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Narrative in Video Games

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Synonyms

Ludonarrative; Video game narrative

Definition

Today, no generally accepted definition of video game narrative exists. The academic discourse has pointed out ontological and phenomenologi-cal differences to more traditional forms of narrative, and therefore, the relationship to established scholarship in narratology is complex. In the field of video game studies, narrative aspects of video games are often described in contrast to rule-based aspects. A wider scan of related fields reveals additional positions. Ludonarrative is variously understood as a structural quality of the video game artifact, as an experiential quality during the experience of a video game, or as a high-level framework to understand video games. Finally, a number of scholars emphasize the difference to traditional manifestations and there-fore work towards specific theories of video game narrative. While all legitimate by them-selves, these different usages of "narrative" in the context of video games are often not clearly distinguished in professional or academic discourse and can lead to considerable confusion. It is therefore essential to scrutinize the particular context and underlying assumptions when approaching the topic. This state of affairs puts particular responsibility on scholars to identify the origins of their understanding of video game narrative and define their particular usage of the term in contrast to earlier applications.

Introduction

Video game narrative has been the topic of much scholarly and professional debate (see "Narratology vs. Ludology debate" below). Both academics and practitioners are divided on the potential and scope of narrative in regards to video games. A foundational issue of these perspectives is the lack of a shared understanding of "narrative" – the term might be variously used to mean an ornamental function to provide context (Juul 2005), a structural quality of the video game artifact (Fullerton et al. 2008), an experiential quality during the experience of a video game (Pearce 2004; Salen and Zimmerman 2004), or a high-level analytical framework to understand video games (via textual analysis (Fernández-Vara 2014)). Each of these perspectives represent valid approaches; however, implicit definitions of "narrative" are prevalent in academic and professional discourse on video game narrative,

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and thus the particular meaning used is often not readily accessible. The topic therefore needs to be approached with particular scrutiny to carefully unpack the underlying assumptions of a given academic paper, professional publica-tion, or audience reaction. In other words, one scholar's "experience dimension" might be another scholar's "narrative" and one developer's "level design" might be an audience member's "narrative." As a generally accepted definition of "narrative" (and the related term "story") seems elusive for the time being, scholars and professionals working on video game narrative are highly encouraged to make their respective definitions and underlying assumptions explicit.

Analytical Perspectives: Understanding Video Game Narrative

Early Perspectives

Early scholarship on video games understands narrative as a natural ingredient, for example, the first PhD thesis on the topic in 1985 by M.-A. Buckels analyses the first text adventure as a "Storygame": Interactive Fiction: The Computer Storygame "*Adventure*" (Buckles 1985). Later publications by Brenda Laurel (Laurel 1991; Laurel 1986) also center on narrative. Theorists of Hypertext literature such as Jay Bolter (Bolter 1991) and George Landow (Landow 1992), intent on using computers as means to implement post-structuralist ideas of narrative, developed analytical frameworks and introduced sophisticated concepts like that of variable "contours" (Bernstein et al. 1992) – narrative forms that enable their own reshaping. It was however Janet Murray's seminal book *Hamlet on the Holodeck. The Future of Narrative in Cyberspace* (Murray 1997) that alerted a wider audience of the narrative potential of the digital medium. The essence of Murray's book is not in the vision of the holodeck itself (a frequent misunderstanding), but instead in the development of two sets of related and influential analytical categories for interactive forms of narration: the affordances (participatory, procedural, spatial, and encyclopedic) and aesthetic qualities (immersion, agency, transformation) (cf. (Harrell and Zhu 2009; Mason 2013; Tanenbaum and Tanenbaum 2015; Wardrip-Fruin et al. 2009) for further developments of these categories and (Roth and Koenitz 2016) for an application in user experience research).

The "Narratology Vs. Ludology" Debate

This academic debate is foundational for the field of games studies and one of its main underly-ing assumptions, that of a dichotomy between dynamic, rule-based games and static, immutable narratives. This perspective featured prominently in the inaugural issue of the journal *Games Studies* (gamesstudies.org) (Aarseth 2001; Eskelinen 2001; Juul 2001). The debate encapsulates two separate topics, the question of video games as a medium for narrative and the applicability of analytical methods from the field of narratology to computer games. It started in 1999 when Jesper Juul proclaimed: "The computer game is simply not a narrative medium" (Juul 1999), a position Juul later modified (Juul 2001); in the same year, Gonzala Frasca emphasized the need for ludology in contrast to narratological analysis. Furthermore, he proposed the term "ludology" to mean the "discipline that studies game and play activities"(Frasca 1999). Frasca later defined games as "simulations" with distinct rhetorical possibilities in contrast to narratives (Frasca 2003a) (cf. Bogost's (2007) further development of this perspective).

The pioneering ludology scholars in particular directed their criticism against Janet Murray and Henry Jenkins. In Murray's case, it was her analysis of *Tetris* as a narrative (of an overwhelming onslaught of tasks in contemporary society) in *Hamlet on the Holodeck* (Murray 1997) that provided a particular target for their critique, and in the case of Henry Jenkins it was his understanding of transmedia narratives and of video game design as "narrative architecture" (Jenkins 2004). In that paper, Jenkins identifies a number of productive avenues for game narrative: *evocative*, *enacted*, *embedded,* and *emergent* narrative. *Evocative* narratives reference prior work, for example, a Star Wars Game that refers to the movie series. *Enacted* narratives allow the user to act out roles

within an existing narrative universe, for example, as a hobbit in a Lord of the Rings game. *Embedded* narratives convey information by means of narratively meaningful objects and encounters within the game space. Finally, Jenkins describes *emergent* narratives in games like *The Sims* that provide players with the tools to construct stories of their own.

The debate continued at conferences and publications and is most visible in the dialogic form of the electronic version of the edited collection *First Person* (Wardrip-Fruin and Harrigan 2004), for example, Eskelinen's response (Eskelinen 2004) to Jenkins (2004) or Aarseth's (2004) response to Murray's article (2004). After 2004, the intensity of the debate decreased considerably and Murray attempted to put an official end to it in a keynote speech at the 2005 DIGRA (Digital Games Research Association) conference (Murray 2005).

However, the underlying issues cannot be considered resolved. Neither Murray nor Jenkins have ever made claims to be narrative theorists and are better understood as "narrative expansion-ists" with a purpose to expand our understanding of narrative phenomena (respectively of interac-tive digital narratives and transmedial narratives). Indeed, Gonzala Frasca's thoughtful contemporary analysis of the debate "Ludologists love stories, too. Notes from a debate that never took place" (Frasca 2003b), rejects the label of narratology for Murray and Jenkins (cf. for actual narratological positions (Ryan 2006; Ryan 2001) or (Neitzel 2014)). Frasca instead issues a challenge to discuss a third, "narrativist" position, which he associates with attempts to create interactive experiences based on literary theory (e.g., Mateas 2001). This interesting perspective of a "third position" has yet to receive sufficient attention, although Eskelinen applies the term later to refer to Murray, Jenkins, and Ryan (Eskelinen 2012). In addition, both the main protagonists (e.g., Aarseth (2012, 2014), Murray in the new edition of *Hamlet on the Holodeck* (Murray 2016)) and additional scholars (e.g., (Calleja 2013, 2015; Ryan 2006; Simons 2007)), continue to reference and discuss the original positions. Eskelinen's recent project of a more universal theory of narrative (Eskelinen 2012) merging narratology (mainly Genette (Genette 1980)) with Aarseth's earlier work on cybertexts (Aarseth 1997) attempts an integration of narrative and games, yet its own persistent distinction between digital and nondigital forms points to the limits of an approach that insists on a media agnostic position (cf. Nausen's warning about "media blindness" (Nausen 2004)). Eskelinen's text so far had limited impact on the ongoing debate.?? Conversely, the editor of a recent collection of essays (Kapell 2015) reiterates Frasca's argument that the debate truly never took place and that the questions the debate poses are still unresolved (also see (Mukherjee 2015)).

Therefore, the foundational dichotomy is still influential in video game studies and related fields and by extension in the video game industry, as can been seen in the related term "ludonarrative dissonance" (Hocking 2009) meant to describe a situation of supposed conflict between gameplay and narrative. An example of ludonarrative dissonance would be a character that is portrayed as mild-mannered and considerate in the narrative and yet kills hundreds of virtual characters in the gameplay.

In retrospect, the debate can be seen as productive as far as the development of the study of nonnarrative aspects of games are concerned. However, by entrenching the problematic dichotomy between "game" and "narrative" (maybe most prominently in Juul's book *Half-Real* (Juul 2005)), interest in the understanding of narrative aspects of video games became marginalized in video games studies and consequently, development of specific analytical perspectives has languished. In that sense (and in a somewhat ironic twist) the rejection of narratology has created an analytical void that has more recently been filled by perspectives based in classical (e.g., textual analysis (Fernández-Vara 2014)) and postclassical narrative theory (e.g., Ensslin 2014). One issue with applications of literary-based theory – for example, the reframing of *fabula* and *syuzhet* in a recent paper by Wood (2017) – is that it applies (in this case) structuralist narratology to video games without properly scru-tinizing the respective underlying assumptions. This is exactly the danger Aarseth has been warn-ing about: "Do theoretical concepts such as

"story," "fiction," "character," "narration," or "rhetoric" remain meaningful when transposed to a new field, [or are they] blinding us to the empirical differences and effectively puncturing our chances of producing theoretical innovation?" (Aarseth 2012). Similarly, Timothy J. Welsh wonders about the influence of established frameworks and asks in a review of Ensslin's book, whether video game narrative has "'matured', as Ensslin suggests, on its own terms," or rather started to produced artifacts that "sufficiently resemble already established artistic practices and critical traditions" (Welsh 2015).

Dissenting Voices

During the main debate Marie-Laure Ryan argues against the rejection of narrative analysis: "The inability of literary narratology to account for the experience of games does not mean that we should throw away the concept of narrative in ludology" (Ryan 2001). She instead proposes to create a new narrative modality for games, in addition to mimetic (enacted) and diegetic (described).

In 2007, Jan Simons offers a pronounced critique of the ludological position: "[…] their arguments against narrative and narratology have often been unnecessarily unconvincing." Simons deems the ludologists' arguments "ideologically motivated rather than theoretically grounded" (Simons 2007). In particular, this scholar rejects the distinction between narrative and rules as disproven by emergent narrative in games like *The Sims* series (Wright 2000). Simon's alternative project is in a connection between narrative studies and mathematical game theory (Neumann and Morgenstern 1953). To enable this connection, Simons downplays the importance of the essential category of interaction in video games, of control by the player, and calls it "merely a matter of perspective" already covered in narratology by reader-response theory (Iser 1979). Yet, the kind of cognitive engagement reader-response theory identifies (how readers actively engage with immutable texts in their minds) is not in the same category than the planning and conscious decision-making afforded by video games, where players control the course and outcome (cf. (Koenitz 2010a)). In addition, Simon's focus on outcomes is forced and ignores the fact that games are about experi-ences, about being "in-game" (cf. (Calleja 2011)). Furthermore, the application of procedural generation to games (e.g., in *No Man's Sky* (Hello Games 2016), a space exploration game in which new planets are procedurally generated) means that some games might no longer have an ending and instead offer infinite gameplay. Yet, even in finite games, players' main focus is not on the ending, but on the experience. To describe a video game from the perspective of the ending means to only incompletely reflect on a 30+ hour commitment and the enjoyment of the in-game experience.

Parallel Developments

Several important contemporary developments in narratology and related fields happened simultaneously with the debate and were not fully reflected in it, most prominently the publication of David Herman's *Story Logic* in 2002. This book marked the "cognitive turn" in narratology, a change from a focus on the analysis of narrative as an aspect of specific forms to an understand-ing of narrative as a "forgiving, flexible cogni-tive frame for constructing, communicating, and reconstructing mentally projected worlds" (Herman 2002) – a flexible definition that can also be applied to video game narrative. Indeed, Marie-Laure Ryan (2006) criticizes the ludologists for basing their critique of narratology on outdated positions (an argument repeated by Calleja (2009)), especially Prince's restricted (and later revised) definition in the first edition of the *Dictionary of Narratology* (Prince 1987) which foregrounded diegetic modes of narrative (the verbal representation of events - "telling") requiring the existence of a narrator, while seemingly rejecting mimetic modes of narrative (the direct presentation of speech and action – "showing"). Ryan therefore rejects the notion of the incompatibility between narratology and ludology and proceeds to locate game narrative with *paidia,* referencing Caillois' (1961) distinction between two kinds of play: *paidia* and *ludus* (essentially free-form and rule-based). This means that computer games which invite make-believe activity – like *The Sims* – can be described as narratives

regardless of strong ludic elements. However, Ryan ultimately does not cross fully into the new territory of interactive video game narrative, as she stays convinced that "interactivity is not a feature that facilitates the construction of narrative meaning" (Ryan 2006).

Crossing Ryan's border, other scholars have worked to understand interactive forms of narration and to further develop the analytical arsenal. For the sake of space, the following section can only provide a rough overview of this work and does not claim to be extensive. Additional material can be found for example in the proceedings of the ICIDS (https://link.springer.com/conference/icids) and AIIDE (https://dl.acm.org/results.cfm?query=AIIDE) conferences as well as the INT (http://www.di.unito.it/~rossana/INT10) workshop.

For example, drawing on traditions in semiotics along with poststructuralist and pragmatist narrative theories, Gabriele Ferri (2007a, b, 2013, 2015) develops an "epistemological common ground" (Ferri 2015) to support a multidisciplinary analysis of video game narratives and other forms of interactive digital narratives (IDN). In particular, Ferri tackles the issue of textuality under interactive conditions and provides a model ("interactive matrix") for the encounter of player and computational system.

In 2011, Clara Fernandez-Vara also applies a semiotic perspective – based on Peirce (1992) – to pick up Jenkin's thread of *embedded* narrative (Jenkins 2004) and further develop it as "indexical storytelling" (Fernández-Vara 2011) (in the Peircian sense of indexical signs) through mean-ingful objects, encounters, and traces left by other players.

In 2001, Michael Mateas develops a poetics for interactive drama (Mateas 2001) extending Brenda Laurel's earlier work (Laurel 1991) in connection to Murray's affordances and aesthetic qualities (Murray 1997) as a theoretical basis for this later narrative artificial intelligence (AI) projects. Mateas' perspective is referenced by Frasca's (2003b), but little further discussion occurred.

Working on narrative in the related field of virtual environments, Ruth Aylett develops a theoretical position on emergent narrative and the problem of the "narrative paradox" (Aylett 2000) (also see the related article on "Narrative Designer's Dilemma" in the cross-references section below) – the conflict between narrative coherence and interactor control. In 2003, Ruth Aylett and Sandy Louchart published a "Narrative Theory of Virtual Reality," which explicitly treats as VR as a narrative medium (Aylett and Louchart 2003). Later, they collaborate on extending narrative theory to cover emergent narrative in AI-based experiences and video games (Louchart and Aylett 2004).

In addition to Aylett, Louchart, and Mateas, a range of additional AI researchers have developed analytical perspectives on narrative alongside their work in applying AI to various forms of IDN (Cavazza et al. 2008; Cavazza and Pizzi 2006; Cavazza and Charles 2002; Riedl 2010; Riedl and Bulitko 2012; Riedl and Young 2006; Bates 1993; Mateas and Stern 2005; McCoy et al. 2009; Saillenfest and Dessalles 2014)).

Design-Based Perspectives

The perspective of game developers towards "narrative" has been described as "pragmatic" (Ryan 2006) in its flexible application of various narrative models and concrete design methods to create video game narrative. The available literature is focused on a traditional understand-ing of narrative, influenced by cinematic ap-proaches and screenwriting (Field 1979) and prominently features concepts like the "Hero's Journey" (Campbell 1949) (applied for example in Ernest Adams's *Fundamentals of Game Design* (Adams 2010)) or the "story arc." In her book *Game Design Workshop* Tracy Fullerton writes: "[...] the tension in a story gets worse before it gets better, resulting in a classic dramatic arc [...] This arc is the backbone of all dramatic media, including games" (Fullerton et al. 2008). This traditional understanding of narrative is fore-grounded also in an opinionated column in the same book by game designer Jesse Schell, author of another influential book on game design (Schell 2008). In particular, Schell denounces the idea that the interactive aspect of games have a fundamental influence on narrative: "The idea that the

mechanics of traditional storytelling, which are innate to the human ability to communicate, are somehow nullified by interactivity is absurd." (Fullerton et al. 2008) A critique of Schell's perspective can start with the realization that his notion of "traditional storytelling" is based on a narrow, colonial perspective of narrative that ignores many non-European varieties (cf. (Madej 2008)) with very different mechanics, for example, multiclimactic, cyclical African oral storytelling forms (Jennings 1996), Asian structures that lack a tension arc (Kishotenketsu) (Koenitz 2016), or forms of participatory theater like Arturo Boal's "Theatre of the Oppressed" (Frasca 2001). Schell's assertion is therefore untenable and points again to the fundamental problem of totalizing and implicit assumptions (in Schell's case that of a universal "mechanic of traditional storytelling") in the discourse about video game narrative.

During the Narratology vs. Ludology debate, Celia Pearce argues for a relocation of narrative in video games as an element of the player experience. She develops a set of categories to describe narrative aspects: *Experiential, Performative, Augmentary, Descriptive, Metastory,* and *Story System* (Pearce 2004). For her, the *Experiential* aspect always exists, while the other ones depend on the specific implementation in a particular artifact. Pearce' foray into the experiential dimension is significant, as she opens up a productive avenue to analyze video game narratives. However, her framework carries the danger of understanding all in-game experience as narrative. Conversely as Calleja reminds us (2013) referencing Aarseth (2004) if everything is narrative, nothing is.

The experiential perspective is also a cornerstone of Salen and Zimmerman's game design book *Rules of Play*. They write: "our intention is not just to arrive at a formal understanding of narrative (What are the elements of a story?) but instead an experiential one (How do the elements of a story engender a meaningful experience?)" (Salen and Zimmerman 2004). For these authors, the main question is how to best design "narrative play" (ibid). A decade later, Teun Dubbelman makes this perspective even more concrete in his analysis of "Narrative game mechanics" (Dubbelman 2016).

Specific Approaches

Instead of defining video game narrative within the framework of traditional narratological analy-sis and forms, Calleja (2013, 2015) and Koenitz (2015, 2010b) argue for the development of a specific theory of video game narrative (for Koenitz as part of a wider understanding of interactive digital narrative (IDN) phenomena like interactive documentaries, electronic literature, artistic installations). Calleja contends that the lack of progress in understanding video game narrative is due to the overly reliance on "classical notions of narrative developed for non-ergodic media such as film or literature" (Calleja 2013). He therefore calls for a re-conceptualization of narrative that takes into account "the cybernetic nature of games and thus factor in the experiential dimension of the human as well as the formal properties of the game." (ibid). Conversely, Koenitz references Roy Ascott's theory of cyber-netic art (Ascott 1968, 1967, 1964) as a basis for his SPP model (System, Process, Product) (Koenitz 2015, 2010b). The triad of System – Process – Product (digital artifact, user interaction and resulting output) bridges the gap between artifact and instantiated narrative (cf. Montfort (2005)). By understanding the content of the sys-tem as a "protostory," the narratological category of "story" is relocated with particular instantia-tions (products), while the analysis of the process (as userly performance (cf. Knoller (2012))) can be given proper analytical space.

Cross-References

- Hypermedia Narrative as a Tool for Serious Games
- Narrative Design
- Narrative Designer's Dilemma, Context vs Story
- Story Telling in Virtual Reality

- Virtual Reality as New Media
- Visual Novel

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