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***Limbo* and the Edge of the Literary**

Résumé

Cet article analyse le jeu vidéo *Limbo* et s'intéresse à trois frontières possibles entre les jeux et la littérature : la narration, le langage et l'attention. Sorti en 2010, *Limbo* traite d'un personnage joueur qui se réveille dans les limbes, dans les marges de l'enfer. Il doit traverser un monde rempli de pièges à ours, d'araignées gigantesques et des scies circulaires meurtrières. Son art monochrome, son scénario minimaliste, et ces morts horribles ont fait de *Limbo* un exemple souvent commenté dans les discussions traitant du jeu comme art. Cet article se demande si *Limbo* peut également servir d'exemple d'une frontière entre jeu et littérature. Étant donné que *Limbo* manque presque totalement de texte et de narration explicite, quel est son état comme objet littéraire ? Cet article suggère que *Limbo* se trouve à la frontière du littéraire, qu'il marque et efface les limites entre le jeu vidéo et la littérature.

Mots clés : jeux vidéo, littérature électronique, écriture à contraintes.

Abstract

This essay addresses three potential limits between games and literature — narrative, language, and attention — by way of an analysis of the videogame *Limbo*. Released in 2010, *Limbo* features a player character that awakes in limbo, on the edge of hell. He must traverse a world of bear traps, giant killer spiders, and spinning blades. *Limbo's* monochromatic artwork, its minimalist storyline, and gruesome deaths meant that the game, perhaps predictably, found its way into various « games as art » conversations. However, this paper asks whether *Limbo* can serve as a different kind of

limitrophe. Given *Limbo*'s near complete lack of text and a lack of explicit narrative, what is the status of *Limbo* as a literary object? This paper suggests that *Limbo* sits at the edge of the literary, both marking and erasing the limits between videogames and literature.

Keywords: Digital games, electronic literature, constrained writing

Introduction

Austin Grossman's novel *You* presents a snapshot of the videogame industry of the late 1990s, but the debates it dramatizes between designers and programmers are helpful when taking up contemporary discussions of digital games and electronic literature. The novel's protagonist, Russell, is committed to making games that compete with films. For Russell, a game designer for a company called Black Arts, « without a story you're just jumping around polygons ».¹ Lisa, one of the Black Arts programmers, sees things differently. Confronted with Russell's argument that Black Arts should « play to a different market » by building complex narratives, Lisa argues that « story sucks ».² Russell admits that some of Black Arts stories might be derivative, but Lisa goes further: « No, it's not even that the stories we're doing suck, although they do! What if story *itself* sucks? Or it sucks for games? ».³ This discussion might be familiar to scholars in both game studies and electronic literature who witnessed the debates between ludology and narratology. While Russell and Lisa are talking about what games can do well, their discussion also points to the various discussions about how games should be analyzed and how they differ from other cultural forms. Such debates have defined the conversation about digital games and literature, and they have often resulted in contentious debates between ludologists who argue for a focus on procedurality and game mechanics and narratologists who examine games with the traditional tools of literary theory. But Patrick Jagoda argues convincingly that there is no real need to continually rehearse this debate:

Ludology had valid reasons to resist literary studies when it was still a fledgling field and looking to establish its own legitimacy. But surely, with

the expansion of game studies in recent years, that is no longer necessary and it is time to put the terms of these earlier polemics behind.⁴

Regardless of the winners and losers of this debate, it is time to move toward more productive analyses of games and literature, something I aim to do in the present essay.

While *You* presents us with these debates about design versus programming, game versus narrative, and immersive environments versus system modeling, the primary driving force of the novel is actually a game engine, and it is this engine that is most relevant to a discussion of digital games and literature. The genius programmer behind Black Arts games is Simon, the prototypical 1980s hacker who designed the engine that drives a massively successful videogame franchise. Simon's engine, WAFFLE is mysterious and complicated, and it sits beneath all of the Black Arts games, from its hugely popular *Realms of Gold* franchise to an ill-advised golf game:

It was called the WAFFLE engine, a witches' brew of robust world simulation and procedural content generation, the thing that powered Black Arts games first, to critical success, then to profitability, then to becoming a runaway phenomenon.⁵

The engine is even adopted by a group of investors as a financial modeling system. While the novel also provides a discussion of other game engines of the 1990s, such as those that powered *Doom* and *Quake*, the entire narrative revolves around the complexities of WAFFLE (and a complex Easter egg embedded in it). What Simon created was not merely a series of games but most importantly a series of constraints that shaped the various worlds created by Black Arts. It is this procedural system that offers one opening for considering the relationship between digital games and electronic literature.

But what does a game engine have to do with electronic literature? Given Katherine Hayles' redefinition of electronic literature in terms of the electronic literary, the link might seem self-evident. For Hayles, the term « literature » does not provide a large enough container to account for the various works on display in the *Electronic Literature Collection*. She proposes « the literary » to account for « creative artworks that interrogate the histories, context, and productions of literature, including as well the verbal art of literature proper ». ⁶ But while Hayles is comfortable blurring the lines between games and literature,

Joseph Tabbi takes issue with this definition, arguing that literature does something that digital art and games do not — it engages the problem of linguistic constraints. For Tabbi, the works included in Hayles's category of « the electronic literary » often use language as little more than « a commentary on visual, programmable, or otherwise operational elements ». ⁷ Tabbi argues that literature (electronic or otherwise) departs from other forms of expression in that it always represents writing under constraint. Literature must always grapple with the constraints of language, and this is what makes it different from various other media, including games:

Where games demand interaction and where conceptual arts bring us to a new, embodied understanding of the primacy of perception in the arts, literature does something else, something requiring continuity and development, not constant interruption through the shifting of attention from one medium to another. Literature's cognitive complexity comes not primarily from the media it encounters but from constraints that are peculiar to language. ⁸

I'll return to this description of games later in the essay in order to question Tabbi's discussion of interruption and shifting attention. For now, I'll note that though Tabbi's discussion of games happens as a small part of the broader project of defining world literature, his distinction between games and literature is crucial to anyone seeking productive ways of bridging the study of electronic literature and games.

As we'll see, the game I take up in this essay — a puzzle platformer named *Limbo* — presents a boundary case that forces us to pause over Tabbi's argument. Released in 2010, *Limbo* is a platformer that features a player character who awakes in *Limbo*, on the edge of hell. He must traverse a world of bear traps, giant killer spiders, and spinning blades. As with any game, the player of *Limbo* will necessarily fail while solving the game's puzzles; however, this game makes those failures especially painful. The player character is decapitated, impaled, and dismembered as the player attempts to solve each of the game's puzzles. *Limbo* allows us to consider how Tabbi's seemingly more narrow definition of literature as « writing under constraint » might not cleanly exclude games and other digital media. ⁹

As Jagoda notes, whether we deploy Hayles's notion of the « literary » or Tabbi's « writing under constraint, » we find that « a number of contemporary

digital games seem to enter the realm of literary studies ». ¹⁰ Jagoda presents an impressive account of such games in his essay, an account that, to my mind, is not offered in the interest of the *inclusion* of games in the category of electronic literature but instead in the interest of *investigating the limit* between games and literature, an approach that Jacques Derrida calls, in a very different context, *limitrophy*. For Derrida, who is probing the boundaries between human and animal, there is no single limit as such. Rather, there are multiple limits, and the practice of *limitrophy* is to track and proliferate limits not in the interest of subsuming the marginalized into an accepted or assumed category but rather as a way of reimagining categories once deemed stable, natural, or easily identified. *Limitrophy* ô a method of tracking and following limitrophes ô is not carried out in the interest of « effacing the limit, but in multiplying its figures, in complicating, thickening, delinearizing, folding, and dividing the line precisely by making it increase and multiply ». ¹¹ Like the limit between human and animal, the limit between games and electronic literature is not easily located, and in fact there is no single limit, strictly speaking. In this paper, I address three potential limits between games and literature: narrative, language and attention. The first of these is the debate that has received the most attention, and the second two are raised by Tabbi's response to Hayles. By examining *Limbo's* relationship to these three limits, we can open a discussion beyond the question of electronic literature *or* digital games. We can begin to consider electronic literature and/or/versus/if digital games.

These limits are a moving target, and they have been probed by scholars such as Noah Wardrip-Fruin, whose *Expressive Processing* argues that digital fiction and digital games can both be analyzed from the perspective of computational processes. ¹² Such an approach analyzes both literature and games on their own terms, without subsuming either the literary or the ludic into a single category. In the tradition of such work, I take up *Limbo* not as a work of electronic literature but as an instructive example of the troubled and moving boundaries between games and literature. *Limbo's* monochromatic artwork, its minimalist storyline, and these gruesome deaths meant that *Limbo*, perhaps predictably, found its way into various « games as art » conversations. The limits between games and art are just as fraught as those marking games from literature, and Ian Bogost has conducted his own limitrophic account of this debate in *How To Do Things With Videogames*. As Bogost notes, any discussion of games as art would first have to contend with the fact that « -artø is hardly a fixed and uncontroversial topic ». ¹³ Before we can imagine games as part of this category which is deemed more

prestigious, scholars and critics would first need to recognize that the term « art », particularly during the 20th century, has undergone continuous « disruption and reinvention ». ¹⁴ However, this paper asks whether *Limbo* can serve as a different kind of limitrophe. It is fortuitous that the game's very name opens up the question of limits, but *Limbo's* use as a case study extends beyond the fact that it takes place at « the edge of hell. » *Limbo* features a near complete lack of text. While the game's paratext (menus, credits, etc.) contains language, the game itself contains no written instructions or subtitles. In fact, the game proper contains only a single word — a large sign that reads « HOTEL ». The game also features a lack of explicit narrative. Given these features, what is the status of *Limbo* as a literary object? On first glance, the game fits neatly in Hayles's category of « the electronic literary » since it seems to operate in the « trading zone » of games, art, and animation. However, *Limbo* can also be seen as taking up Tabbi's definition of literature as « writing under constraint. ». In fact, the game engages Tabbi's definition of literature from the outside. It is quite clearly a game, but it is a game that takes on the constraints of language, attempting to craft a minimalist narrative that provides little explanation and that also eschews language. One might say that the game's lack of language makes language all the more present. In short, I would like to suggest that *Limbo* sits at the edge of the literary, both marking and erasing the limits between videogames and literature.

Narrative in Limbo

The battles between narratologists and ludologists have served to mark one of the limits between games and literature. Much has been said about the differences between the study of narrative and the study of games, but the debate might be best understood in the terms Gonzalo Frasca laid out in an early essay on the topic. While games are primarily defined as sets of rules, narratives have a different set of characteristics: « We cannot claim that *ludus* and narrative are equivalent, because the first is a set of possibilities, while the second is a set of chained actions ». ¹⁵ Narrative links events together, and games lay out a possibility space for play. *Limbo* is perhaps a paradigmatic case of how these two approaches to cultural expression differ. Further, it serves as a space in which narrative and game collide.

Limbo's narrative is minimalist, to say the least. The game opens with a young boy (the player character) lying in the woods. He remains in this position

until the player presses a button. The silhouetted character wakes up (signified by the opening of two glowing eyes), and the player immediately finds herself in a puzzle platformer game. There is no explanation of where the character is or what he is trying to accomplish. *Limbo*'s designers describe its primary mechanic as « trial and death » rather than « trial and error ». While all games (especially puzzle games) rely on player failure, the player of *Limbo* experiences a different kind of failure as the player character is continually decapitated, dismembered, and impaled. Falling on a spike or jumping into a spinning blade results in the gory death of this silhouetted character. Still, as gruesome as these deaths are, the game still presents the player with limitless opportunities to « try » and « die ». The boy is tasked with solving various puzzles with only a few controls — the player character can move left or right, jump, and grab objects. *Limbo* offers no opening screen that explains the character's situation and few instructions (it provides a screen that shows the game controls). I should note here that I am referencing the Mac OS X version of the game, but these same traits are present across platforms.

Most narrative clues lie outside of game play (in interviews with the designers), and many involved with the design of *Limbo*, including its producer, have openly stated that « the development team has deliberately kept information to a minimum, as it wants players to decide for themselves exactly what's going on ». ¹⁶ The game's ending is indicative of this approach. Upon solving the game's final puzzle, the player character is thrown to the ground in a place that looks very much like the game's beginning. When the player moves the character to the right, s/he finds what appears to be a hunched over young girl at the bottom of a rope ladder (Figure 1). As the player character approaches, the girl hears the boy approach and straightens, and the game cuts to credits. After the credits, the game's final frame reappears. However, this time, the boy and girl are not visible, the rope ladder is torn apart, and two swarms of flies appear where the boy and girl once stood.



[FIGURE 1]

The player character in *Limbo*'s approaches a young girl at the end of the game. (© 2010, Playdead Games)

The game's beginning and end are the only portions that don't explicitly lay out puzzles for the player. Throughout the body of the game, the player must run, jump, move objects, battle giant spiders, and complete a number of other tasks in order to progress. However, the bookends of *Limbo* present only the sequences described above, and this has led most critics to focus on these portions of the game when trying to explain *Limbo*'s narrative. Some have noticed that the early puzzles do in fact seem to link more clearly to the game's narrative. These puzzles involve a number of non-player characters (NPCs) that would seem to hint toward a larger narrative. There are other children in these levels, suggesting a *Lord of the Flies*-type narrative, since the children are often seen setting traps and terrorizing the player character. A giant spider serves as the primary foe in these early levels, and it marks some of the major battles the player has to complete in order to move forward in the first half of the game.

However, these characters and the spider fall away as the player progresses, and many have attempted to link these differing halves of the game to the *Limbo*'s larger narrative. It is worth noting that the game's creator sees the differences between the two halves of the game as a fairly major design flaw, and he attributes it to his own lack of involvement in the design of the game's second half.¹⁷ While this suggests that the game's early puzzles were in fact

attempts to hint at a larger narrative, the intention of the creator is largely beside the point. What I am most interested in here is that the game seems to stand as an embodiment of the narratology/ludology debates that defined much of the early discussions of games and narrative. Frasca has argued that this debate never actually took place and that it relies on a number of misunderstandings and straw person arguments.¹⁸ Nonetheless, this debate (mythological or not) continues to define how scholars approach videogames and narrative, and it shapes any discussion of how games relate to electronic literature. *Limbo* offers an example of a game that struggles to incorporate narrative. Its beginning and end stand in contrast to its puzzles, and narrative and game seem almost incommensurable within the space of *Limbo*.

Because the beginning sequences provide no conclusive answers, many players and journalists have primarily sought information outside of the game. From interviews to articles about *Limbo*, various supplementary materials offer players some more clues (though, even these are minimal) about who the player character is and what motivates him. From comment threads to forum posts, players have speculated about the game's ending. Here is one example of a player's interpretation, located in the comments section of a YouTube clip of the game:

The girl looks like she is trying to wake someone up who is lying in the grass on the ground. That [sic] is probably the boy. he [sic] probably died when he fell, and she lived, and the whole game is him trying to get back to her. when [sic] you break the glass at the end you have broken through back to the real world. maybe [sic] you're a ghost now, or maybe you can move on- it is open ended, you'll never know. [sic] that is my take.¹⁹

This is but one example, but it's instructive. This commenter offers a fairly complex (and, to my mind, plausible) reading of the scene, arguing that the ladder leads to a tree house, that the boy's death was the result of a fall from that tree house, and that the game's ending is the boy returning to the scene of his death. However, what's most important for our purposes is that this interpretation offers no discussion of the game's puzzles. The beginning and end of the game are considered to be its narrative components, and the puzzles are assumed to be something separate.

In fact, one critic has gone farther, suggesting that *Limbo* has « no real story ». In a blog post entitled « Infernal Logic » Greg Kasavin argues that the

game sets up narrative expectations without fulfilling those expectations:

Limbo has no real story as such. But you go through the game consciously or subconsciously looking for one, expecting one, because *Limbo* does such an excellent job of creating atmosphere and giving exposition, using methods that are as minimal as they are effective. Thus you expect the opening exposition to be expanded on, because of how our brains parse things shaped like stories.²⁰

Kasavin's account demonstrates how *Limbo* offers both narrative and he says it is « shaped » like a story and a game, and he argues that the drive for narrative closure is what motivates players. However, for Kasavin, the game seems to present two different experiences, and he argues that *Limbo*'s narrative feels incomplete and unsatisfying. Andy Lih responds to this reading, arguing that

[í] the puzzles and the narrative both have continuity and it just so happens that they don't share the same path. The puzzles stand alone in isolation from the rest of the game, resulting in a discordant play experience resulting from its ludonarrative dissonance.²¹

Both of these responses offer more evidence of *Limbo*'s narrative limbo, suggesting that game and narrative meet within the space of this puzzle platformer without ever exhausting one another. This is perhaps a design flaw, but it is also our first reason for considering how a game like *Limbo* forces us to consider the limits between games and electronic literature.

Language in Limbo

When asked about *Limbo*'s narrative inconsistencies, game creator Arnt Jensen argues that he was more concerned with cultivating a certain kind of mood than he was with telling a specific story:

I think it's pretty important to have the right feelings throughout the game. I don't know if it's that important if it's specific storytelling. I don't care about that. It's important to have those special feelings. It was supposed to feel this loneliness so that in the end, when you meet the little sister, it seems like you haven't seen people so long, the impact will be so much bigger.²²

A large part of this mood of loneliness and despair is the game's distinct lack of textual clues. *Limbo* is sometimes compared to Jonathan Blow's *Braid*, another successful platformer that employs a creative puzzle structure. However, *Braid* makes ample use of text to tie the game's mechanics to its narrative (and also to link game play to the narrative's surprise ending). In *Braid*, the player's ability to reconfigure time is tied directly to the stories told in between puzzles, stories in which the game's main character expresses, among other things, regrets about his decisions. In fact, *Braid* and *Limbo* can be seen as mirror images of one another in important ways. While the player character in *Braid* never dies (due to the ability to manipulate time), the player character in *Limbo* dies repeatedly, even if he also respawns an infinite number of times.

This is not to say that *Limbo* reflects a lack of power while *Braid* allows the player to experience pure control. In fact, Jagoda argues quite the opposite with regard to *Braid*. In an analysis of the game's treatment of history and time, Jagoda argues that videogames are both reflective and productive of a new sensorium, one that represents a shift in the experience of history. *Braid* evokes the history of computing and atomic technology, making it more than just a story about a man who regrets decisions and aims to turn back time. These broader historical references serve to entangle rather than empower the player, and Blow's game suggests that language is not the only tool one might use to attempt disentanglement:

Over the course of the game, the player, like the protagonist, is shown not to be a sovereign subject but rather a braided being made up of many nested subroutines and sociopolitical loops. The plaits that compose the game reveal complicity, but also the possibility of unknotting a sensorium, which cannot be accomplished with language alone. Whereas a novel systematizes irresolvable tensions through narrative structure, a game plays out such knots.²³

Both *Braid* and *Limbo* comment on the sensorium theorized by Jagoda, and they do so by way of language, computational procedures, images, and sound. However, their engagements with language are particularly striking, given that *Braid* relies so heavily on text while *Limbo* attempts to remove it altogether. While Blow ties narrative exposition to procedural puzzles, Jensen decided to avoid the use of text, meaning that *Limbo* must lean more on image, sound, and

procedure as expressive resources. Jensen's decision to impose this constraint means that *Limbo* is directly confronting constraints peculiar to language.

Limbo contains a single word: a sign that reads «HOTEL» (Figure 2). Aside from this word, all text associated with the game sits outside of game play. For instance, the tagline included on the Xbox Live Arcade page for the game offers some textual clues: «Uncertain of his Sister's Fate, a Boy enters LIMBO». ²⁴ The very existence of this tagline is curious, since it does not even appear on the game's Web page. Still, this description of the game does match what designers of the game have said in interviews. The only clue that Playdead Studios have offered regarding the game's narrative is this mention of a boy, his sister, and the game's setting (which is also suggested by the game's title). Thus, one might consider the HOTEL sign to be significant. The game's lack of language is interrupted by this sign, across which the player character must walk, jump, and swing. However, given the rest of the game's design and its lack of language, one is tempted to respond: *ceci n'est pas un mot*. Given that players use the HOTEL sign in



[FIGURE 2]

The «HOTEL» sign in *Limbo*. (© 2010, Playdead Games)

much the same way they use corpses, logs, and giant spider legs as tools for solving puzzles or platforms for traversing the game it seems just as likely that the word HOTEL was chosen more for its various flat and rounded surfaces

than for an attempt at evoking the in-betweenness of hotels.

The inclusion of this word is the exception to the rule established by Jensen that the game would not use language to guide the player. Designing the game under this constraint presented a number of challenges, and many puzzles had to be redesigned as they proved too difficult during early playtesting of the game.²⁵ The lack of text meant not only that the game's narrative had to be left open to interpretation but also that the game had to be procedurally, visually, and aurally expressive when it came to teaching the player how to solve puzzles. While many games other than *Limbo* use early levels and simple puzzles pedagogically, showing players what is or is not possible in the space, *Limbo*'s designers focused on designing such levels without the use of text.

In this sense, *Limbo* offers the underside of Tabbi's definition of literature. Whereas Tabbi sees electronic literature as differing from games or digital art because it operates from within the constraints of language, we can view *Limbo* as a game that deals directly with the various predicaments of language by *excluding* language. Just as Ernest Vincent Wright's *Gadsby* and George Perec's *La Disparition* omit the letter 'e', attempting to see what kind of literary expression emerges out of certain linguistic constraints, *Limbo* imposes linguistic constraints that force creative design and unique types of expression. Like the work of the Oulipo, the designers of *Limbo* took on the problem of language, even if they did so by making language a specter that haunts the game.

Attention in Limbo

In addition to his discussion of literature as writing under constraint, Tabbi also draws a limit between games and literature in terms of attention. He suggests that games call for interaction while literature does «something else». That something else involves both «constraints that are peculiar to language» and also the need for sustained attention to a single medium. This is similar to an argument Hayles has made, both in *Electronic Literature* and also in an article entitled «Hyper and Deep Attention: The Generational Divide in Cognitive Modes.» Hayles suggests that deep attention, which is «characterized by concentrating on a single objects for long periods», is the default mode of the humanities (and of literary studies) and that this style conflicts with a generational and cultural shift toward hyper attention, which involves «switching focus rapidly among different tasks, preferring multiple information streams, seeking a high level of stimulation, and having a low

tolerance for boredom ».²⁶ Whereas a game might ask a player to shift amongst various streams of information and various media, literature asks its audience to focus on a single stream of information and to be attuned to the problems of language. However, Hayles is also willing to grant that hyper and deep attention are not necessarily opposed. For instance, she argues that Talan Memmott's *Lexia to Perplexia* engages both « hyper-attentive characteristics of multiple information streams and rapid transformations » while also demanding « deep-attention skills to grasp the complex interactions between verbal play, layered screen design, twitchy navigation, and JavaScript coding ».²⁷ Hayles's account differs from Tabbi's. While Tabbi associates literature's « cognitive complexity » with the fact that it requires deep attention, Hayles suggests that hyper and deep attention can be threaded through one another while readers/players engage with artifacts. Further, her analysis suggests that while hyper and deep-attention are encouraged by certain kinds of artifacts, they are not essential to any single medium.

Limbo is once again instructive in this regard. In one puzzle, the player faces a steep upward plane. On the first play through of this level, the player might not recognize the dirt or pebbles that roll down the hill toward the player character. Soon after, what looks like a large boulder comes tumbling down the hill to crush the boy. The first time through this level, the player is likely to be crushed, but a player paying deep attention to all clues might find a way to avoid this fate by noting the falling pebbles as foreshadowing future events. Further, the boulder turns out not to be a boulder at all. Our first clue of this is that it appears to have fur or hair, and we learn later that this object is likely the body of a killer spider. Again, these subtle clues reward deep play, and they demonstrate that while games might employ various media and call for interaction, they do not always call for hyper-attention. *Limbo* certainly draws on various media and information streams. The game's visuals and sound help to create a mood and might even possibly distract the player (though, this is not something that reviews of the game typically mention), but this does not change the fact that the game rewards and requires deep attention.

In one sense, the hard and fast distinction between hyper and deep attention makes sense. Reading literature often calls for the deep attention described by Hayles and Tabbi, asking readers to focus on a single medium. However, *Limbo* (like Hayles's example of *Lexia to Perplexia*) is evidence that deep attention is not attached to any particular medium. The player of *Limbo* is called to focus on solving puzzles, and that focus is not the chaotic process evoked by the term

hyper-attention or by Tabbi's description of « constant interruption through the shifting of attention from one medium to another ».²⁸ So, in addition to operating by way of narrative and linguistic constraints — offering a game experience that refuses to articulate a clear narrative and also appears to be an example of writing (or at least *designing*) under constraint — *Limbo* also calls for deep attention. One review of the game suggests that the typical trial-and-error approach to games is a poor fit for *Limbo*: « *Limbo* is not a game that gives up its secrets through mere trial-and-error — its puzzles demand thought and contemplation ».²⁹ If we consider one of literature's defining characteristics to be its ability to encourage deep attention, then *Limbo* once again sits as a stubborn limitrophe.

Constraints in *Limbo*

John Teti of *Eurogamer.com* offers an astute review of *Limbo*'s engagement with constraints, linguistic and otherwise:

Creativity thrives in limitations, and *Limbo* is rigorous in its self-imposed limits. It has no colour, no dialogue, minimal music, no cut-scenes, no on-screen health meters or other clutter. Yet you can't expect limitations alone to make your masterpiece for you. After cutting away the fat, the obligation is to use what remains as convincingly as possible. That's what *Limbo* accomplishes. The game steps back from audio-visual sensory overload so it has room to make inroads to other senses: a sense of wonder, say, or of compassion and vulnerability.³⁰

Teti once again reminds us that *Limbo* does not call for hyper-attention. Further, one need not squint too much to see the *Oulipo* hovering around the edges of this description of the game. Jensen's game is defined by its willingness to establish and follow a set of constraints. Further, as Teti notes, this constraint comes through as *restraint*, as a willingness to offer a certain kind of experience, one that is better described in terms of deep attention and that strips out language and detailed narrative in the interest of creating a mood.

But this attention to constraints can be taken one step further. For just as Simon, the programming wizard in Grossman's account of 1990s videogames, designed the complex and mystifying WAFFLE engine, Playdead Studios crafted a game engine especially for *Limbo*. That is, Playdead authored not only

their game but also the various computational constraints (the physics and operational logics that define the world of *Limbo*) under which the game was designed. (The designers have said that their new project will not use a proprietary engine but will instead make use of the popular Unity engine.) Of course, these constraints are not the same as those crafted by the *Oulipo*, and they are not exactly what Tabbi has in mind when he describes literature in terms of «writing under constraint.» For Tabbi, writing and design are different practices, and keeping them separate helps us see how literature is different from other modes of expression. But this does not change *Limbo*'s status as *limitrophe*, as a work that asks us to see the limits between games and literature as multiple and proliferating. *Limbo*'s liminal status does not make it a work of electronic literature, but it does call into question the ways the field has tried to differentiate games from literature. Playdead's decision to craft a game engine demonstrates that it was willing to create (to paraphrase Raymond Queneau) the labyrinth from which it had to escape, and that it was willing to do so at various levels, in terms of computational process, language, narrative, and attention.

Limbo serves as a boundary object and as an opportunity to perform *limitrophy*, but this same critical approach could be applied to works of electronic literature. For instance, works such as Stuart Moulthrop's *Deep Surface* finesse the various limits between games, textual instruments, and works of literature.³¹ My analysis of *Limbo* suggests that games such as *Limbo* work in the opposite direction, calling upon strategies and traits that we might typically associate with literature. *Limbo* is the result of an experiment: What emerges when designers are forced to make a game under strict constraints? The results of that experiment suggest that we can continue to trace various limits and to think about electronic literature and/or/versus/if games. We should not aim to dissolve these boundaries but to use objects like *Limbo* as opportunities proliferate limits and to rethink both the nature of and our critical approaches to all digital objects.

NOTES

- ¹ Grossman, Austin. *You*, New York: Mulholland Books/Little, Brown and Company, 2013, 120.
- ² *Ibid.*
- ³ *Ibid.*
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