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8.THE PLAYABILITY OF TEXTS VS. THE READABILITY OF GAMES:
TOWARDS A HOLISTIC THEORY OF FICTIONALITY

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ABSTRACT

Playful interaction occurs not only in games, but in literary texts as well. One cannot describe what takes place between author, text, and reader more accurately than by calling it a game. Games, on the other hand, cannot be reduced to playthings, but must be considered as cultural objects that are being read and interpreted. One does not, however, read solely for the plot. This is why a purely narratological analysis of both digital and analog games is bound to fail. Many games create a fictional world to be inhabited and explored by the players. In this respect, games are similar to literary texts, and a philological approach to games is therefore primarily justified because of their fictionality, rather than their narrative qualities. This is my starting point in an exploration of different models of 'playability', and how they can be used to understand the 'readability' of games.

KEYWORDS
Fictionality, reader-response theory, semiotics, possible world theory, playability

THE PLAYABILITY OF TEXTS
Fiction as Play

In his book *The Fictive and the Imaginary* [5], reader response theorist Wolfgang Iser dedicates a whole chapter to what he calls the *Textspiel* ('textual game'). The *Textspiel* is an integral part of Iser's theory of fictionality in which literary texts are regarded as embedded in a triadic relation between the fictive, the real and the imaginary. It should be noted in advance that *play* is the mode of mediation between the three points of this triad, and the driving force behind the *Textspiel* is the opposition between *play* and *game*. Furthermore, Caillois' play modes – *agôn*, *alea*, *mimicry* and *ilinx* – play an important role in structuring this basic opposition.

The word 'fiction' itself is derived from the Latin *fingere* ('to shape, form, devise, feign'). In Iser's interpretation, this last meaning is the most important, because it makes us aware of the fact that the act of creating a fictional world is always a form of manipulation, a sleight-of-hand that creates something which pretends to be real, but must remain imaginary. It should be noted that the same could be said about simulations. Although a simulation usually has a

real referent (a simulation *of* something), the reference system of a simulation can also be fictional. For example, a new car might exist as a simulation before a prototype is built.

According to Iser, there are three different modes of 'feigning'. Of these, the most important one is the mode of 'selection', because it allows us to differentiate between fiction and simulation. In Iser's terminology, selection is the process of choosing and integrating elements of the real world into a fictional setting in order to make it believable. The realists of the 19th century achieved this by paying close attention to details and by including letters, maps and other documents into the text of the novel, but this process of selection plays an integral part in the creation of any literary text. However, the process of selection is different when creating a simulation. Here, not only individual elements of the reference world are selected, but also the interrelations between them. Therefore, we often find 'emergent behavior' in simulations, i.e. events that were not foreseen by the simulation's creators.

Although it might seem so at first, the difference between fiction and simulation is not derived from the fact that fiction is 'static' and simulation is dynamic or procedural. However, in fictional texts, the procedural activity is something external to the text, something that takes place in the reader's mind rather than within the text itself. In this sense, fictional texts are more interactive than simulations, because they absolutely require the participation of a reader. Simulations, on the other hand, are mostly self-sufficient enough to 'run' at least for some time without external input.

In this respect, fictions can be said to be more 'playful' than simulations. There is a sort of subtle competition between reader and text, between

what Umberto Eco once called the *intentio operis* and the *intentio lectoris*. Many digital games, however, are both: simulations *and* fictions. The physical aspects of the game world are simulated by the game's physics engine, while the aesthetic aspects are the product of a process of fiction-making that takes place between the player and the game itself. It should be noted at this point that not all digital games are fictional. I will therefore use Barry Atkins' term 'game-fiction' wherever appropriate.

Fiction-Making in *Half-Life*
This process of fiction-making, or *poiesis*, is best explained with an example. The classic first-person shooter game *Half-Life* [1] seems well suited to this task, because the game itself takes the process of fiction-making as its theme. As mentioned, the process of fiction-making must necessarily begin by taking elements of the real and putting them into a fictional context. Of course, this can be done in different ways. When creating a fictional character, authors or designers can put him or her together bit by bit by taking physical traits and behaviors encountered in the real world, thus constructing a character who is entirely fictional. But they might just as well create a 'blank' character and leave it up to the reader's imagination to fill in the details. Or they might take a historical person whose image already exists in the mind of potential readers and can be 'activated' by the mere mention of his or her name.

The setting of *Half-Life* is a collage of objects from the world we, the players, inhabit. From the vending machines to the lockers, from the muttering scientists to the authoritative security guards, Black Mesa is instantly recognizable as part of the world as we know it. Even the game's primary weapon is not a sci-fi laser gun, or even a gun at all, but a tool, a crowbar. This 'éffet réel' is complemented by what Barry Atkins has called the "gritty realism" of *Half-Life*:

"Even before the alien incursion that damages so much of the infrastructure, the solid state hardware of Black Mesa is in disrepair. Lights flicker, the electrics play up, doors jam" [3]. In other words: it's just like home.

However, the process of fiction-making requires an additional element: the imaginary. In *Half-Life*, this element is represented by the aliens from a different dimension that invade the Black Mesa facility. Suddenly, they are everywhere, roaming the corridors, feeding on corpses, attacking the player's in-game incarnation Gordon Freeman incessantly. Quite obviously, the imaginary is a force to be reckoned with. But if it weren't for the player, the real and the imaginary would never have come into contact. This is illustrated by the scene in the game's beginning in which Gordon pushes a sample of 'anomalous material' into the 'particle beam'. This is the creation myth of all fiction: the real comes into contact with the imaginary and all hell breaks loose.

A Literary Theory of Interactivity

The player's role in the process of fiction-making cannot be overestimated. It is only through the player's investment of belief into that world that the game-simulation becomes a fictional world that can be inhabited and explored by the player. Samuel Taylor Coleridge's "willing suspension of disbelief" is of equal importance in game-fictions as in literary texts or other forms of fiction. Therefore, if we want to understand digital games as forms of fiction, we must take the player's interaction with the game into account.

The concept of interaction itself has been the subject of much heated debate. However, in this discussion, little attention was paid to a theory of interactivity that comes from the field of literary studies. Once again, I turn to Wolfgang Iser, who outlined a theory of literary interaction in his seminal book The *Act of Reading* [4]. Iser starts his exploration of the interaction between reader and text by pointing out that the "reciprocal influence" between the two allows us to speak of interaction. He then goes on to review theories of interaction from psychoanalytic communication research and social psychology. The latter is of special interest to him, because it offers the possibility to distinguish different forms of interaction based on the kind of contingency in a given communicative situation.

Iser outlines the following four types of interaction: reciprocal contingency, pseudo-contingency, assymmetrical contingency and reactive contingency. Reciprocal contingency is regarded as the 'normal' mode of communication. It is characterized by a tendency to either thrive on the communicating parties' contributions to the exchange or quickly deteriorate into mutual animosity: "Whatever the content of the interaction's course, there is implied a mixture of dual resistance and mutual change that distinguishes mutual contingency from other classes of interaction" (Jones and Gerald: *Foundations of Social Psychology,* quoted in [4]).

While a game with two or more players is usually characterized by assymmetrical contingency (i.e., one player wins, the other[s] lose), single-player games can be regarded as a form of reciprocal contingency: either the communication between player and game is successful, and the player proceeds in the game, or it fails, and the game is aborted. A hermetic, 'resistant' text shuts itself off against its readers, but still urges them on by its opacity. In a similar way, game-fictions put up resistance against the players' attempts to make sense of them, while at the same time giving them the necessary hints to 'solve' the game.

THE READABILITY OF GAMES
The Postmodern Temptation

Iser seems to offer us a suitable model for the analysis of game-fictions: a playful, interactive process that results in a fictional world for the player to explore. But does it make sense to use Iser's model for the analysis of games? One objection that comes to mind is the fact that an expansion of the meaning of the term 'game' might cause it to lose its analytical power, similar to the way the term 'text' lost much of its critical potential through the way it was used in the heyday of postmodernist literary theory. Therefore, the answer to this question must be both yes and no. No, because it might cause us to fall prone to what has been called the 'postmodernist temptation'. Yes, because Iser's use of the term 'game' is not deconstructive but constructive.

The word *jeu* ('game') itself gained wide currency in deconstructivist thinking through Derrida's concept of the "game of signification" and Paul de Man's "play of language." However, Derrida and de Man use the word 'game' in a way that deprives it of all meaning. While this might have been fully intentional on the part of the two deconstructivist philosophers, it leaves us at a loss about what to do with the term 'game' within the context of literary studies. Should it be given up altogether, in order to avoid the almost inevitable connotation with deconstuctivism? Or can it be used in a way that restores its analytical potential?

Iser's concept of the *Textspiel*, with its fine distinctions between different kinds of games as well as different kinds of play seems to offer a way out of this dilemma. But, I would argue, only if it is complemented by other theoretical concepts that make use of a more rigid terminology. Thus, the meaning of the word 'game' can be stabilized by placing it, as it were, within a semantic field with clearly defined relations between the semantic units. While this will

certainly not solve the problem of defining the term 'game,' it will at least limit its abuse by theorists who will call anything a game– from language to society, from learning to love – without specifying which kind of game these phenomena are supposed to resemble and which rules they follow.

So, what are the theoretical concepts that can be used to stabilize Iser's model? Here, I would like to concentrate on one especially potent theoretical concept from semiotics which has received scant attention from game studies as of yet: possible world theory.

Possible World Theory

Marie-Laure Ryan has outlined the potential of possible world theory for the study of electronic texts in her book *Possible Worlds*, *Artificial Intelligence*, *and Narrative Theory* [7]. The theory is based on the assumption that any fictional text can be regarded as a possible world and that a possible world can contain an unlimited number of sub-worlds. These sub-worlds can be embedded stories, as well as the beliefs, wishes, and obligations of the world's inhabitants. It is beyond the scope of this paper to provide a detailed account of possible world theory, but it should be clear from these brief remarks that the sub-worlds within the world of any given text are usually contradictory models of the world they are embedded in. In the film *The Truman Show*, for instance, Truman's knowledge of the fictional world is radically at odds with every other inhabitant's (or the viewer's) knowledge about this world.

In order to develop a working model of a player's interaction with the fictional world of a game, I intentionally neglect the ontological differences between the world (or worlds) directly accessible to the reader and the world of the game with its potentially infinite number of sub-worlds. Thus, I arrive at a six-world-model

that has the necessary flexibility to describe different kinds of fiction. The individual parts of this model are the following:

1. the reader's actual world (RAW),
2. an external observer's perception of the reader's actual world (RAW'),
3. the reader's possible world (RPW),
4. the narrator's actual world (NAW),
5. the textual actual world (TAW) and
6. the textual reference world (TRW).

A graphical representation of these worlds and their interrelations will demonstrate how this model works:
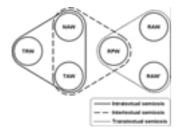

Illustration 1: The six-world model

Thus, the process of playing can be regarded as a series of interlocking semiotic operations, which I call the intratextual, the intertextual and the transtextual semiosis. In this process, the textual reference world – that is, the unmediated fictional world of the game that is twice removed from the player's actual world – is the object of the intratexual semiotic operation. As in any semiotic operation, this object is transformed into an interpretant (TAW) through a sign (NAW). In other words, the image of the textual reference world projected by the game is interpreted and brought forth by a narrative agent. In turn, this interpretant becomes the object of the intratextual semiosis. In this step, the boundary between game and player is transcended, and its product is the player's possible world.

The difference between a literary text and a game-fiction lies, among other things, in the fact that the reader's possible world has a physical manifestation in the process of playing, while it is purely virtual in the process of reading. In the terminology of Philippe Bootz, who differentiates the text-as-written (texte écrit), the text-as-seen (texte-à-voir) and the text as read (texte lu), the text-as-read is what is on the screen in the process of playing. This pattern of pixels can be seen and interpreted by another person watching the player, and although this observer might interpret the image differently, he or she sees the same things as the player. If I watch somebody reading, on the other hand, I do not have access to the the reader's possible world, but only to my own.

This does not mean, however, that two people cannot communicate about a game, or, for that matter, a text. On the contrary, the difference between the reader's possible worlds is a prerequisite for this communication. If this difference did not exist, there would be nothing to say, because the experiences of the communication party would be exactly the same. No contingency. Game over.

But let us return to the third and final semiotic operation: the transtextual semiosis. This is what takes place in the player's consciousness after the image on the screen has been registered. As before, a sign is used to arrive at an interpretant. In this case, the object is the reader's actual world, and the sign is the reader's possible world. The resulting interpretant is RAW', that is, an alternative of the reader's actual world. This reflects the fact that the world of the player, which is partially a product of his or her own perception, is changed, albeit only slightly, by every interaction with the game. Games, like texts, change our perception of the world.

TOWARDS A HOLISTIC THEORY OF FICTIONALITY

Before I conclude, I would like to point out how Iser's *Textspiel* and the semiotic six-world-model can be integrated into a holistic model of fictionality. In this process, I will also attempt to extrapolate some of the rules of the *Textspiel*. It must be clear, however, that the model, as it is presented here, is far from complete. Therefore, its rules are themselves subject to play, and will necessarily change as the concept evolves.

First of all, we must attempt to clarify how the individual parts of the six-world model correspond to the elements of Iser's *Textspiel*. Since both are basically triadic models, this proves rather simple: the intratextual semiosis corresponds to what Iser calls the fictive, the intertextual semiosis corresponds to the imaginary, and the transtextual semiosis corresponds to the real. This draws attention to the fact that the model can not only be used to represent the playing of a game-fiction, but also its creation. In this case, elements from the creator's actual world are transferred into the fictional world by an act of the creator's imagination.

Intratextual Semiosis

A closer look at the elements of the six-world model should reveal some of the rules that govern the process of fiction-making. The intratextual semiosis provides a convenient starting point, because it will allow us to go through the process' steps one by one. As has been pointed out before, the intratextual semiosis takes as its object the textual reference world and transforms it into the world-image projected by the text. The rule that governs this process is the rule of internal consistency. In order to project an image of the textual reference world to the player that he or she will accept at face value, the narrating agency must be reliable.

An unreliable narrative agency will make the player suspicious of the way the game-world is represented to him. In extreme cases, this can lead to a total breakdown of the fictional process, but usually moderate violations of this rule are tolerated. Everybody who has ever played a game-fiction will be familiar with autistic adversaries that will react to being shot at, but not to the pushing around of heavy metal crates directly behind them, or similar inconsistencies in the game-world.

In some cases, violations of this rule might even have a beneficial effect: for instance, in the adventure game *ICO* [2] the save-points are marked by glowing white sofas that are totally out of place in the game's fantastic setting. Although these are obvious breaks in the game-world's internal consistency, they nevertheless allow the player to save the game intuitively and without navigating through menus. This in turn blends the process of saving smoothly into the game itself and thus coherence is reestablished.

Intertextual Semiosis

The second part of the process is the intratextual semiosis, the imaginary component that links the real world and the fictional world of the game. In this step, the image projected by the text is transformed into the reader's impression of this image. As has been pointed out before, this is an interactive process which is governed by the rule of consistent interaction. That is to say, the interaction with the game should be as intuitive and predictable as possible in order to guarantee the completion of this step of the process. In a game-fiction, the rules governing the interaction between player and game are not supposed to change arbitrarily.

What happens if these rules are subject to arbitrary

change is described impressively by D.B. Weiss in his novel *Lucky Wander Boy* about the fictitious arcade game of the same name:

> "The tentacles of randomness had been extended to envelop the very physics of the game world. The variables in the equation that determined the parabolas of Lucky Wander Boy's Jump!s, the rate of his Drop!s, the number of seconds before the horrible Photo-Sebiro came out [...] – all were subject to the whims of random-number generating subroutines, themselves modified by other random-number generating subroutines. [...] After about twenty seconds, Photo-Sebiro caught up with Nixon's Lucky Wander Boy and flashed him into oblivion. [...] 'Fuck you, you fucking punk-ass fuck! It's not fucking fair! Cheating bitch!' Nixon smacked the machine and we all backed off." [8]

This drastic reaction is of course entirely understandable. The game *Lucky Wander Boy* is a parable of life and as life itself it seems utterly random and unfair at times. What we expect of games, however, is a refuge from the uncertainties of everyday life, an escape into a world where death always has a reason – such as our failure to pull the trigger quickly enough or our misjudging the distance to a platform suspended over a sea of bubbling lava.

If the criterion of consistent interaction is not met, the fictional game-world easily breaks down. If button configurations change from one moment to the next, this inevitably draws our attention away from what is happening in the game to focus instead on the controller in our hands. If our game character loses items from his or her inventory, we will start to distrust the game. And if we cannot proceed within the game because of a bug in the game code, this will shatter our faith in the game-world beyond repair.

Transtextual Semiosis

The third and final step in the process of fiction-making is the transtextual semiosis. In this step, the player's impression of the game-world is integrated into his or her real world, effecting a change in this world. This difference will then be fed back into the game-system and the semiotic process begins anew. This part of the process is governed by the player's suspension of disbelief which in turn is dependent on the game's ability to present itself as unaware of its fictional status. Clearly, this can only be the result of the successful completion of the previous semiotic operations.

As of yet, games have made only timid attempts at meta-fictionality. While self-referential elements abound in many games – such as the kitchen appliances in *Half-Life* that are embossed with the name of the game's developer, Valve – to my knowledge there is no game in which the game's designer boldly steps forward within the game and strikes up a conversation with the player. If this were to be done, however, it would constitute a clear violation of the contractual agreement between game and player, and it would cause the fictional world of the game to break down at least momentarily.

A break of this rule might have its benefits as well. In his book *More Than a Game*, Barry Atkins points out the similarities between strategy games with a historical setting and 'counterfactual fiction', i.e. fiction that deviates boldly from historical fact such as Richard Harris' novel *Fatherland*. It is only a small step from counter-factual fiction to what Brian McHale calls 'historiographic metafiction' [6], i.e. a distortion of official history in order to draw attention to minority discourses that have been marginalized by the historiographers. The effect of historical metafiction and counterfactual fiction is basically the same: it sheds a doubtful light on the way history is

represented to us, i.e. as a consistent narrative that follows the laws of causality and chronology. If such a change in the reader's world can be affected by a game, this must be seen as a form of enlightenment.

CONCLUSION

I have demonstrated that literary theory can contribute more to the emerging field of game studies than just narratological analysis. If we take games seriously as forms of fiction, we must not disregard literary studies' expertise in studying fictional worlds. I hope that this is not misconstrued as a form of 'theoretical imperialism', but rather as an attempt to integrate a concept from literary studies into the larger framework of game studies. In fact, I would like to argue that game studies have reached the era of post-colonialism: the concepts developed within the field are now mature enough to be exported back into the disciplines that games studies have emerged from.

The concept of playability presented here is one such concept. I have tried to outline ways in which literary studies could benefit from a theory of playability, but the potential use of this concept extends much further. Film and media studies are obvious candidates, and other disciplines in the humanities and natural science might follow. This is by no means an attempt to reinstate the postmodern dogma that 'everything is a game'. If everything is a game, the term becomes meaningless. But if we try to understand natural and cultural processes as games, this might lead to new insights.

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