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Games and Realism

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First published Nov 11th 2022, no current revisions

This entry offers an overview over applications of the the concept of realism in game studies. After a general description of the term, I move on to an aesthetic notion of realism before I direct attention to its use in videogames research. I show that realism in game studies is about more than photorealist representation of surface phenomena and that it also needs to account for players' perceptions.

Introduction

This contribution offers an overview over the concept of realism in game studies. After a general description of the term, the text homes in on an aesthetic notion of realism before it focuses on its application in videogames research. I show that realism in game studies is about more than photorealist representation of surface phenomena and that it also needs to account for players' perceptions. Moreover, it demands formal devices that articulate socio-political positions and relations in a believable manner.

What is Realism?

Originally derived from Latin *res* (thing), the term realism can be understood from the perspective of a *philosophical* and an *aesthetic* tradition. While philosophical realism is concerned with the relation between material reality and the observing and conceptualizing subject positing the preeminence of the former over the latter, the aesthetic tradition interrogates how various aspects of the physical

and social world can and should be represented in art and other cultural expressions. It is this second notion of the term—aesthetic realism—that is most relevant to the present inquiry on realism in games.

In general terms, *aesthetic realism* posits that the purpose of art and the artist is an accurate recording and reproduction of the minute details of everyday life. In contrast to such movements as formalism or subjectivism, the meaning of art is not estrangement from everyday habits and accustomed perceptions of reality, nor is it the idiosyncratic filtering of an external world through an individual subjectivity. Instead of shaking up or elevating audiences, art should closely observe and meticulously record nature and contemporary life with the purpose of informing the observer. Throughout history, a realist aesthetic has been characteristic for a variety of artistic genres ranging from Hellenic Greek sculptures and 17th century Dutch, Italian, and Spanish paintings, via the 18th century novel, the 19th century realist stage, and documentary photography to Italian neorealist as well as French cinéma vérité film of the 1950s and 60s. It is apparent that the term also has salience for studies of the currently dominating cultural form of videogames.

Aesthetic realism can be used in a normative and a descriptive fashion. The purpose of the concept can be to guide artistic practices in the direction of verisimilitude with a preceding reality, or it can be used to analyze and evaluate works of art through an assessment of if and how they achieve this goal. In the descriptive case, expressions such as 'realist depiction of the world' can mean widely different things to different people and in different contexts. Aesthetic realism does not have fixed coordinates.

All representation, realist and otherwise, is dependent upon selection (Hall 1997). Reality is too complex to be rendered available in its entirety through a work of art or other forms of cultural expressions. Even apparently indexical technologies such as analogue photography and film rely upon tacit or explicit frames that predispose what is emphasized and what is hidden from view (Sontag, 2003; Butler, 2004, 2009). As Sontag (2003) explains in her book *Regarding the Pain of Others*, photographs always have "a point of view [...] they are both objective record and personal

testimony" (23). Even though photography is an indexical art form that mechanically records patterns of light reflected from the surfaces of an object world, it nevertheless remains reliant upon the subjective framing by invisible photographers behind every image. Consequently, decisions about what to take a picture of and from which vantage point a certain part of the world is recorded became key areas of contention in debates about realist photographic expressions. Such issues of selection retain their validity also when applying aesthetic realism as an analytical concept to the audio-visual medium of videogames.

Aesthetic Realism. Between Accuracy and Authenticity

In analyses of realist narratives, a distinction is often made between the notions of accuracy and authenticity to account for different ways through which written or audio-visual representations signal correspondences with actual conditions thereby asserting their significance for historical or political discourse. In this entry, I follow the definitions of these terms established by Laura Saxton (2020) in her study of historical fiction. She writes that an *accurate* text about the past is focused on historical veracity and aims at consistency with available historical knowledge and accepted facts about a period, individual, or event. In contrast, she suggests, *authenticity* is a concept that refers to experiences of accuracy created in shifting audiences: "authenticity is the impression that a text is accurate, even if it is not" (128). Authenticity, she continues, is context-dependent and "shaped intertextually, culturally, and subjectively" (128). As such, authenticity is not only asserted based on verisimilitude with traces of, or documentary materials about, a certain event, but also with reference to earlier representations of these events in different media and genres and the expectations representational conventions create in audiences (see also Sturken, 1997, Erll, 2010, Erll and Rigney, 2009). A work can assert its realism either by following generic representational conventions familiar to audiences, or by adhering to available facts and actual documentary images.

What Saxton (2020) asserts for historical fiction, retains its validity for analyses aimed at understanding the various ways through

which realist videogames refer to and rearticulate the actual world (see for instance Pfister, 2020 and Mochocki, 2021). However, when addressing how games assert realism by signaling correspondence with available documentary materials and accessible social facts (accuracy) or by catering audiences' perceptions that this is the case (authenticity), we need to see how these aspects are realized at the interconnected levels of story, game world, and game mechanics (see also Šisler et al., 2022).

Drawing attention towards perceptions of realism in empirical audiences rather than the formal aesthetic means through which such responses can be invited, Malliet (2007) has proposed five different dimensions of what he terms "perceived realism" in games. Adapting established approaches from television, film, and media studies to the specificities of the 'new' medium of videogames, he develops a suitable terminology to understand which factors make players categorize their experiences as realistic — factuality (in this entry referred to as accuracy), authenticity, character involvement, virtual experience, and perceptual pervasiveness. In a later publication, he and a colleague add social realism as a fifth dimension to account for believable social settings and group relations (Ribbens & Malliet, 2009).

Aesthetic Realism in Videogames

How are impressions of realism invited in videogames? In game design literature and reviews, focus is often directed at audio-visual veracity, i.e. the ability of the game form to accurately represent aspects of the physical world and thus immerse players in virtual environments that become experienceable as-if-real (virtual experience and perceptual pervasiveness in Malliet's (2007) terms). This frame has led Järvinen (2002) to propose a distinction between three overall styles for videogames — caricaturism, abstractionism, and, most important for the present entry, photorealism. The latter term is further distinguished into the subcategories televisualism and illusionism that denote the mimicking of styles associated with indexical technologies in the former case (e.g. photorealist military shooters and sport games) and the use of photorealist elements for the presentation of imagined worlds in the latter (e.g. photorealist games with overtly

unreal settings).

Järvinen's approach can be criticized for disregarding elements of realism at a processual level and at the level of game mechanics that are included in competing frameworks such as Malliet's (2007) and Ribbens and Malliet's (2010). Many games such as the early Microsoft Flight Simulator (Microsoft, 1982) are not perceived as realistic due to their photorealism, but due to the degree of accuracy with which they replicate flight mechanics and systems processes. Similarly, the perception of the social relations presented in *Night in the Woods* (Finji, 2017) as realistic is not an effect of exact replications of surface phenomena. Also, the overly stylized nature of presentation adopted in many simulation and resource management games such as *The Sims* or *Civilization* series does not impede the realism with which they replicate social, economic, historical, or other processes. Even a photorealist military shooter is not only realistic due to its ability to audio-visually mimic a three-dimensional object world, but also due to the way the genre makes player interaction with this world and with other characters possible. In other words, exaggerated focus on photorealism as the core of videogame realism tends to de-emphasize aspects at the level of simulation, game mechanics, and rule systems.

Photorealism is only one among many ways in which videogames can make claims to realism (Galloway, 2006; Malliet, 2007). However, photorealist representation is an important feature of many games and has been part of public discourse about video games for a long time. In such debates, photorealism is treated in both positive and negative terms; it is for example connected with the successful rehabilitation of victims of trauma (see e.g. Banks and Cole, 2016) by some, and treated as a contributing factor to violent behavior (Anderson, Barlett, and Swing, 2009) by others. Demands for an exact object-physics, accurate interaction patterns, and NPCs controlled by believable AI are key factors driving technological and economic developments in the industry. Often technological innovation promising a further upswing in the accuracy of photorealist surface representation is an important factor for economic success of expensive blockbuster titles and therefore becomes crucial for return-of-investment considerations in the industry.

Often certain aspects of videogame realism disregard failures in other domains. This is the case, for instance, in war games that regularly put considerable emphasis on the photorealist presentation of weapons and environments ranging from light reflections and reload speeds to recoil and bullet trajectories, while disregarding the nature of severe injuries caused by bullets or explosives that are usually treatable with the help of a piece of cloth and some alcohol. The aesthetic realism at play in videogames takes multiple forms and all of them are inherently selective — the features they realistically represented are contingent upon the choices of designers and developers (Pötzsch, 2017). Therefore, the term needs to be disentangled further to become a useful tool for analytical purposes.

In his book *Gaming: Essays on Algorithmic Culture*, Alexander Galloway (2006, p.84ff.) introduces three different types of aesthetic realism. He distinguishes between realism-in-narrative, realism-in-images, and realism-in-action and associates each with one particular artform. Literature, he posits, is the most typical form of expression for narrative realism, while visual art, photography and film most significantly draw upon image realism (and, as I would add, in the latter case also sound-realism). In contrast, argues Galloway, videogames are the artform that is most heavily invested in action-centered realism — it enables the accurate and authentic replication of choice alternatives and interaction with worlds and characters. Galloway acknowledges that all artforms regularly tap into all three forms of realism but maintains that some are more salient to specific media than others. As such, realist games will draw upon both narrative devices and audio-visual techniques to invite impressions of accuracy and authenticity but are specifically defined by their capacity to enable players to act in, and interact with, artificial worlds and characters in a believable manner.

	Accuracy	Authenticity	Galloway
Story	In line with actual events featuring real characters	In line with conventional beliefs about actual events and real characters; coherence with conventional story-schemata	Realism-in-narrative

	Accuracy	Authenticity	Galloway
Game world	Coherence with real-world object physics and social complexity; photorealist presentation	Coherence with earlier representations of object world and social world, and/or with widely shared beliefs about real world issues	Realism-in-images (and in-sound)
Mechanics	Paradigm of possible in-game actions mirrors real-world complexity and variability	Paradigm of possible in-game actions adheres to conventions and appears to mirror aspects of real-world performances	Realism-in-action

Table 1. Game realism: Authenticity and accuracy at the levels of story, world, and mechanics.

By extending the term realism to more than photorealist surface appearances, the question regarding the politics of representation become relevant to game studies. What is at stake in claims of certain game titles to be accurate reflections of the world as it actually is?

To account for such issues, Galloway (2004, 2006) distinguishes game realism further into "realisticness" and "social realism" as two main directions. The former captures aesthetic means used in games to model real events along the lines of narrative, audio-visual representation and actions to invite various impressions of realism in players (see Malliet, 2007), whereas the latter inserts a political agenda in that it maintains that realist games should serve as "extensions of real-life struggle" (2006, p.78) facilitating progressive change. Through this move, Galloway adopts the ideals of 19th century literary realism and asserts that games should aspire to be more than "mere realistic representation" of surface phenomena (realisticness) and instead should "reflect critically on the minutiae of everyday life, replete as it is with struggle, personal drama, and injustice" (social realism). By these means, he asserts a political role of realist cultural expressions and focuses the discussion on the various ways through which perceptions, actions, and understandings afforded by games can relate to and feed back

into real world politics and social struggles. This political aspect of social realism is missing in Malliet's (2007) early framework but included in later publications (see for instance Ribbens and Malliet, 2010) even though with a less direct activist stance.

In their study of elements of the military first-person shooter, Breuer, Festl, and Quandt (2012) offer a different framework that merits brief mentioning. The authors distinguish between three forms of realism that roughly align to Galloway's three-partite distinction introduced above. The authors posit a ''representational'', ''behavioural'', and ''narrative realism'' (p. 218) and connect the concepts to aspects of photorealist verisimilitude, game mechanics, and storyline respectively. I opt for Galloway's concepts because he explicitly applies them to a wider range of game genres and, more importantly, because his concept of social realism directs attention to the various political and ideological issues at stake in debates about realism in games.

Filtering the Real World Through the Game Form: Selective Realism

Every representation—realist or otherwise—is inherently selective; it is based on often-implicit decisions about what to include and what to exclude and about whose perspective to align to. These decisions are inherently normative and therefore have political implications. As Judith Butler (2009, p.70) correctly observes regarding photography, "[e]ven the most transparent of documentary image is framed, and framed for a purpose, carrying that purpose within its frame and implementing it through the frame". What is valid for classic (audio-)visual representational media such as photography, film, and television, also retains its validity in relation to realist games and the ways this medial form configurates game environments and frames players abilities to interact with and partly reconfigure both their surroundings and their relations to other players and game characters. This simulation aspect of games as an action-focused artform is predisposed by certain developer choices and emerges as inherently selective and therefore political. Only certain variables are deemed as salient and therefore included and only specific processes are modelled while

others remain unattended to.

Realist videogames carry with them aspects of both simulation and representation and claims to accuracy and/or authenticity can be based on either of these or on both with focus on story, game world, or mechanics (Galloway, 2006; Mochocki, 2021). According to William Uricchio (2011, p.333), a simulation is "a machine for producing speculative or conditional representations". Arguing in a similar direction, Ian Bogost (2006, p.98) asserts that a simulation "is a representation of a source system via a less complex system [that] informs the user's understanding of the source system in a subjective way''. Similar to representational media critiqued by Sontag (2003) and Butler (2004, 2009), simulations always imply a frame—they are inherently selective and decisions about what to exclude and what to include and how to pre-dispose player performances become inherently political once we see supposedly realist games as embedded in the struggles and minute details of everyday life posited as a guiding principle by Galloway's (2006) notion of social realism.

Realist games function as simulations that make certain aspects of a preceding reality in varying degrees of complexity tangible to players. Players' capacities to explore and reconfigure simulated worlds is dependent upon the mechanics and audio-visual frames that tacitly guide and limit what they can hear, see, and do. The resulting constrained perceptions and performances produce "conditional representations" (Uricchio 2011) that influence understandings of a respective source system "in a subjective way" (Bogost 2006). In the following, the case of military shooters set in the past, the present, or the near future conflict scenarios will serve to briefly illustrate how such subjective conditionalities entail political implications that merit critical attention.

As Pfister (2020) has observed many times, the presentation of history and in particular war history in games is a process infused with politics and ideology. In a study on how photorealist first- and third-person shooters stage violent conflict (Pötzsch 2017, p.159), I have offered a similar argument and identified 4 filters at the levels of story, game world, and mechanics, that tacitly predispose player perceptions and performances in the scenarios played through in the allegedly realist genre. A *violence filter* reduces effects of

warfare to injuries to combatants' bodies and excludes issues such as collateral damage, rape, and other forms of terrorizing civilians even though these are thoroughly documented components of wars. A *consequence filter* systematically de-emphasizes the detrimental long-term effects of warfare on societies, economies, cultures, and individual psyches pretending that once the killing stops all sufferings and hardships are over. A *character filter* limits available perspectives and performances to those of white male combatants marginalizing alternative experiences of e.g. civilians, women, children, non-hegemonic males, non-white ethnicities, and others. Finally, a *conflict filter* implies violence and war as the only viable options for conflict resolution and excludes non-violent alternatives such as negotiation, retreat, or surrender. In the study, I argue that the "selective realism" of the genre limits perceptions of and performances in the simulated settings and that these tacit constraints serve to systematically invite the adoption of bellicose and militarist ideological positions before I offer examples for games problematizing these filters.[1]

In public discourse, realism in games is often understood as implying a verisimilitude between game and the real world at the level of object physics and audio-visual presentation. As such, development puts a lot of weight on game engines that can render complex physical settings in an accurate manner often tacitly conflating an increase in audio-visual fidelity with enhanced truth-value. Once we extend the perspective to a form of social realism as advocated by Galloway (2004, 2006) or to the variety of factors predisposing player perceptions of realism identified by Malliet (2007) and Ribbons and Malliet (2010), however, it becomes apparent that accuracy at the level of surface appearances not necessarily implies accuracy at other, and more salient, dimensions of conflict and war such as summarized in the filters described above. The politics of realism in games is essentially a politics of selection—a selection that decides which elements are represented and become part of the simulated environment, which are marginalized and excluded, and how possible player interactions with these are predisposed.

Conclusion

Cultural representation is an inherently political field (see e.g. Hall, 1997). The way we see, imagine, and culturally frame one another has influence on individual and collective responses to such others. In these processes, claims to the realism of certain representations or simulations are political acts aimed at charging certain statements with political valence and power. Often claims to accuracy and authenticity remain unspecific regarding the type of realism invoked. Even though selectivity is a key aspect of a realist aesthetic, it is seldom acknowledged as such and often brushed over. This entry has attempted to disentangle the complexities of realism in videogames by offering a series of terms that can facilitate future studies on how videogames can, and ought to, reflect the complex realities we live in.

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1. Of course, the frames set up at the level of narrative and game mechanics can be subverted in and through practices of critical or counter play (Flanagan, 2009). To state that the formal devices at the levels of narrative, game world, and mechanics systematically invite a certain perceptions and ideological positions and that this systematic political cuing will predispose reception by passive mass audiences does not imply the claim that all audiences are determined by 'textual' structures regardless of specific contexts of reception.↩

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