



“The Link Out”

Towards a Theory of Epiphany in Digital Games

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Abstract. In this paper, we take up the subject of epiphany in digital games, inspired by Espen Aarseth’s claim in *Cybertext* that epiphany serves as one half of a “pair of master tropes [that] constitutes the dynamic of hypertext discourse: the dialectic between searching and finding typical of games in general”. This article investigates the continuities and discontinuities between the literary epiphany and the hypertext epiphany, and subsequently theorizes the different types of epiphanies that occur in various digital games. We argue that epiphany in digital games is experienced by the player instead of the fictional protagonist, and that this experience can be brought about by ludic or narrative elements (making either a ‘ludic’ or a ‘narrative epiphany’), or by the collaboration of those elements (a ‘ludonarrative epiphany’). In addition, we distinguish between epiphany on a ‘local’, meaning small-scale and context-specific, and a ‘global’ scale, pertaining to the entirety of the game system. We conclude that an improved understanding of epiphany in digital games contributes to the maturation of digital games as a medium, since it allows both designers and scholars to better understand the medium-specific ways in which games can evoke certain feelings and emotions within their players.

Keywords: Epiphany · Aporia · Digital games · Ludonarrative
Ludic system · Narrative system

1 Introduction

“The epiphany [...] is the sudden revelation that replaces the aporia, a seeming detail with an unexpected, salvaging effect: the link out. The hypertext epiphany, unlike James Joyce’s ‘sudden spiritual manifestation’ [...] is immanent: a planned construct rather than an unplanned contingency.” - Espen Aarseth, *Cybertext* [1].

Several questions arise from the second sentence in Aarseth’s statement. Who is the ‘receiver’ of the epiphany, the protagonist/avatar or the reader/player? How can a ‘planned construct’ simultaneously have an ‘unexpected, salvaging effect’? How different is the ‘immanent’ hypertext epiphany from its Joycean literary counterpart, which is not only spiritual but also refers to a “secular experience” [3]? None of these matters are further specified in *Cybertext*, and Aarseth’s subsequent claim that aporia

and epiphany serve as a “pair of master tropes [that] constitutes the dynamic of hypertext discourse: the dialectic between searching and finding typical of games in general” [1] has since gone undiscussed in game scholarship, with one exception. In an online article, Katherine Hayles notes that “searching for keys to a central mystery” is a common trope in electronic literature such as hypertexts, inherited from digital games [10]. This argument is dismissed by Aarseth himself, who proceeds to disconnect hypertext and games entirely: “The real father of electronic literature is not computer games, but the computer interface itself. And the result, in the form of hypernovels [...] is no hybrid, it is literature” [2]. This provocative stance is at odds with his equally provocative, though far less inflammatory argument in *Cybertext*, and the reasoning behind this change of heart is never fully explained. We seek to pick up the thread of epiphany in cybertexts by studying and clarifying its occurrence in one type of cybertext: digital games. We investigate the continuities and discontinuities between the literary epiphany and the hypertext epiphany, and subsequently theorize different types of epiphanies that occur across three digital games.

2 Epiphany in Historical Context

In this paper we employ the notion of epiphany as it is defined by the Oxford Dictionary: “A moment of sudden and great revelation or realization”. This definition is the product of the distance created between the original divine connotations of the word and its purely etymological origin through its modern utilization. The word originates from the Greek ἐπιφάνεια, *epipháneia*, which is a combination of ἐπι and φαίνειν, that roughly translates to ‘manifestation’ or ‘appearance’. It was primarily used to describe the appearance of a deity to a worshipper [15]. The word came into use in Christian circles, among which it delineated specifically the manifestation of “God’s presence within the created world” [3]. Later, the epiphany became an important aspect of nineteenth and twentieth century literature, wherein this specific form took a more secular approach to the experience of epiphany as a hidden divine aspect becoming manifest. William Wordsworth described sublime revelations when observing natural phenomena, which some scholars have now come to understand as epiphanies [7]. James Joyce’s description of this form of epiphany within the semi-autobiographical *Stephen Hero* lays the foundation for a now fundamental understanding of the concept within literary studies (cf. [5, 14, 27]). The titular character describes how an ordinary object had revealed its true self to him through a sudden flash of revelation: “Its soul, its *whatness*, leaps to us from the vestments of its appearance. The soul of the commonest object, the structure of which is so adjusted, seems to us radiant. The object achieves its epiphany” ([13]; emphasis ours).

What makes this definition particular is that Joyce disconnects the epiphany from its originally divine sense and focuses it rather on the mundane aspects of life, and how gaining a new understanding of these aspects is close in relation to this divine inspiration. Irene Hendry explains the three aesthetic principles bound to the epiphany as Joyce and other modernist writers use it: *integritas*, *consonantia*, and *claritas* [11]. *Integritas* refers to the observation of a single thing as *one* thing; *consonantia* is the subsequent perception of the thing as “complex, multiple, divisible, separable, made up

of its parts and their sum”. Lastly, *claritas*, or ‘radiance’, is connected to the notion of *quidditas*, realizing the ‘whatness’ of a thing:

This is the moment which I call epiphany. First we recognise that the object is one integral *thing*, then we recognise that it is an organized composite structure, a thing in fact: finally, when the relation of the parts is exquisite, when the parts are adjusted to the special point, we recognise that it is that thing which it is. ([13]; original emphasis).

Finally, Scott Berkun takes a decidedly more pragmatic approach and describes the epiphany as the final piece of a puzzle, which completes the picture and allows for a clear understanding of what is (re)presented. He describes the action of fitting the final piece as feeling different than those before, “in comparison to the simple action of fitting [them] into place, we feel the larger collective payoff of hundreds of pieces’ worth of work” [6]. Berkun also feels that the work that came before is just as important to the moment of epiphany as the moment itself: “the last piece isn’t any more magical than the others, and it has no magic without its connection to the other pieces” [6].

3 Epiphany in Digital Games

Unlike the modern literary epiphany, which is experienced by a character within the fiction of the text, the hypertext epiphany as Aarseth theorizes it appears to be experienced by the player through interaction with complex, responsive digital systems. Berkun’s discussion of epiphany as the ‘collective payoff’ of multiple elements working in conjunction with each other, then, appears to stand closer to Aarseth’s conception of the ‘immanent’ hypertext epiphany than the literary epiphany. Similarly to hypertexts, digital games as interactive systems are geared towards incorporating feedback from the player into meaningful outputs. Subsequently, the medium-specific interactive modalities of digital games are constructed to, when combined with each other, afford an epiphanic experience for the player. In other words, the payoff experienced by the player is manifested by a sudden understanding of the relationship between the player’s visible and invisible interactions with these complex systems and these systems’ interactions with each other, all of which are necessarily planned, designed and constructed. Accordingly, epiphany in hypertexts and digital games is *immanent* – non-transcendent, bounded – precisely because it is contained within these interactive systems. Jonathan Blow’s *The Witness* [26], for example, explores this notion through environmental storytelling and puzzles. In this game, epiphanies are not derived from arbitrary actions and symbols, but from instantaneous awareness of the ‘whatness’ of the game’s simulated behavior and environments [4].

The sense of *aporia* in such a puzzle game, where the player is ‘stuck’, is replaced by an epiphany when “suddenly something happens in your mind where you understand exactly what [the problem] was about, what was going on” [4]. Aarseth places the hypertext epiphany in dialectical opposition to *aporia*, defined by Nicholas Rescher as “any cognitive situation in which the threat of inconsistency confronts us” which is resolved only by “a plausibility analysis that enables the chain of inconsistency to be broken” [23]. For digital games and hypertexts, the ‘threat of inconsistency’ that is *aporia* is built through the player’s interaction with, and understanding of, ludic and

narrative elements and is resolved by means of a sudden realization of the internal logic of these elements, the moment that breaks the perceived inconsistency: the digital game epiphany. The player's own pre-existing literacies of digital, hypertext, or game systems and interfaces (also known as "ludoliteracy" [28]) may aid in avoiding a state of aporia, but developers and designers can also exploit this knowledge to subvert player expectations and encourage aporetic moments, which in turn primes the player to search for an epiphanic moment that will reinstate consistency to their understanding of their interactions with the system. This is not to say that the aporia-epiphany dialectic is connected to notions of player skill and mastery: an aporetic state is not necessarily an indication of low player skill, and epiphany is not the same as attaining 'full mastery' of a game system – though understanding a system's 'whatness' may be an important step towards it.

In placing the player as the subject of epiphany, the object of epiphany must be found somewhere within the game, that is, in the holistic interrelation of the components of these phenomena. From this perspective, Aarseth's determination that the hypertext epiphany leads to an 'unexpected, salvaging effect' for the player can be qualified by looking at the aspects of a hypertext/game that factor into the epiphany that is eventually experienced by the player, namely the ludic and narrative elements.

Ludic and Narrative Systems

Our apparent separation of ludic and narrative elements requires some further elaboration. The surface-level systems that the player consciously interacts with are the ludic and narrative systems. Narrative systems in digital games share some similarities with other media, such as film, the book/novel, and theatre, particularly when the narrative system does not meaningfully interact with or map onto other systems in the game [12, 20, 24]. We see narrative systems in digital games as being in line with Hartmut Koenitz' theoretical framework for interactive narrative design, containing elements such as the environment, assets, settings, and narrative vectors [16]. Mechanics that are typically framed as part of the narrative system include dialogue navigation, diegetic user interfaces, audiovisual representations; in other words, any mechanic which explicitly serves to establish narrative elements such as characters, events, etc. Bearing this in mind, we identify the ludic system as those mechanics which the game does not frame as having 'narrative implication': this frequently (but not always) includes spatial navigation and movement, non-diegetic user interfaces, and combat systems, among others. When mechanics are not given immediate or overt narrative meaning, they qualify as part of the game's ludic system.

Ideally, both the ludic and narrative systems are intertwined to form a single coherent game system; this is the case in all three case studies we address in Sects. 3.1 and 3.2 of this paper. Unfortunately, many games tend to frame the ludic and the narrative as separate systems that coexist (or sometimes even compete) in the digital game space – and indeed, for many digital games the story still serves as nothing more than a "narrative shell" [18] to contextualize their ludic system. This distinction we have made is highly arbitrary, as the ludic and narrative systems can and do overlap often enough. However, (academic) games criticism continues to draw similarly troubled dichotomies, mostly as a result of the yet-unresolved 'ludology versus narratology' debate – a fault Aarseth is not innocent of, either (cf. [2, 9, 17]). Given that

this discourse is so pervasive that it becomes nearly impossible to evade, we choose to adopt it with a critical lens, as it is still useful to pinpoint which aspects of a game system contribute to the epiphanic moment as it is experienced by the player. This typology enables us to analyze which specific elements of the game bring about epiphany for the player, be they framed narratively or ludically, or both. Let us be clear, however, that the primary purpose of our own ludic/narrative distinction is to be comprehensible within the current state of game scholarship, and that it does not stem from a belief that game and narrative are somehow two irreconcilably different concepts.

Local vs. Global Epiphany

As a second typological tool, this time to qualify the different ‘scales’ on which epiphany can take place, we propose the notion of ‘local’ and ‘global’ epiphany, inspired by Mateas and Stern’s distinction between “local” and “global agency” [19]. This idea is useful especially in the context of digital games as systems that players must engage with in order to eventually achieve a certain understanding of them. Thus, players can experience a sudden revelation that is “immediate, context-specific” and would shed light on a nearby, single element of the game’s system; a *local epiphany*. On the other hand, they may have an epiphany that would reveal the meaning, the true nature, the “global shape” of the system in its entirety; a *global epiphany*. Local epiphanies can be seen as suddenly realizing the solution to a single puzzle or problem, whereas global epiphanies provoke a more radical, grand-scale understanding of the system in which those individual problems are situated.

3.1 Ludic Epiphany in *the Witness*

The first type of epiphany that we discern within digital games is *ludic epiphany*. This form is specifically focused around the ludic system and the player’s understanding of it. A game that models this type of epiphany, both locally and globally, with particular clarity is *The Witness* by Jonathan Blow. In an interview with Leigh Alexander, Blow explains that one of the primary goals of *The Witness* was modeling the feeling of epiphany [4]. The environments in *The Witness* were crafted with purpose, every single aspect of the island that the players get to explore has an element of intentionality and simplicity. The goal of this is to have the player engage with a complicated system that does not obfuscate its particularities in the hopes of fostering epiphany, both locally and globally. First the player is taught the general idea that will govern the puzzles within the game, which are like small mazes that the player must solve by drawing the solution. The solution seems simple at first, when the mazes are just about finding the way to the exit while evading their many dead ends, but as the game continues, more and more different mechanics are added to the mazes that complicate this simple notion. *The Witness* directly addresses the player’s lack of knowledge by having them face a seemingly insurmountable challenge prior to providing the tools for a solution. It confronts the player with their own aporetic state before leading them to the puzzle sequences which are constructed in such a way that they lead the player towards a

moment of understanding, resolving their aporia. Quite like the puzzle piece that Berkun describes, the sequence allows for the moment of clarity, the moment of epiphany, to take place at any of these panels, but the subsequent puzzles are just as important to the player's growing understanding because they test the hypotheses formed by the player; "it's not [...] the magic moment that matters much, it's the work before and after" [6]. This creation of understanding comes from a local ludic epiphany, which happens on a smaller scale and it is particular to a single element of the ludic system (see Fig. 1).



Fig. 1. The pathway to epiphany [26]

However, *The Witness* also features a global ludic epiphany, a moment that shifts the player's understanding of the system to such a degree that they will regard the gameworld as if with an entirely new set of eyes. The puzzles in *The Witness* have a very particular shape, the starting point is bulbous and the end point tapers off, various aspects of the environment on the island that house these puzzles reflect this iconic shape. This at first might seem to be a purely aesthetic choice, but a few curious individuals might actually attempt to 'solve' these environmental puzzles and find out that indeed there is a whole secondary layer of puzzles hidden in plain sight. This realization completely recontextualizes the game's environments and changes the overall view that the player has on the game and its gameplay systems; this is a global ludic epiphany.

3.2 Ludonarrative Epiphany

We discern two additional types of epiphany in digital games: narrative epiphany and ludonarrative epiphany. *Narrative epiphany* within digital games can be equated with the hypertext epiphany which Aarseth discusses in *Cybertext*. He points out that within hypertext fiction the concept of epiphany indicates the revelation, or the understanding, of the narrative system itself [1]. That is, while the Joycean literary epiphany is understood as an aesthetic experience [11], within hypertexts, and especially digital games, narrative epiphany is not only an aesthetic experience which 'reveals the true nature of an object', but is also part of the structure of hypertexts themselves.

Progressing through a hypertext fiction is a matter of accepting aporia and pursuing epiphany, in the sense that the selection of one path would preclude following another one, so that one part of the story is ‘revealed’, while another remains ‘unknown’. However, the main difference between narrative epiphany and the other two is that the former does not require spatial navigation to engage with the narrative – after all, navigating a hypertext is merely the clicking/following of hyperlinks. Given that we consider digital games to be those cybertexts that involve not only such narrative navigation but also spatial navigation and interaction within that space, we do not discuss narrative epiphany in further detail here. Instead, we turn to *ludonarrative epiphany*, for which the narrative system and the ludic system are inextricably intertwined and together produce a great revelation/realization about the digital game as a whole. We discuss two games that model ludonarrative epiphanies in similar, yet different ways: *Oxenfree* and *NieR:Automata*.

Corollaries of Epiphany in *Oxenfree*

Oxenfree [21] is a graphic adventure game that models both local narrative epiphanies and global ludonarrative epiphanies. The story follows the events of a group of teenagers who go to an ostensibly inhabited island for a weekend party. Alex, the protagonist, accidentally opens a portal to another dimension that traps the teenagers in a time-loop. The goal of the game is to rescue Alex and her friends and bring them home. The game does not have many mechanics: it allows the player to walk across the different areas, to select dialogue lines – in this way, it is possible to affect the story, shaping it according to the player’s decisions – and to tune the radio with the singularities around the island. These singularities provide additional background information on the story, and it is precisely through them that players can experience a local narrative epiphany. Indeed, by collecting all these ‘bits of story’, they may realize what past events have led to the current situation. Thus, they find out that a woman called Maggie Adler was the cause of everything, when she inadvertently gave the order to attack a submarine loaded with nuclear weaponry that was sailing close to the shores of the island. This epiphany is related only to the narrative system of the game, and it does not affect its ludic elements. Rather, it permits the player to understand parts of the story, thus gaining a better comprehension of some aspects of the ongoing narration.

On the other hand, to understand *Oxenfree* in its entirety, the player has to experience a final, global ludonarrative epiphany. After Alex has rescued her friends and they are all on the ferry back to the mainland, she discusses the events that have happened and that would happen afterwards. However, at one point her voice starts glitching and suddenly she is talking about going to an island with her friends for a weekend party. It is in this moment that the game gives the player the “continue timeline” option (see Fig. 2). Thus, *Oxenfree* narratively motivates an aspect of the gameplay, that is the possibility of re-playing it. In this way, players can try different options to experience different endings. In order to keep track of the choices players have made in previous playthroughs, the player can leave hints and messages in specific places. *Oxenfree*’s global ludonarrative epiphany is given precisely by the understanding of the relationship between those two mechanics and the time-looped structure of the narrative. Alex cannot break out of the loop, she is trapped there for good. Even though players try different things, eventually the protagonist always find

herself at the ‘beginning’ of the time-loop. The hints left by the users over the course of the game contribute to create the global ludonarrative epiphany: *Oxenfree*’s story is endless, and it does not have a univocal finale, no ultimate conclusion. The game’s story ends only in the moment the player stops playing. Through different playthroughs, which are narratively motivated by the ‘continue timeline’ option and the hint mechanic, the game constructs its ludonarrative epiphany. Therefore, the understanding of the dynamics in play between these two mechanics and the looping narrative manifests *Oxenfree*’s nature.



Fig. 2. Continue timeline? [21]

Recontextualizing Conflict in *NieR:Automata*

Ludonarrative epiphany in action role-playing game *NieR:Automata* [22] comes in the first two ‘playthroughs’ of the game, which both chronicle the same events but switch perspectives between the two protagonists across those playthroughs. During the first playthrough, when the player controls the female combat android ‘2B’, the game sets up an oppositional relationship between the human-made androids and the alien machines who invaded Earth. Multiple characters in the game tell us that the machines are dangerous, warmongering creatures out to destroy all androids and whatever still remains of humanity. Correspondingly, the vast majority of machines that the player encounters will be hostile and attack on sight, leaving the player no other choice but to fight back. Even those machines that are not immediately hostile, such as those that have occupied an abandoned amusement park, can be easily taken to be a threat – especially considering that there is often one machine in the group that *will* attack the player, which quickly leads to escalation. As the player progresses through the story, going through the motions of what one might expect of a typical-yet-engaging action RPG, they increasingly get the sense that something is quite off. This opposition is contrasted with displays of ‘human-ness’ by the machines, for example when 2B and her partner, ‘9S’, encounter a group of machines trying to emulate human sexuality and child care (see Fig. 3).



Fig. 3. Trying to be human, in their own way [22]

By the end of the first playthrough, it has become clear that the machines are not mindless robots and that, in fact, many machines have no desire to fight and are even afraid of the androids. The second playthrough, as mentioned, follows the same events as the first but switches the player's perspective to 9S, who also happens to be one of the most vocal proponents of the oppositional frame, with lines like "they're just imitating human speech, they don't have any feelings". The player visits the same places, encounters the same characters, and mostly engages in the same combat scenarios. This time, however, the content of the dialogue and the fighting mechanics are radically recontextualized, with the player's understanding of what is happening completely different now than during the first playthrough. In the first playthrough, the machines' actions and speech were the elements that challenged the established frame of reference; in the second, it is the dialogue with other androids that causes the tension, which serves to expand upon and drive home the 'point' of the incited epiphanic moment. The game uses its "ludonarratively dissonant game design" [25] to set up the conditions for aporia and global ludonarrative epiphany, contrasting the rigid actantial model of 'androids = helpers; machines = enemies' enforced by the ludic system with the rhetoric of blurred lines conveyed by the narrative system (insofar as the two can even be considered separate in this case) to great effect. In other words, the competitive friction between ludic and narrative systems, "ludonarrative dissonance" [25], is actually a strength in this case, rather than a weakness. The moment of epiphany is ludonarrative because the player's altered understanding of narrative relationship between androids and machines also affects their understanding of their ludic interactions with the machines. During the second playthrough, the player once again has to kill many machine lifeforms who, as it turned out in the first playthrough, might not have any urge to fight at all. The game thereby heavily leans into the player's presumed ludoliteracy of action RPGs, which leads them to expect that the primary

mode of interaction with their opponents is through combat. The combat does not feel like righteous battle anymore, instead coming across as senseless slaughter, as ‘going through the motions’, as “cutting through hundreds of robots like butter because [...] that’s what you have to do to complete the game, right?” [8].

4 Concluding Remarks

Making any generalizable statements regarding digital games and player experience is a fundamentally problematic exercise, and we are indeed critical of adopting Aarseth’s normative claim that the aporia-epiphany dialectic constitutes any medium’s “master tropes” [1]. There are many types of games, players and experiences, which inhibits any assertion that the game system necessarily constructs aporia for the purpose of leading the player to epiphany, or that the player actually experiences epiphany even when the game system is constructed with this dynamic in mind. For instance, a game’s ludic and narrative systems may present aporia in a manner that, when resolved, does not grant a sudden revelation of the ‘whatness’ of an object or system, but rather emphasizes the need to master certain skills in order to solve the puzzles or conflicts presented within the game. Likewise, both global and local epiphanies might be experienced outside of the game through, for example, extensive paratextual engagement on the part of the player in the form of theorycrafting or lore analysis. The cognitive experience of epiphany during gameplay, as well as outside of the game through engagement with game objects and paratexts in online discussions, or simply “while you’re reaching for the cat food at the store” [4] is worthy of further research. Similarly, further study that engages in comparisons between reader, audience and player will deepen our phenomenological understanding of the embodied experience of epiphany.

Our three analytical case studies appear to use some of the affordances most commonly connected to digital games as a medium to set up the aporia-epiphany dialectic; for instance, *NieR:Automata* does this by sending conflicting messages through various ludic and narrative elements before allowing the player to understand and reconcile those inconsistencies, thereby resolving the aporetic state into epiphany. Such consideration of epiphanic experiences by means of game systems – that is, making explicit the aporia-epiphany dialectic in a variety of digital games – has the potential to provide game designers with the conceptual tools necessary to devise new design practices oriented around intentionally constructing epiphanies. Ultimately, an improved understanding of epiphany in digital games contributes to the maturation of digital games as a medium, since it allows both designers and scholars to better understand the medium-specific ways in which games can evoke certain feelings and emotions within their players.

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