & Slater, 2000, p. 4-7).

3. Virtuality and reality: spaces of expression and transit

The implementation and subsequent multiple developments of VR (Virtual Reality) systems that took place throughout the second half of the 20th century, based in a sensory experience separated from the physical environment where it takes place, has technologically evolved towards what is called a mixed reality, which includes elements of virtual reality (or visual simulations) over the space or the physical reality.

Although virtual reality is still used for certain applications –such as training, medical therapies or for heritage reconstructions-, mixed reality has intensely spread, both in research and consequently at a business level, in the cultural, creative and entertainment fields. This happens because of its accessibility as well as due to financial issues (since virtual reality was and still is much more expensive and difficult to implement).

In terms of experience and perception, the essential difference to virtual reality is that it provides us with an integrated, mixed or expanded vision of space, not separated from the physical context. Mixed reality applications allow us to interact with the physical space and to expand it with additional information which can be visual, auditory and/or textual. Thus, they offer a more 'natural' context of environmental perception. A context which, according to Hansen, matches a wish of total convergence with natural perception: "[It] is not the possibility they open for creating ever more immersive illusory spaces, but rather the expanded scope they accord embodied human agency" (Hansen, 2006, p. 3).

Thus, mixed reality would represent an opportunity to regain a phenomenological approach to media, since these projects reinforce our perception of space, integrate the experience of other senses, and, consequently, prioritize auditory perception and body action: "What comes to the fore is the central role played by the body in the interface to the virtual (…) researchers and artists have come to recognize that motor activity _ not representationalist verisimilitude _ holds the key to fluid and functional crossings between virtual and physical realms" (Hansen, 2006, p. 2).

Experimentation with mixed reality has often focused on the creation of games combining virtual elements with devices that might alter or modify this virtual environment. The works by the artistic collective Blast Theory have pioneered in the use of said systems, as in 'Can You See Me Now?' (2001), a game which is played both live,

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in the streets of a city, and online, through a gaming interface on the Internet. Another significant example in Spain would be that of the Lalalab collective (Diego Díaz and Clara Boj). One of their projects, 'Hybrid Playground' (2008), creates a new gaming environment for the development of interactive ludic experiences set in an urban park. Through a system of sensors, which are easy to install and invisible to the children, the elements in the park become interactive and provide data that is analyzed and transformed to become part of the game dynamics.

Another term closely associated to mixed reality is that of augmented reality. Although both technologies are very similar, the difference between them is that augmented reality generates the stimuli in real time for the user's interaction, stimuli which overlap with his/her physical environment: "Whereas virtual reality involves cutting yourself off from the real world in order to immerse yourself in a computer generated virtual world, augmented reality involves overlaying a virtual world onto your view of the real world, so that you can experience both at the same time" (Gwilt, 2009, p. 594). We find significant examples of the use and recent popularization of augmented reality technologies in videogames (such in 'Invizimals', a PSP game for Sony), art (in the case of 'Levelhead', by Julian Oliver), or in the mobile applications market (such in the 'Layar' browser for Android telephones).

Likewise, we detect an extension of the previous developments in mixed reality and augmented reality when they interact with so-called locative media, that is, with wireless location services, so that when the user is close to objects, buildings or people, he/she can send or receive information about them. Although locative media are based on current location technologies (GPS, mobile telephones and PDAs mainly), they aim to create a non-substitutive context to explore new and old models of communication, community and interchange (Russell, 2004) thus allowing us to understand mixed reality, augmented reality and locative media as part of a same aesthetic approach (San Cornelio & Alsina, 2010).

4. Simulation in an expanded field: online representation and socialization

"The previous image of the computer era –VR user travelling in a virtual space- has become replaced by a new image: a person checking email, or making a phone call (…) while in the airport, in a street, car, or in other actually existing space" (Manovich, 2006, p. 220).

The previous quote by Lev Manovich points to a new, expanded field where reality and simulation intertwine apart from a substitutive model based on the systems and devices of virtual reality: the social network. Internet bears witness and is a favourable environment for abundant fakes, tricks and visual simulations of every kind. With greater or lesser success (and technical ability), the Net accommodates –and sometimes provides with a certain ephemeral glory– the authors of fake impact images, subsequently bringing about an avalanche of reversions of those fake images.

The intense photographic and audiovisual presence on the Internet, particularly on social networks such as Facebook, Flickr, YouTube, Pinterest, Instagram or Twitter, opens up a whole field of emergent experimentation, not only formally by manipulating and applying highly varied effects of graphics simulation, but also on all forms of increasing representation and socialization derived from self-images.

In this respect, a significant example is that of the so-called ego-shots taken both by professionals and amateurs, and consisting of self-portraits holding a camera with the hand.

Used as a basic means of self-representation and communication with the social environment, ego-shots reopen the debate on the truthfulness of personal identity based on the proliferation of portraits and self-portraits, so often simulated in social networks, which are paradigmatic of both the actuality and vitality of simulacra in the visual digital contemporary culture and the interest in a non-substitutive understanding of simulation in it.

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