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Aura in the 21st Century

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What makes a digital aura?
Consequences for the "here and now" of Mixed Reality and Multitasking Interfaces

Federico Biggio

University of Paris 8
federico.biggio02@univ-paris8.fr

Abstract. Since the notion of "aura" can be exploited to describe both the phenomenological sides of the viewing experience and the semiotic sides of digital images, the article will analyse Mixed Reality and multitasking interfaces with the aim of understanding how legitimately concepts such as "distance" and "proximity" can be used to describe the consequences of depicting world through such a kind of technologies for the "here and now" experience. On the one hand, their utopic understanding focuses the distancing process users are allowed for; on the other, their dystopic understanding focuses the negative consequences that the excessive of proximity of digital interfaces produces which, ultimately, coincides with the decay of the aura.

Keywords: Mixed Reality, Interfaces, Aura, Virtual Reality, Digital Culture

1. Introduction

The concept of "aura" has been so long debated that discourses *about* the aura constitute an object of study *per se*. As highlighted by Andrea Pinotti and Antonio Somaini (2012), the notion of "aura" keeps together very heterogeneous traditions: the Jewish mysticism, the spiritualist, occultist and mediumistic currents, the irrationalist philosophy of Klages and the Monastic Cosmists, as well as the

Goethean aesthetics of beautiful appearance, or the French one by Baudelaire, Proust, Léon Daudet. Hence, it has been heuristic for academics to associate from time to time the notion of "aura" with different kinds of referents and, as a consequence, the resulting meanings related to this notion are nowadays very heterogeneous ones.

Starting from this assumption, the article will try to outline the changes of

meaning in the understanding of this concept, in particular by highlighting the issue of the aura's renewal, translation and migration. In particular, to be pivotal will be the change of field of reference of the notion of "aura".

On the one hand, the philosophy of media experience understood such a term by focusing on the subjective and phenomenological sides of the viewing experience. By following this trajectory, it is important to assume that the idea of the decay of the aura after the advent of reproduction technologies proposed by Benjamin is collectively accepted as a "techno-deterministic" one and, in a sense, an *apocalyptic* one (Eco 1964)[1]. As it is known, the understanding of the "aura" by Benjamin is strictly interrelated with the critical historicism of which he was one of the most representative authors. According to this perspective, the aura is associated with "distance", as it invokes the "appearance of a distance" (Benjamin 1936 [Pinotti, Somaini 2012], p. 237), or that "atmosphere", "sheath", "halo" and "breath" that not only makes contemplation of the object possible, but also evokes that sense of nostalgia for a past that characterized the bourgeois imagination contemporary to Benjamin (as the image is conceived as a historical index) and that can emerge only from a process of distancing which allows viewers to recognize themselves as historically situated[2]. This ideological position is confirmed also by writings on Baudelaire where Benjamin spoke about a progressive "atrophy of experience" determined by the large print runs of newspapers, which exclude events from the scope in which they might affect the reader's expe-

rience. In such a view, the persistence of the aura would not be just associated to the issue of reproducibility but also with the one concerning the mediated (but also alienated) experience of the subject, which is ultimately made unable to recognize him/herself within the technology he/she is using.

On the other hand, contemporary reflection on media interfaces seems to foster the use of the notion of aura to denote specific visual features of the digital interface. In 2006, for example, Jay David Bolter and others (2006) dealt with the notion of "aura" by referring it to a "mystical breath that encircled the object", sense of the "here and now" that each such work possesses because of its history of production and transmission, and sense of nostalgia and remoteness (Bolter *et al.* 2006, pp. 24–25). He focused on Mixed Reality (MR henceforth): according to him, the digital aura enabled by those artifacts enables a new "sense of place" (Meyrowitz 1985), and thus a new "hic et nunc", as well as they allow the reproducibility at scale of digital artefacts stored in the Web.

Hence, the first question to account for concerns the possibility of conceiving the "aura" as an effect of meaning emerging from digital and MR interfaces. For Semiotics, effects of meaning are very important: for example, Greimas (1984) spoke about the effect of veridiction, to denote discursive strategies that allow something to be believed and accepted as true by the recipient of a communication. In accordance with Galloway's suggestion,[3] it is possible to speculate about the effects of meaning produced by MR interfaces. The effect of being al-

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1 As argued by Balides, while Benjamin's analysis of the implications of proximity associated with mechanical reproduction was not directly applicable to technologies of simulation and immersion, seventy years later, his essay [...] may be read as a de facto a critique of the presumption that cultural critique should defend the aura of original works of art and that critical distance is the desired mode of consumption (Balides in Jenkins 2003, pp. 322–323).
2 According to Ferris (1996, pp. 20–21), "in the case of the auratic work of art, the difference named by the distance is derived from the continuity of history as a witness of the past. [...] Since the authenticity of a thing is what cannot be reproduced, then, according to Benjamin's own argument, what cannot be reproduced is the aura's testimony to the history on which its uniqueness is based".
3 According to Alexander Galloway, interfaces are not simply objects or boundary points, but they are autonomous zones of activity, processes that effect a result of whatever kind. For this reason, he spoke not so much about particular interface objects (screens, keyboards), but *interface effects* (Galloway 2012, p. VII).

ways connected – a term that has come back into vogue since the release of Apple's latest iPhone in 2022 – for instance, is somewhat that can be said to emerge from the *always-on* display. But the responsiveness (i.e., the ability of a virtual environment to adapt and change in real time depending on the input it receives from the user's tracing systems) is also an effect of the meaning of this kind. In this sense, the effect of responsiveness is an effect produced by the device's computational enunciation, which is able to receive, compute and transmit information and multimedia content on the device's screen in real time. The adoption of the semiotic concept of enunciation is functional to describe the genesis of the effects of meaning that take place at the level of the interface, and inscribes our reasoning within the methodology proposed by the Paris school in recent years, which prescribes thinking hierarchies of levels of immanence, between which *conversions* that are, in fact, *enunciative practices* (Fontanille 2008), take place. In the case of the computational enunciation of the aura, it will be a matter of thinking levels of immanence, that range from that of the material support, physical and electronic, of the binary code, to the screen, and thus to the visual signs that have elaborated on the basis of formal rules of inscription, up to the level of interaction practices and the effects of meanings that these ones produce (Dondero & Reyes 2016).

By following the analogy between the concept of "aura" and the MR interface proposed by Bolter, and accepting to use the notion of "aura" to denote floating and immaterial contents (often 3D ones and created by means of computer graphics techniques) that are superimposed on photographically reproduced images of reality, the article will try to understand the effects of meaning that emerge from MR interfaces and, as a consequence, to affirm the aura's renewal (it is not a case that one of the former AR application is called *Aurasma*).

At the same time, it is possible to understand the MR interface as a sign of technological progress and, ultimately, to bear again the discourse to the critical paradigm of Benjamin.

In this perspective, inquiring about the possibility of calling "aura" such a form of overlapping content featuring MR interfaces means to understand how much its possible decay is featured by an actual connection with the issue of distancing, as well as how much its contrary, the shock, is involved, determined and in some way envisioned by technological innovation and MR interfaces.

By leveraging on the idea of the aura as the result of a process of distancing, the MR interface will be considered as a typology of text able to provide users with tools for distancing themselves from their actual *hic et nunc* (but just for a moment), for technically self-organizing their own viewing and cognitive experience and for enabling an "augmented" gaze over what they are seeing. In a such perspective, it is possible to embrace the Bolter's suggestions, and arguing that the translation of the meaning of "aura" corresponds to an evolution in thinking about the atmosphere created by ubiquitous and immersive media which, in the wake of Silicon Valley's techno-utopia appears less apocalyptic than that described by Benjamin, and more oriented towards a form of "technological re-enchantment". In these terms, the virtual aura compensates the decay of Benjamin's aura through an artificial and magic re-enchantment of the user experience.

On the contrary, the MR interface can be considered as a typology of text in process of being defined, able to canalize several ideological thoughts about contemporary reproductive technologies. If, as Bolter suggested, MR is not an exact reproductive technology as it keeps visible the so-called "real-reality", the user as well occupies an in-between position, he/she is both here and there. If we read this sentence in a negative way, we could say that the user is neither totally here or totally there. Somehow, they are sus-

pended between the two "realities" (the travel souvenir, for example, it is a copy, i.e., something that is "here" – when the journey ends, it is moved into the everyday space – and, at the same time, "elsewhere", and precisely where the original – and its memory – is located). The scepticism which emerges from this idea is not just a sign of our current *Zeitgeist*; it is also a starting point that allows to affirm the critical judgment toward this kind of "new" media experience: will MR lead to a rebirth of the aura? Or, on the contrary, will it lead us to shock because of it will become too close to our intimate space, preventing us from enjoying a total and immersive media experience by virtue of our in-between and undefined condition? According to this second dystopian perspective, the aura will fade out behind the MR interface; it will not allow users to achieve a totalizing and genuine media experience. In order to inquiry this second interpretative possibility, in the course of the article the multitasking interface will represent a case study.

2. Aura's migration and renewal

In order to affirm the renewal of the aura in digital media, a first trajectory to be taken into account can be that of the "migration" of the aura. According to some authors, the aura does not dissolve with technical reproducibility, but rather it "relocalises" itself, by becoming "supple and elastic" (Davis 1995, p. 381).

In this regard, in 2008 Latour spoke about the "migration of the aura", by describing the processes of duplication and digitalization of artworks and affirming the survival, rather than the "dissolution" of auras, in technical reproductions. According to the sociologist, the idea of the aura is strictly associated with a modern obsession for the "original version". To confirm such an idea, Latour dealt with the ways in which the aura might be built as well as destroyed by the expositive context. The original piece of the Veronese's *Nozze di Cana*, for instance, is stored at the Louvre Museum in Paris. However, it is located in the room preceding the Salle de *la Joconde*. The copy of

the same artwork, on the other hand, is stored at the Fondazione Cini in the island of San Giorgio, in Venice. What a difference of meaning between the two pieces! The original one seems to suffer the closeness of the Da Vinci's icon. Instead, the pictorial reproduction that is stored in Venice assures to the piece the right context it deserves. Latour was sure about that: "the aura of the original had *migrated* from Le Louvre to San Giorgio" (Latour, Lowe 2008, p. 3).

Based on the Latour's suggestion, one could argue that the mere technical changings in the expositive contexts determined such a "migration". However, as a sociologist (of technics), Latour nevertheless has been attentive to the communitarian making of artworks' meanings (and auras as well): indeed, as the technical configuration of the expositive environment as the little attention of viewers waiting to enter the Salle de *la Joconde* are signs of the values that the cultural communities associated from time to time to the Veronese's artwork. In particular, it could be argued that both the chaos of the exhibition environment and the consequent loss of attention to the Veronese artwork contributed to the decay of its aura.

The sociological facet of the aura is also the point on which Jay David Bolter, Blair MacIntyre and Maria Engberg insisted since 2004.

> We propose the term aura to enrich the current language for designing and analysing media experiences, especially when using augmented reality, mixed reality and ubiquitous computing technology. Aura describes *the cultural and personal significance* that a place (or object) holds for an individual. A MR application can exploit aura to make the user's experience more compelling or educationally rewarding. Aura provides a necessary complement to the concepts of presence, which is commonly used to evaluate VR applications, and of place, which refers to the more generic significance of places, particularly in CSCW [Computer-Supported Cooperative Work] applications (MacIntyre et al. 2004, p. 36, *my italics*).

In this perspective, the aura of an object or place is understood as the com-

bination of its cultural and personal significance for a user or group of users: "aura can only exist if the individual can connect the object or place to his or her own understanding of the world [...] increasing the connection to a person's understanding of the world can increase the aura for that person (MacIntyre *et al.* 2004, p. 37). Although the focus of the cited article was aimed at proposing digital solutions for expositive contexts[4], it is nevertheless to be noted that it has been supported by a theoretical reflection upon the functioning of the aura as well.

In particular, the authors focused on the effects of meaning produced by MR technologies: according to them, MR technologies are able to reactivate the *hic et nunc* of the viewing experience. In such a perspective, the feeling of presence and the sense of "being-there" enabled by VR, as well as "the absence of mediation" or the "illusion of non-mediation", have to be understood as the opposite of Benjamin's aura (Bolter et al 2006, p. 28): because the computer is capable of perfect reproduction of information, the same media experience can be offered repeatedly to a series of users, and VR experiences are completely repeatable wherever the VR equipment can be set up. On the other hand, instead, because they are not purely virtual, MR and AR experiences are not perfect reproductive technologies: they draw on the physical and cultural uniqueness, the "here and now", of particular places (Bolter *et al* 2006, p. 23).

Paraphrasing, if VR destroys the aura, the reason has to be found in the lack of users' self-distancing it does not provide for (by recalling the Benjamin's thought, it can be understood as a recognition process located in the here and now). On the contrary, MR and AR experience would protect the aura by transforming it into a

vague "*cultural and personal significance*" which, for the authors, denotes nothing more than a set of information to be enjoyed in context, physically, through MR and AR technologies.

Finally, it must be noted that within the field of media studies the renewal of the concept of aura has been advanced and suggested several other times. By dealing with ubiquitous computing, Ulmer & Freeman spoke about "ordinary aura" by referring to "the integration of the aesthetic attitude into lifeworld behavior and skills" (Ulmer, Freeman 2014, p. 69). According to them, the so-called "netizens"[5] are nowadays able to include aura not as separation from but syncretic with their other institutional behaviors. In this perspective, the aura is conceived as an aesthetic attitude that creates value, allowing to overcome alienation and to recover the experience of individual and of the collective agency. David Berry as well, in his *The Philosophy of Software*, wrote about visual or *aural* notifications that break the flow of user experience with disconcerting ease, by moving the user from a state of ready-to-hand, writing or using the computer to perform a task, to that of present-at-hand, which makes the entire computer apparent and available to inspection (Berry 2011, p. 134). Again Bolter, dealing with MR technologies, proposed to think about "aura" as a kind of cultural radioactivity (Bolter *et al.* 2021, p. 42).

As we will see in the next section, such interpretation of the aura term concerns the evolution of the concept of aura: from a sign of the aesthetic and phenomenological dimension of experience to another one concerning the semiotic and visual dimension of a text, and precisely a digital interface. In fact, since a consistent whole of theoretical contributions located into

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4 For instance, the authors explained that Augmented Reality might enhance the aura of a place for a particular visitor by providing historical and cultural context through the visualization itself or through text or audio delivered on the device (Bolter *et al.* 2006). In this perspective, art and history museums acquire from their original sites or makers the aura of the objects they contain, since concentrating auratic objects in a building can make the building itself auratic.

5 Netizens or ubizen is a hyphenated word referring to "citizen of the net" or "net citizen". It describes a person actively involved in online communities or the Internet in general (source: Wikipedia).

the field of art and historical criticism, it is fruitful to understand the "aura" not only as an abstract element of the user experience (which would recall the transcendence of the artwork), but also as a concrete and tangible aspect of a *text*.

Hence, if digital technologies were able to welcoming the migration of the aura, it would remain to be understood in which forms this aura is re-presented.

3. The auras of mixed reality

Based on the ideas exposed in the previous section, it is possible to inquiry through visual semiotic lenses the visual imagery of auratic digital interfaces' realm.

Augmented images, i.e., digital images produced through the use of augmented or mixed reality technologies, can represent a starting point. Commonly they are featured by floating and immaterial contents (often 3D and created with computer graphics techniques) that has been superimposed on images of reality produced by the camera. In some cases, as in tourism apps, such contents could exert an indexical and referential function, i.e., they could point toward some point of interest which is located into the environment; in other cases, as for filters in social media, they could exert an expressive and emotive function.

In any way, they feature a certain degree of pervasiveness and hypertopia-*ness* (Casetti 2015; Biggio 2021). Pervasiveness is a fundamental characteristic of augmented images, which allows to differentiate the images produced through MR from those produced through VR. The VR image, in fact, is immersive but not pervasive, as it enables a 360 degrees experience in which the totality of what is perceived by the user coincides with the plane of expression of the computer-generated text. In this sense, the concept of "immersiveness" denotes a unitary and limited space within which the subject "dives" by totally suspending his or her prehension of the surrounding physical world. On the contrary, AR and MR images, the concept of "pervasiveness" is comparable to that of "emergence" and it

can be described in terms of an infiltration or diffusion (of a smell, for example) within an environment that is permeated by it. The concept of "hypertopias", on the other hand, has been adapted by Casetti (as it is known, the original theorization of the notion of "heterotopia" has been advanced by Foucault) to describe the points of a moving image that attract and absorb other dimensions into themselves. By means of such an artifice, a "other" world is made available to us, responds to our summons, and comes to us, it fills our "here" with all possible "elsewheres" (Casetti 2015, p. 131).

So, affirming that floating contents overlapping the image exert some kind of communicative function means to affirm that their function is that of bringing out a sort of "cognitive gain" to the user experience, by allowing the visualisation of overlapping signs that, for example, inform or instruct the user about the surrounding reality. In this case, the digital reproduction and MR interfaces do not determine any aura's decay but, according to Bolter, they allow users to enhance through pervasive and hypertopic discursive strategies the "here and now" of particular places: places where they are physically located. In such a view, they provide users with tools for *distancing* themselves from their actual *hic et nunc* (but just for a moment), by requiring them to technically self-organize their own viewing and cognitive experience and to enable an "augmented" gaze over what they are seeing.

In several films and series, it is equally possible to detect sequences where overlapping elements unfold a similar function: some of them are created with cinematic technologies, others with com-

puter tools. For instance, we can distinguish between *captioning* auras, in which overlapping elements are used to support a discourse about something within the frame (parallel to the purely visual discourse); *gamification* auras, in which they are used to engage the viewer by translating the visual discourse in a gameplay interface; and *dialogical* auras, in which we observe characters sending messages and, at the same time, the same messages that the he/she receives, by reading them in real time. These images can be interpreted as kind of a "false subjective" (Casetti 1993)[6].

In the language of television, as well, we find formats that are naturally predisposed to processes of overlapping "syncretic elements". These are all those discursive forms in which it becomes indispensable, for example, to place alongside verbal communication written CG texts, subtitles, interactive graphics and so on. We detect overlapping mechanisms of this kind in news broadcasts, where the overlapping element may be an information banner bearing the name of the journalist; or in quiz shows where the overlapping elements are, again, contextual information banners useful for the viewer to "participate" in a pseudo-interactive way in the broadcast. Moving away from a purely visual conception of superimposition, the same could be said of the addition of recorded and replayed laughter within specific television programmes whose aim is, again, to produce a certain kind of gain in the viewing experience and, in this case, to appeal to and sympathetically prompt the viewer to laugh.

What is important to emphasize here is that this series of overlapping elements work together to create a pervasive and hypertopic effect which, on a diegetic level, describes an aspect of the character's experience and which, on an extra-diegetic level, constitutes a syntagmatic element of the narrative flow in the same
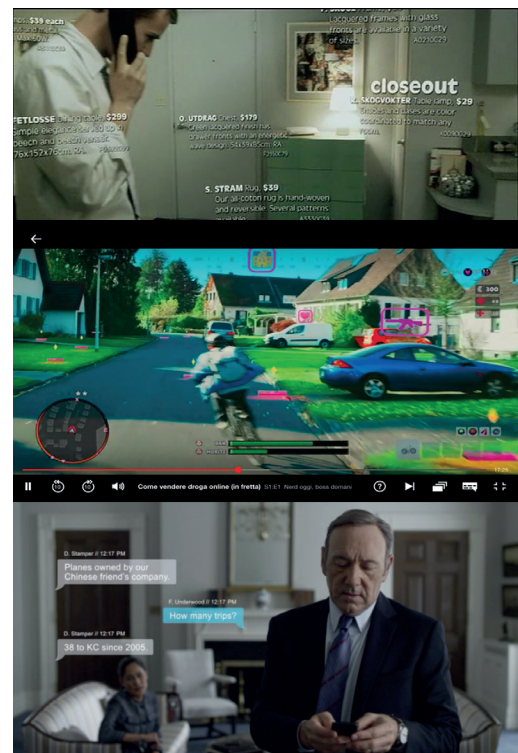
way as any dialogue or scene portrayed by live actors.

Fɪɢ. 2. Cᴀᴘᴛɪᴏɴɪɴɢ ᴀᴜʀᴀꜱ ɪɴ *Fɪɢʜᴛ Cʟᴜʙ* (1999), ɢᴀᴍɪꜰɪᴄᴀᴛɪᴏɴ ᴀᴜʀᴀꜱ ɪɴ *Hᴏᴡ ᴛᴏ ꜱᴇʟʟ ᴅʀᴜɢꜱ ᴏɴʟɪɴᴇ (ꜰᴀꜱᴛ)* (2019) ᴀɴᴅ ᴅɪᴀʟᴏɢɪ-ᴄᴀʟ ᴀᴜʀᴀꜱ ɪɴ *Tʜᴇ ʜᴏᴜꜱᴇ ᴏꜰ ᴄᴀʀᴅꜱ* (2013).

Into these different kinds of augmented images, the auras result from a post-production process, which is often linked to the utilisation of the chroma key composition. This means that the aura is not created in the context of a factual interaction. Hence, the superimposition of the aura is not the result of a linguistic process, but rather of a meta-linguistic one. Nevertheless, such images are interesting as those created through augmented reality: they testify to an emerging visual imaginary linked to the – still elementary – use of immersive technologies and are representative of emerging compositional grammars and reading pragmatics.

4. Mᴜʟᴛɪᴛᴀꜱᴋɪɴɢ ᴀᴜʀᴀꜱ

As we argued in the previous section, the auras enabled by MR interfaces can

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6 The false subjective is that shot that simulates a subjective, that is, a point of view, but is not: in fact, the character (or part of him/her) is always visible, so that the transition to the objective shot is seamless.

be said to provide users with programs of action that require them to adopt a *distant view* upon the same interface. In this sense, distance is not just a characteristic of the auratic experience as it was described by Benjamin (actually as an effect of the feeling of being situated in history) but, on the contrary, it is a kind of attitude – a set of gesture and interaction *stricto sensu* – to be assumed *in order to* interact with the aura, without which the aura would not be realised.

A similar operation occurs in interacting with multitasking interfaces. The term derives from the computer world, where it nevertheless has a positive connotation: the more a device is multitasking, i.e., the more a computer is capable of executing multiple task segments in an interlocking manner, thanks to common processing resources shared in central processing units (CPU) and memories (RAM, ROM), the more efficient it is.

According to Raluca Budiu, Director of Research at Nielsen Norman Group:

> "Multitasking refers to the ability to run multiple applications at the same time and easily switch among them. Users often engage in multitasking when they perform complex tasks that require putting together multiple sources of information. In fact, collecting, comparing, and choosing between multiple items are the most mission-critical tasks people do with information technology". (Budiu 2015)

In this sense, multitasking is synonymous of multiple modes of interaction.

Besides, although multitasking is a topic that is more concerned with psychology and cognitive science – the interest is in multitasking behavior, rather than in the analysis of interactive text as an interface, semiotically organized in a multitasking way – Semiotics has also had its say. For instance, in a book entitled *Interfaces of Writing Objects*, Alessandro Zinna (2004) defined the multitasking interface as the result of a *mise en abyme* process. In this view, the multitasking interface results from the writing of a succession of topological units (interaction with the multitasking interface is therefore a practice that has to do with

the interactive writing of virtual space): electronic writing has the particularity of multiplying the inscription surfaces, which, once written, contract relations of dependence or autonomy according to an order of succession between the units in relation to an assembly scheme with which they are linked. The main operation is that of the "zoom-out", the stepping back, which allow to activate a comprehensive and distant view over the observed object.

Moreover, the multitasking interface implies the establishment of an interstitial and transparent device capable of supporting the users, providing them with operational tools to organise the contents of the experience (the prosthesis, the interface). From the point of view of the Anthropology of technology, the multitasking interface is the representation, the textualization, of the human faculty to think in advance about its actions, to control them and, consequently, to control its environment and to obtain an evolutionary advantage. In such a view, the distancing operation provided by the multitasking interface is strictly related to the enjoyment of the cognitive gain we have described in the previous section.

However, the MR interface and the multitasking one as well can also be deconstructed according to the critical perspective of Benjamin. This perspective will allow to consider not only the utopic ideology according to which MR and multitasking interfaces would be able to recover and enhance the aura by consequently bringing out an experiential gain; it will allow to reconsider reproductive technologies as determining a certain kind of shock which, ultimately, would destroy the aura of emerging technologies.

The field of Cognitive Ergonomics has often inquired this aspect of multitasking in human-computer interaction. In formulating solutions for designing the learning, communication and content clarification within the interface, it provided designer with solutions aimed to *reduce* the cognitive load of the user (Nielsen 1993; Tosi 2019). This paradigm

of design implies that the main risk for technological progress is the *cognitive over-loading* and its mission is ultimately that to prevent and contrast the affirmation of the continuous partial attention in digital users.

On the other hand, it has to be highlighted that it is not the actual multitasking interface to determine a cognitive over-loading. Rather, it is its representation into the media to convey cultural meanings that can be associated with the issue of cognitive ergonomics.

This is a pivotal point: the representation of MR and multitasking interfaces in the media not only does not emerge from a factual interaction, but they are commonly associated to semiotic discourses featured by a certain degree of expectancy for the future of technological progress. In this perspective, the historical criticism of Benjamin becomes relevant again[7]. In this regard, Benjamin itself understood the decay of the aura not only as an aesthetic issue but rather as a technological one, which is related to the changing of mediums. On the basis of Benjamin's historicist perspective (as well as Baudelaire's philosophical one) we could understand the aura (and in particular its dissolution) as the element of a theoretical discourse mainly aimed at the critique of innovation and technological shock (Pinotti, Somaini 2012).

Utopic and auratic multitasking interfaces are, for instance, those depicted in the film *Minority Report* (dir. Spielberg, 2002). In these compositions, we see an individual equipped with HMD (but not necessarily), placed in front of a series of hologram windows of different sizes that can be interactively manipulated. In *Minority Report* the protagonist intends to manipulate images of his own premonitions of future crimes, displayed (or rather, projected) on a screen of holograms. Here, the multitasking interface is portrayed as a tool at the service of the user

and, in particular, of justice, as it is used to predict crimes.

In such a situation, the user is empowered by the interface, as he/she occupies a distant point of view and the place of the orchestrator of his/her own experience. This is precisely a utopic representation of MR interfaces, in fact the movies dated 2002! However, the idea is valid for further kind of representation of technological futures.
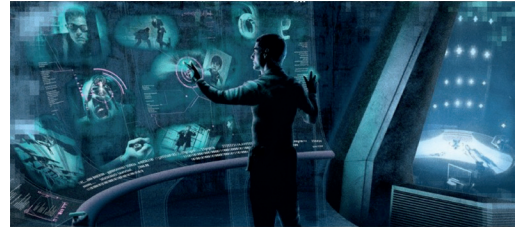

Fɪɢ. 3. Fᴜᴛᴜʀɪꜱᴛɪᴄ ᴍᴜʟᴛɪᴛᴀꜱᴋɪɴɢ ɪɴᴛᴇʀꜰᴀᴄᴇꜱ ɪɴ *Mɪɴᴏʀɪᴛʏ Rᴇᴘᴏʀᴛ* (ᴅɪʀ. Sᴘɪᴇʟʙᴇʀɢ, 2002)

In Meta's presentation video, for example, we initially see Zuckerberg answer a phone call through a wearable gadget on his wrist. Then, we see him enter an immersive space where he is involved in a game with other players; finally, a call from a friend distracts Zuckerberg from the game to show him a piece of AR street art that, ultimately, he shares with others.

In this perspective, it could also be argued that Meta will not be a platform capable of bringing cognitive gain to the user at all, but at most an experiential one. As can be seen in figure 4, Mark or his avatar are constantly arrested by pop-up windows that interrupt the "natural" flow of the user experience.

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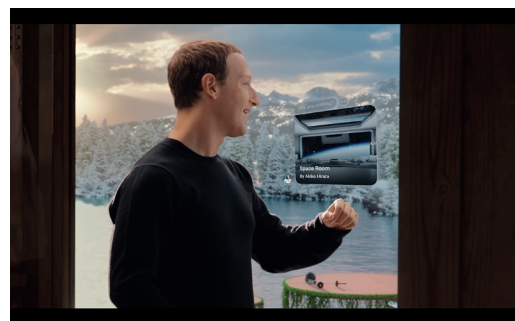
7 In our perspective, in order to understand the meaning's changings of the "aura" term, it is possible to understand Æsthetics not just as a philosophy of beauty into artwork, but rather as a "Techno-Æsthetics" (Simondon 1982).

In this regard, we can argue that the multitasking interface is not just a typology of text, or at least it refers to something more general, i.e., to a paradigm. For Semiotics, a paradigm is the set of elements that constitute a linguistic system and to which one refers in order to communicate. However, to say that a certain paradigm exists is also to say that a certain specificity – a set of positive qualities – belongs to this paradigm. A paradigm is, in this sense, a rule implicit in the symbolic forms that are elaborated from this paradigm.

With regard to the paradigmatic configuration of the multitasking interface, the syncretic and multifocal perspective that characterize the digital image emerges. In this sense, not only is the computing machine, at the hardware level, to be

capable of running multiple computational processes simultaneously (parallel execution), but the augmented mind of the user as well, insofar it is projected onto a space such as that of the multitasking interface, is capable of carrying out cognitive processes, through a modulation of the flow of thoughts. This idea concerns the possibility of augmenting human cognition with machines and digital technology which is a rule of composition, hence a paradigm that our culture has assimilated since at least the 1960s, with Doug Engelbart, if not before[8].

At this point, we could wonder if, on the contrary of what is represented in *Minority Report* and in the Meta's teaser, is there a point at which the multitasking interface becomes pervasive, in a negative sense. If we think about the user experience enabled by push notifications, popup ads or multitasking content display the answer is positive; designed for PC browsers, if moved into the user's field of view and made to float, they would result in overexposure to the multiplicity of signals received, exposing the user to a kind of anaesthesia of experience. In addressing the ethics of communication in relation to substances and affordances (i.e., the actual access to functionality that the medium provides to users), the semiotician Gunther Kress (2010) has also expressed a pessimistic perspective on the issue of attention, arguing that the king of multiple framing and multiple attention is likely to be the norm rather than the exception in most cases of communication. According to a certain ideology of computing, multitasking is strictly related to a social and cognitive isolation of the user in a self-referential space.

Such a form of cognitive overloading could be legitimately described as a "shock" – the contrary of the aura – and, as a consequence, as a form of interaction that does not allow user to distance themselves toward the modalities ex-

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8 This is also the case with the Oculus rift interface or Quest, in which an attempt is made to recreate not so much the desktop interface, but the televised – but interactive – interface designed, for example, for curved and, indeed, immersive screens.

plained in the previous examples[9]. Rather, to be at stake is the excessive proximity of technology to obstruct users' distancing operation.

If the utopian future of Minority Report is a good example to focus on the cognitive gain resulting from the process of distancing that the MR interface enables, the dystopian future depicted in *Omniscient* (2020), a Netflix series, offers interesting insights on non-distancing effects, shock and alienation, which ultimately coincide with the vanishing of the aura.

In this series, diegetic shots often alternate with subjective shots of drones, central actors in the narrative, whose function is to monitor citizens at all times.

In addition to the fact that, as can be seen in Figure 5, such shots are often enunciated in the forms of multitasking (these are, actually, computational entities), it is in the attitudinal disposition of human characters towards such entities that the sense of the fading aura is expressed. While the protagonist continually performs distancing operations, imagining in advance the automated behavior of the drones and behaving in such a way as to evade them, all the other citizens, having accepted to be surveilled in order to obtain security, no longer do so. However, in this case, the process is reversed: the user-machine interface does not allow users to distance themselves,

to self-regulate and self-organize, as the protagonist does, but the processes of distancing carried out by the protagonist denote the disappearance of the aura and the recognition of her own state of alienation, understood, in the Marxist sense, as the impossibility of recognizing herself[10]. On the other hand, the auratic interface would only be that which drones possess and, as a consequence, humans would not have access to it. However, this condition would not determine the experience of shock for common users, since it would only be situated where such an impossibility of distancing, which is an awareness of one's own condition, would be realized. The proximity of the technological entity is in connection with a new aura typology that derives rather from the experiential gain emerging from surveillance.

5. Conclusions. The aura of technological re-enchantment

As we have argued before, both the MR and the multitasking interface can be conceived as symbolic forms that clearly express the evolution of the notion of "aura" in the contemporaneity.

On the one hand, if we accept as a valid one the use of the notion of "aura" proposed by Bolter and others, we can welcome the idea according to which innovative media such as MR and multitasking interfaces, as reproductive technologies, do not lead to the decay of the aura: whenever they provide users with tools for distancing themselves, they enable a new "here and now" and, as a consequence, they allow users to achieve a cognitive gain from the syncretism the same interface created.

On the other hand, whenever the MR and multitasking interface would fail in providing users with tools for distancing themselves, they become alienating technologies as the reproductive ones de-

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9 In this regard, it is interesting to retrieve the prototype of the so-called "Project Aura" whose objective was actually that to minimize distractions on a user's attention, by creating an environment that adapts to the user's context and needs (Garlan *et al.* 2002).

10 This polysemy derives from the different meanings that can be attributed to the notion of "alienation", cf. the article "Del modo di formare come impegno sulla realtà" in Eco (1962).

scribed by Benjamin were. In this sense, they would come much too close to the users and would prevent them to enjoy that renewed sense of "here and now", by ultimately bringing them to loss the "authenticity" of the experience of the place. In others words, they would realize the dystopic previsions about the users' attention that the current critique of multitasking argued for. In this view, in accordance with Latour's idea, the decay of the digital aura would be lawfully associated with the users' distraction.

However, as according to Benjamin there is a dialectical principle of sensory experience, in which proximity, distance, aura and shock are opposed, the digital aura is both innovative (it produces a cultural shock, such as the one aimed at by Zuckerberg's Meta) and "auratic" (in the Benjamin sense), i.e., it is a vehicle for "authenticity" and a return to the "immediate dimension" that characterizes by difference the condition of digital non-mediation. The emerging of this new kind of digital aura has to overcome a diachronic process of assessment. As the theorist of the remediation, Bolter argued as well that media forms always oscillate between offering a non-auratic, reflective experience and reasserting the importance of immediacy and aura (Bolter et al 2006, p. 34).

In fact, as we have seen in the case of *Omniscient*, even where technology takes over and distancing operations are no longer possible (or necessary), a form of aura is still traceable. Such a form is probably referable to the one Erik Davis, theorist and philosopher of techno mysticism, has spoken of, by matching this notion with a religious sense.

> The powerful aura that today's advanced technologies cast does not derive solely from their novelty or their mystifying complexity; it also derives from their literal realization of the virtual projects willed by the wizards and alchemists of an earlier age. Magic is technology's unconscious, its own a rational spell. Our modern technological world is not nature, but augmented nature, super-nature, and the more intensely we probe its mutant edge of mind and matter, the more our disenchanted produc-

tions will find themselves wrestling with the rhetoric of the supernatural (Davis 2015, p. 48).

The dimension of magic and religion, as Simondon (1958) had already explained, is one of the fundamentals to be retrieved whenever we need to make sense of technology. This explanation, however, is not merely suggestive and vague. It provides an escape route from the apocalyptic interpretation of technological determinism. In this sense, the notion of "delegation" to the prostheses of the body – a concept again proposed by Simondon and alluded to by Benjamin himself when speaking of the loss of the hic et nunc – is to be understood as a form of technological enchantment, similar to that resorted to by the citizens of *Omniscient*, a solution to the fact that human brains cannot satisfactorily compass this hyperspace of collective information.

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88 years have passed since the first publication of Walter Benjamin's essay where he firstly proposed the notion of aura.
Following the ongoing process of artification of daily life, the problem of the uniqueness of the work of art, as identified by aura, continues to be inspiring for understanding and criticizing the social world.
This issue of Global Humanities proposes the idea that the concept of aura may be considered as an effect of meaning which demands to be managed by social actors in the mediasphere. Such a move enlights the relevance of a proper struggle for "authenticity" to be pursued as an added value of daily life: How do social forces construct such an effect? How do they capitalize on it, in their activity? How does it get recognized and valued?

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