Figures of the avatar: semi-autonomous agents, presence effects and interpellation in videogames

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The emergence of intelligent virtual characters

The avatar, a concept popularized by the videogame industry, generally refers to a set of functionalities allowing the players to interact and move around in virtual spaces (Klevjer, 2006). In some of these spaces, avatars can be more than interactive tools: through a process of appropriation and incarnation, they can induce empathic emotional experiences in the players, and a feeling of presence within ever-more complex and sophisticated virtual worlds (Perény & Amato, 2010; Georges, 2012). The concept of avatar emerged in 1970s techno-cultural circles under the influence of the “Californian ideology” (Barbrook & Cameron, 1996). From its inception, it presented gamers with a promise of escape into and immersion in enchanted magical universes generated by computer-generated calculations (de Wildt et al., 2020). “Avatorial” devices (Gaon, 2013) are key to videogame practices and have become increasingly common (Egenfeldt-Nielsen et al., 2020). They have even spread to digital platforms in other sectors of the social sphere (health, culture, education, work, communication, etc.), allowing users to create a character in order to surf the internet, access information or interact with others. Some of these platforms allow their users to chat with virtual assistants, not just real people. Virtual assistants have been programmed to operate as rational agents and today their autonomy depends more on their perception of their own environment (based on the data they are capable of processing in order to trigger targeted actions) than on their designers’ prior knowledge (Seidel et al., 2020). Their autonomy has in fact reached new heights in the last few
years as deep learning techniques have turned them into sophisticated and complex autonomous agents (Marreiros et al., 2021). Indeed, the word “avatar” no longer refers only to human actors engaged in virtual worlds, but also to autonomous agents engaged in increasingly complex simulated behaviours (Rich & Sidner, 2009; Larson, 2010). Known in the videogame industry as “non-player characters” (NPCs), these agents perform various tasks for, and provide assistance and information to, their users. There is currently a lot of research interest in the potential impact of these intelligent virtual characters on medicine (Croatti et al., 2019), education (Page & Gehlbach, 2017), psychology (Gupta et al., 2020), society (Reis et al., 2018) and management (Han & Yang, 2018).

**Videogames rich in encounters**

In this article we focus on the particular case of non-player characters. In terms of artificial intelligence, videogames are faced with a paradox that constrains designers to try and define the parameters for the “intelligence” of their NPCs. This is because the autonomy of NPCs must abide by the rules of the fiction and gameplay, if they are not to shatter the videogame experience with unexpected behaviours (pathfinding defects, erratic actions, a problematic field of view, etc.). Indeed, today the videogame industry is said to deploy deep learning techniques—classed somewhat nebulously as “strong AI” (Butz, 2021)—more productively on the level of level design (for example, to generate the game environment) than on the level of NPCs. If we consider that NPCs are “finite automata” with a limited AI and capacity for adaptation, this invites us to focus on the gaming and fictional strategies that videogame designers must devise in order to compensate for these agents’ relatively low level of autonomy. In other words, what strategies do designers use to trick their users into believing that NPCs are autonomous agents in the service of complex videogame worlds? We shall answer this question with reference to the concept of “presence effect” as defined by Féral and Perrot: “the feeling the viewer has that the bodies and objects that he can see (or hear) are indeed there, in the same space and the same time as him, even though he knows very well that they are absent” (2012, p. 26) from his real environment.

For the sake of expediency, we shall refer to non-player characters as semi-autonomous agents or SAAs. This term seems appropriate to us, because it conveys a sense of the otherness of these algorithms endowed with a power of action programmed to induce a presence effect. In our study we examine the presence effects of NPCs in the following two videogames: Red Dead Redemption II (Rockstar Studios, 2019) and The Last of Us Part II (Naughty Dog, 2020). In Red Dead Redemption II (RDR2), the player is immersed in a fictional representation of the American West, Midwest and South in 1899. She incarnates Arthur Morgan, an outlaw battling government forces, rival gangs and other foes in a declining Wild West. In The Last of Us Part II (TLOU2), we leave the wilderness behind for a hostile, post-apocalyptic world. The player alternately incarnates Ellie and Abby, two characters up against people and monsters contaminated by a mutation of the cordyceps fungus. These are not the only threats facing the player in this game, however: she must also fight off heavily armed mercenaries, dog soldiers and a millenarian sect.

We chose to focus on these two games for at least three reasons. The first is that they are relatively recent and mark a transition towards a new generation of more powerful
consoles (Playstation 5, Xbox Series X/S). The second is that both titles are action-adventure games inviting players to explore the spaces of the videogame, run, pick up items, manage their inventory, fight, hide, flee, and last but not least, chat with other characters (Pérez-Latorre et al., 2017). The third is that the player’s potential for action and multiple interactions with SAAs, both of which are influenced by the conventions of the genre, were suited to the type of analysis we sought to conduct. Although there were of course other good candidates for our case studies, the series Red Dead Redemption and The Last of Us were our first choice for evaluating the role of NPCs in the constitution of realistic and autonomous virtual worlds, i.e. worlds that seem to follow their own rules (Andrew & Jussi, 2019; Rabin, 2020) and within which players must carve themselves a place.

Our theoretical approach is based on research on the links between the presence effect and the virtual characters used in the media and theatre arts (Bourassa & Poissant, 2013a) and interactive devices (Bourassa & Poissant, 2013b). We combine these works with game studies research on the relationship between the players and their avatars, whether the latter have been designed as empty shells, because of the extent to which they can be personalised and modified, or programmed to present as characters with a set of more or less unalterable characteristics (Arsenault, 2013; Barnabé, 2018; Therrien, 2013). Finally, our work is indebted to a communicational and semiotic approach to game studies that was developed at UQAM’s Faculty of Communication (Bonenfant et al., 2020).

In her analysis of the presence effect associated with the use of virtual characters in the performing and media arts, Louise Poissant (2013) identifies six “shifters” capable of inducing this feeling. These shifters are: verisimilitude, doubling, the staging of an absence, the staging of a trace, telepresence and immersion. We adapt these shifters to videogames and divide them into two distinct but complementary categories: simulation shifters and interpellation shifters. We also illustrate them in the specific games under discussion.

**Categories of simulation shifters that induce a presence effect**

According to Poissant, verisimilitude plays a key role in inducing a presence effect. It belongs to the Platonic register of mimesis and simulacra. In this article, we approach it more specifically in light of Baudrillard’s definition of verisimilitude as a simulation process exhibiting all the signs of a reality that does not exist (Baudrillard, 1981, 1995). As such, this appearance of reality is not so much a representation as a simulacrum, i.e. “a copy of something that never existed.” In other words, virtual characters owe their capacity to deceive us to an illusion that confuses our senses (Bourassa, 2013, p. 31). However, even if they are complete fabrications, SAAs are not drawn from thin air. These videogame simulacra imply a meticulous semiotic process (Vella, 2014) involving the fabrication, combination, and hybridisation of signs in order to make us believe in a hyperreality—i.e. an excess of reality—that contributes significantly to the presence effect. On the more global scale of videogame worlds, Carl Therrien rightly speaks of a “canned reality”:

> Contemporary videogame worlds do not present us with a concrete material using stage devices or photochemical sensors, but essentially merge a profusion of
complex geometric forms with sophisticated audio-visual effects, whose quality nonetheless depends on a canned reality, through the use of recorded dialogues, sound effects, texture photography and motion capture; all of which they do in order to achieve a level of “kino-realism” that only big budget productions can pull off. (Therrien, 2011, p. 59)

To approach SAAs as simulacra is to take into account their photorealism (skin textures, eye colours, facial lighting, etc.), their simulated facial expressions, the tone and prosody of their voices, and the fluidity of their movements or gestures, for example. The games under study both benefit from cutting-edge illusion-enhancing recording techniques based on motion capture (mocap) and performance capture. The player keeps encountering different characters who move in a distinctive way, as though animated by their own desires. When these characters speak, the lines of dialogue activated by the player’s performance are voiced by actors who hide behind their avatars, as though the characters were speaking for themselves. One of the most striking features of RDR2 and TLOU2, beyond their photorealism, lies the capacity of their SAAs to simulate the awkward, clumsy, blundering or faltering movements that often characterise human gestures. The infected characters in TLOU2 have a limp and are prone to spastic fits that make them cry out and their insides rumble. In RDR2, a drunk saloon customer struggles to sit down and ends up falling asleep at the table.

Doubling shifters originally described a device used in the theatre to project pre-recorded footage of the actors on the stage, in order to reproduce their gestures, expressions, or stance (Poisant, 2013, p. 22). In this case, doubling twins the actor with his ghostly, virtual, alter-ego, creating a vertiginous presence effect for the spectator: how can she distinguish between reality and the simulacrum when they are side by side, and tease reality apart from fiction (Bourassa, 2017)? Doubling is a key feature of videogames and generally starts with the player himself (Georges, 2016), since the projection of his avatar on the screen is a marker of his presence in the online world. In the world of videogames, presence can be conveyed though the different modes of projection (the line of sight can be subjective, a third person’s, isometric, etc.) used to appropriate and incarnate an avatar. However, doubling also affects the SAAs in the diegetic universe: these characters can systematically appear unique and singular, irrespective of their position or role (as “opponents” or “adjuvants” to quote Greimas’ terminology [1966, 1983]) in the actantial structure of the game. The graphic designers and programmers of the games under study have been particularly careful to limit word-for-word repetitions and to avoid characters that might induce a feeling of déjà vu. RDR2, faithful to the conventions of the genre, presents a series of duelling sequences between strongly-characterised opponent and adjuvant SAAs. In TLOU2, when the survivors, who have organised their lives to avoid contact with the infected characters, take refuge in a bar to discuss current affairs and forget their troubles, the success of the presence effect induced by these videogame agents is based on a doubling that emphasizes the (re-)discovery of characters that are in fact very familiar, minimising the player’s feeling of déjà-vu.

SAAs have been programmed to follow the instructions and procedures dictating their behaviour and conduct, whether these adapt to the player’s avatar or not. This brings us to the shifters that stage an absence. With these shifters, the presence effect is based on establishing a relationship with something that cannot be seen because it lies beyond the field of vision. In films, what is off-camera is not just what lies beyond the frame of the cinematographic image: it is also the viewer himself (Metz, 1977),
absorbed by the images, in a state of semi-consciousness. In a videogame the intermediary figure of the avatar immediately creates a focal point, compensating for the disjunction between the viewer and the image. But there is more. This staged absence can take an unexpected turn when the player, who connects to the videogame image via her avatar, meet SAAs who are busy carrying out their assigned tasks and activities. In TLOU2, the player chats with the last remaining survivors of a hostile world as they rediscover activities that the mercenaries and infected characters had made impossible for a while (tilling the land, keeping livestock, eating out, engaging in sports). RDR2 takes the illusion even further. The player can meet the ranchers, shop owners, cowboys, and outlaws seeking their fortune in the fictional small town of Valentine, as they follow their strict routines, going from one task to the next. This is how the day of a stable boy unfolds, for example: chopping wood (6:25 am), looking after the horses (7:30 am), stacking hay (11:30 am), lunch (2 pm), smoking break (2:50 pm), looking after the horses (3 pm), evening at the saloon (7:30 pm), staggering back home at night (11:30 pm), playing the harmonica in his tent (1 am). It is as though the player’s presence was not a prerequisite for the actualisation of these videogame sequences. In other words, the absence that is staged is the player’s own absence, as he enters a universe that almost seems not to need him.

This staging of absence in the off-screen space where SAAs dwell, away from the eyes of the player, is connected to another type of staging: the staging of a trace. In both TLOU2 and RDR2, the player finds herself in a videogame universe where animals leave tracks in the snow and the mud; where burnt down village houses hint at the passage of a group of marauders that she must pursue (or not); and where the presence of corpses strewn here and there indicates a possible threat from a horde of infected characters. The staging of a trace is all about hunting for clues and solving enigmas. The player-cum-detective must solve a puzzle, inferring causes from effects, i.e. develop his “indexical knowledge” (Ginzburg, 2007) of a videogame world affected by the passage of SAAs. There is a direct relationship between the efforts that the player makes to piece together the meaning of a scene, drawing on her personal “encyclopedia” (Eco, 1979, 1989), and her feeling of being emotionally present in the videogame.

The shifters we have discussed so far can be classed as simulation shifters, and the presence effect they induce is based on mechanisms in which SAAs play a key role. Let us now turn to telepresence and immersion shifters, which are used to describe a feeling of presence that is based on a person’s capacity to act and change in a virtual environment. Telepresence shifters are connected with interactivity. The presence effect that they induce is no longer based on their power of suggestion, but on something that has been a fundamental dimension of the videogame experience since its inception with Spacewar! (1962): the “immediate control of the objects perceived on the screen” (Triclot, 2011, p. 27). In the same way, the presence effect that can be created through immersion is a key aspect of videogames. However, the fact that the notion of immersion is polysemic rather complicates the use of this term (Trépanier-Jobin & Couturier, 2018). Let us however mention the major contribution of Gordon Calleja (2011, p. 43-44), who approaches this multidimensional concept though different levels of “engagement” (kinaesthetic, spatial, narrative, affective, ludic, shared). The presence effect is based on how engaged the player is in the ludic system of the videogame, i.e. on his power to act in that virtual world. We approach immersion
in this perspective, and through interpellation more specifically, in order to take into account the role that SAAs play in the production of a presence effect.

**Interpellation shifters as sources of interaction: the simulation of a relationship to the world**

When, in her exploration of the city of Valentine, the player’s avatar comes a little too close to some of the passers-by, they say things like: “Sorry!,” “You have a problem?,” “Leave me alone.” In TLOU2, when the player holds the mercenaries at gunpoint, some of them react with insults, others with a mix of fear and anger: “You beat me, but your turn will come,” “Keep calm, don’t kill me!,” “If you intend to finish me off, let’s get it over now.” These commands, pleas and allusions are triggered by the actions of the avatar of the player, who can choose whether to heed or disregard them.

Doubling shifters are at work in these examples, because in the fictional world of the videogame, it is the player’s avatar who is the subject of these utterances and who is disturbing the SAAs peace (in RDR2) or has to decide on their fate (in TLOU2). Yet the player knows very well that ultimately, these characters are addressing her and no one else. As we consider this “actantial competition” (Guillomont, 2005), it is worth mentioning the work of Arsenault, who establishes a judicious distinction between avatorial and actantial approaches in order to tease out the complex relationships forged by different types of avatars. “Characterised avatars” (Therrien, 2013) imply an avatorial approach that tends to reinforce the player’s subjective distance from the character she incarnates. Conversely, in an avatorial approach, the avatar is an empty shell, a vehicle that the player can alter at will, encouraging her to identify completely with its character. In both cases, we observe markers that Arsenault, referencing Jean-Marie Schaeffer (1999), proposes to call markers of “allosubjectivity” (i.e. the alterity of the avatar is maintained) and “subjectification” (i.e. there is no subjective distance between the player and her avatar). Presenting the player with a first-person view or the possibility of incarnating an amnesiac character (which is analogous to the player’s situation at the start of the game), for example, are attempts at subjectification. Conversely, the expressivity of an avatar, its presence on the screen and involvement in the diegesis, help to reinforce its dimension as an actor, based on markers of allosubjectivity. But what happens when these markers do not concern the player’s avatar, but the characters she meets over the course of the game? For the sake of our discussion in the lines that follow, we shall call them markers of “subjectivation” when they are used by SAAs seeking to catch the attention of the player in order to start a conversation. When SAAs call out to the players, their addresses take the form of summonses, demands and commands requiring a reaction from the players. Interpellation is a “recruitment” process that seeks to assign a role or position to the person concerned. Indeed, the interpellation can be double, as in the games under study, targeting both John Marston and the player (RDR2), both Ellie/Abby and the player (TLOU2).

It is on this analysis of interpellation, which we owe to the philosopher Louis Althusser, that we propose to base our examination of the connections between immersion and interpellation. Althusser imagined an ordinary scene from everyday life: a police officer calls out to a passer-by—“Hey you there!”—and that person turns around. From this thought exercise, Althusser inferred the way ideologies operate:
I shall then suggest that ideology “acts” or “functions” in such a way that it “recruits” subjects among the individuals (it recruits them all), or “transforms” the individuals into subjects (it transforms them all) by that very precise operation which I have called interpellation or hailing, and which can be imagined along the lines of the most commonplace everyday police (or other) hailing: “Hey, you there!” Assuming that the theoretical scene I have imagined takes place in the street, the hailed individual will turn round. By this mere one-hundred-and-eighty-degree physical conversion, he becomes a subject. Why? Because he has recognized that the hail was “really” addressed to him, and that “it was really him who was hailed” (and not someone else). (Althusser, 1976, p. 174)

In this famous theoretical scene, a peremptory utterance mobilises markers of subjectivation (“you”) and spatialisation (“there”) in order to catch the attention of the person that is being hailed as a suspect. For Althusser, interpellation is how ideology turns individuals into social subjects (Lecercle, 2019). Ideology unfolds processes of subjectivation and identification prompting those that are hailed to think of themselves as subjects (for example: as fathers, mothers, sons, consumers, players, etc.) and to respond with behaviours, attitudes and utterances that are considered licit. From this point of view, an ideology has a material existence and can be expressed in a multiplicity of ways, namely in ideas, representations, and imaginary significations (Castoriadis, 1975) that invariably end up finding concrete expression in practices, rituals and behaviours that constitute forms of subjectivation. The philosopher of language Jean-Jacques Lecercle (2019) has proposed a radical re-reading of Althusser, breaking with his determinism (ideology automatically entails an alienating form of subjugation for Althusser) in favour of a theory of subjectivation that paves the way to a process of “empowerment” (Butler, 2008). What makes Lecercle’s argument so powerful is the fact that interpellation, in his analysis, does not merely subjugate the subject to an ideological order: it can also spur counter-interpellations allowing the hailed subject to respond with different acts.

With interpellation, an ideology expresses itself with the “forcefulness of an address” allocating a fixed place on the social spectrum to individuals (both hailers and hailed) based on the roles assigned to them. Moreover, interpellation is not confined to the order of discourse: it can also mobilise other semiotic regimes (gestures, sounds, images, tactile sensations), taking hold of the body through the senses involved in the process of subjectivation. In Althusser’s theoretical scene, interpellation first involves sound (the peremptory voice of the hailer), then sight (his scrutiny of the hailed individual).

If we transpose this analysis to videogames, the “sensory” interpellation mediated by SAAs invites us to examine the different types of shifters (involving sight, sound, or touch) deployed to catch the attention of the players in order to “recruit” them by assigning them a position and an active role in the world of the videogame. Our stimulating foray into Althusser and Lecercle invites us to consider videogame interactions (sender/receiver/feedback) in light of the dynamic of interpellation (interpellator/interpellated/counter-interpellation). In this perspective, SAAs deploy many different forms of interpellation expressed through sight, sound and touch. In several videogame sequences, for example, SAAs look directly at the player with photorealistic facial expressions denoting an impressive variety of emotions. It is also worth mentioning that SAAs can often gesture (through their beckoning, waiting stances, nodding, etc.) at the player as they call out to her, in order to emphasize that they are addressing her, not someone else. These agents may arguably be said to seek out the player’s avatar, subjecting it/her to the force of their address in order to
compel it/her to acknowledge their intentions. Ultimately, these semi-autonomous agents are programmed to subjugate the player on two levels: on the (diegetic) level of the relationship between the NPC and the player’s avatar, and on the (ideological) level of the relationship between the semi-autonomous agent and the player herself. In both RDR2 and TLOU2, one of the more common forms of interpellation is the insult, which brings sensory interpellation to its paroxysm because it has a direct impact on the body that is being affected or wounded (Lecercle, 2019, p. 124). When a SAA insults the player, the player responds to the SAA’s provocation with a counter-interpellation, i.e. a series of actions programmed by the videogame designers. This counter-interpellation is merely gestural: it is generally a matter of pressing the right button at the right time. The player responds to the SAAs sensory and linguistic markers of subjectivation with concrete actions. For the sake of analysis, we call “procedural” shifters the actions that make up this counter-interpellation, drawing on the works of Ian Bogost, who argues that interactivity is key to the form and signification of games.

In TLOU2, the player hears a roar in the distance: the cry of a colossus at an advanced stage of cordyceps infection. The bellowing colossus also has an irregular stomping gait and is in the vicinity of the player’s avatar, causing the gamepad to vibrate. These sensory interpellations are not and cannot become linguistic: the horrifying cries of the infected are their only means of expression left. Although there are no linguistic markers of subjectivation in this case, the player is nevertheless being interpellated as potential victim or exterminator. Her fate depends on her capacity to counter-interpellate the system, i.e. to counter the beast’s actions with the correct procedures. The player’s performance thus rests on her ability to counter-interpellate her opponent, along with the whole videogame system. And in this particular game, counter-interpellation can be a creative process. In some of the sequences of TLOU2, the player can get rid of mercenaries indirectly by redirecting a horde of infected characters towards her target, before watching the ensuing bloody battle (which takes a different form every time) from a safe place. In RDR2, the player is constantly being interpellated. Everywhere he goes, there are SAAs calling out to him, inviting him to sample fresh market produce, play a hand of cards in the saloon, or visit the gunsmith to acquire a new gun. These agents’ voices, gestures and expressions, along with the vibrations of the gamepad, make their addresses forceful. As Lecercle has shown, the subject is always already being interpellated, insofar as the interpellations are constant and repeated.

It may now be clear why it can be interesting to approach the presence effect through a combination of simulation and interpellation shifters. The SAAs’ cries, insults, gestures and verbal addresses, along with the vibrations of the gamepad, are the forms of interpellation they mobilise in order to recruit the player into their virtual universe, and the player can in turn find ways of counter-interpellating them, using the procedural shifters at his disposal. His “ludic freedom” (Bonenfant, 2015) thus depends on his power to act, which is itself constrained from the outset by mechanisms and procedures that are usually fixed, but can sometimes be negotiable. As we have moved from one category of shifter to the other, we have gone from the simulation of a world to the simulation of a “relationship to the world” (Hoare, 2019, p. 25). To be more precise, we might even speak of the simulation of a “social relationship” that is essentially mediated by the avatars (whether it can be controlled or not). This simulated social relationship is of course fictional. However, the sophisticated forms of interpellation deployed by SAAs to hail the player ultimately seek to give her a place in
a game world that reflects and refracts a version of reality that is the product of the fantasies and distortions of the videogame designers themselves. In other words, the player does not merely engage in the videogame from a spatial, narrative, kinaesthetic, or indeed affective point of view: he also engages and is present in that world as a subject subjugated to an ideological order, with all the values, norms, representations and imaginary significations that make up the world he shares with the designers of the videogame. Yet, projecting into videogame worlds is not just subjugating, because, as Farca (2018) argues, it implies a potential for emancipation at the articulation of imaginative acts and “ergodic” actions (i.e. actions that accomplish something), which are the procedures of counter-interpellation through which the players can manifest their freedom and power to act.

Conclusion: the reciprocal dynamics of subjectivation et subjugation

In this article, we have sought to contribute to the scholarship on NPCs, whom we have described as semi-autonomous agents (SAAs), approaching them as mediation devices capable of “interpellating” the avatars of the players, in order to make them emotionally present and involved in the world of the videogame. In order to do this, we have proceeded in two steps. We began by introducing simulation shifters based on the photorealistic properties of SAAs, as well as on their sophisticated behaviours and attitudes. Both case studies have allowed us to stress the role of SAAs in the staging of an absence or trace, prompting the player’s feeling that he is part of an autonomous world that could almost exist independently of his avatar. In the second part, we approached immersion and interactivity through Althusser’s concept of interpellation, in order to approach videogame worlds as simulations of both the world and a relationship to the world. SAAs present as sophisticated interpellators and are carefully programmed to catch the players’ attention and assign them a fixed place, role or function. However, interpellation is not a one-way process: it prompts “counter-interpellations” from the player, engaging her in the videogame, both on a performance level, and as a subject subjugated to a videogame world in which she has the feeling that she exists, as she keeps being reminded by the SAAs who cross paths with her avatar.

BIBLIOGRAPHY


NOTES

1. See L’Intelligence artificielle dans les jeux vidéo, a report compiled in 2018 by Sébastien Collet for Saagie, a Paris-based software company.

2. Throughout the article, we shall alternate between feminine and masculine pronouns and use them interchangeably.

3. For example The Legend of Zelda: Breath of the Wild (Nintendo, 2017); The Witcher 3: Wild Hunt (CD Projekt RED, 2019); Cyberpunk 2077 (CD Projekt, 2020); Ghost of Tsushima (Sucker Punch Productions, 2020).

4. In the original French, Poissant uses the term “embrayeur,” which is Nicolas Ruwet’s translation of the English word “shifter,” a term that the linguist Roman Jakobson himself borrowed from Otto Jespersen. It describes a class of words allowing the sender and receiver, as well as the spatial and temporal parameters of the enunciation, to be inscribed in an utterance (Jakobson, 1954).

5. Several works of fiction have in fact exploited this idea, including Tron (Steven Lisberger, 1982), the Westworld series (Jonathan Nolan et Lisa Joy, 2016) or more recently Free Guy (Shawn Levy, 2021).
6. For Lecercle, an ideology “materialises a social relationship (explaining its necessity and omni-
materialises a social relationship (explaining its necessity and omni-
historicity) and interpellation is the process whereby this external social relationship is
materialises a social relationship (explaining its necessity and omni-
internalised, producing a subject endowed with both language and consciousness”
materialises a social relationship (explaining its necessity and omni-
(Lecercle, 2019, p. 284).
materialises a social relationship (explaining its necessity and omni-
7. Ian Bogost (2007) has coined the phrase “procedural rhetoric” to describe a form of persuasion
materialises a social relationship (explaining its necessity and omni-
that is based on human-machine interactions and specific to videogames.
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ABSTRACTS

In this article, we analyse the strategies that allow non-player characters to create the illusion
materialises a social relationship (explaining its necessity and omni-
that they are autonomous agents in the service of complex videogame worlds. We describe these
materialises a social relationship (explaining its necessity and omni-
characters as semi-autonomous agents, and approach them as mediation devices that can induce
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a presence effect and “interpellate” the players’ avatars in order to make them more emotionally
materialises a social relationship (explaining its necessity and omni-
and involved in the videogame world. We proceed in two stages. First, we examine the
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immersive and simulative logics that foster the impression that these agents are part of an
materialises a social relationship (explaining its necessity and omni-
autonomous world, almost as though videogame worlds didn’t rely on the presence of the
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players’ avatars. Second, we probe these logics further using Althusser’s analysis of interpellation
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in order to approach videogame worlds as simulating both worlds and relationships to the world.
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We consider semi-autonomous agents as sophisticated “interpellators” that have been carefully
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programmed to capture the players’ attention and assign them a fixed role or function. However,
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interpellation is not a one-way way process because it fosters “counter-interpellations,”
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in the videogame world within which they feel they exist. We use concrete examples drawn from
materialises a social relationship (explaining its necessity and omni-
a comparative study of the interpellation and presence effect mechanisms that we have
materialises a social relationship (explaining its necessity and omni-
identified in two single-player videogames, namely Red Dead Redemption 2 (2018) and The Last of
materialises a social relationship (explaining its necessity and omni-
Us 2 (2020), both of which have gained recognition for their character design and for the quality
materialises a social relationship (explaining its necessity and omni-
and depth of their diegetic universes.
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INDEX

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