

# Emotions about the Deniable/Undeniable: Sketch for a Classification of Game Content as Experienced

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## ABSTRACT

This paper deals with the emotions experienced by a player. It problematises the empirical psychological study of players' emotions. The paper suggests emotions to be understood as structured relationships instead of as reactions. It proposes players' emotions to be analysed through their intentionality, by looking at games as constituting the objects of the emotions. The article questions the validity of objective knowledge about games for the purpose of understanding games as experienced. It presents a method of categorizing game content as it appears as objects of the players' emotions. The categorization is further demonstrated by looking at two erotic variations of Tetris.

## Author Keywords

player, experience, intentionality, emotions

## INTRODUCTION

Emotions are ultimately important for humans. They define the ways we relate to the surrounding world and the ways how we experience objects, events and states of affairs in the world as we encounter them. They are constantly immanent in the players' experiences as relationships between the players and game content. More emotional games are often dubbed as the next milestone in the development of computer games. The sought-after "emotionality" of games, as referring to a particular quality of a game that can elicit emotions in a different fashion than most other games, is not an unambiguous property of an object in the world like colour or shape, which can be easily designed onto products. Neither it is, given that we are talking about a quality of a game, something existing only in the mind of the player. It seems fair to suggest that the emotionality is a highly subject-dependent property of a game; different players will have different emotional experiences with the same game. Having accepted this notion, the design cookbooks, such as [5], which guide the designers to include proper stimuli to achieve the desired reactions, as well as the attempts to create "games that can make their players cry" seem reductionist at best.

A solid foundation for designing more emotional games could be found from a holistic understanding of why and on which grounds some objects or events in games are more important to players' emotions than others. This paper does not provide such understanding but points at a particular direction. To attain such understanding it does not seem feasible to limit the view to extreme emotions, such as sadness so overwhelming that it makes a player cry. Not only because not all emotions are such extremities, but also because making deductive statements about emotions based on extreme examples can easily lead astray [22]. Given that emotions are subjective experiences and that games adapt to a wide range of usages from jolly pastime through artistic expression and cyber-athletics to political propaganda, games as experienced are rather muddy waters for lucid argumentation. However, a requirement set by every computer game, the requirement for the player to suspend her disbelief in order to experience what the game has to offer,<sup>1</sup> seems to sustain an analysis that can shed light on the differences in game content that are important to player's emotions. To facilitate such analysis in this paper, I will first detach the viewpoint from the de-contextualised understanding of emotions and move on to discuss intentional emotions as meaning-making. I will then identify the area of interest as games as played, at which I will be looking through the possibilities of denial and disbelief, in order to arrive at a distinction between two kinds of content in games as played. Finally, I will use this distinction to analyse two different variations of *Tetris* (1985).

## EMOTIONS AS MEANING-MAKING

Psychology is often taken as the discipline of choice when attempting to dissect emotions and understand how they work, [13] also when under scrutiny are the emotions of a player. While the psychological method, honed to observe from an external viewpoint, can provide us results of

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<sup>1</sup> This is not unlike Caillois' idea of games as involving a certain degree of make-believe [3].

scientifically accurate measurements, it severely lacks understanding of the context of the emotions. Sartre [17] notes that “for a psychologist emotion signifies nothing, because he studies it as a fact; that is, by separating it from everything else.” We may accept that the psychological method can tell us which emotions the players experience and when, but still we cannot see it accounting for why a particular emotion was experienced. A proper metaphor for such de-contextualised information about emotions is the story about blind men and an elephant, originating in Buddhist scriptures. One of the men, who groped the elephant’s foot, said an elephant is like a pillar. Another, while stroking the elephant’s tusk, accused the first man of being completely misguided and corrected that the elephant is like a sword. For the attempt of fully comprehending the player’s emotions, the scientific measurements of psychology need to be complemented with an understanding of the context of the emotions. In other words, being interested in emotions themselves is not enough – one must focus on decoding emotions as they deal with something in play.

Emotions play a large role in defining how we experience the world as meaningful. As “constitutive interpretations of the world” [20], they are involved in every meaningful encounter with the world. [4] Emotions are not one-off reactions to stimuli. Instead, they are “processes, which [...] go on and on” [22], unfold over time [14] and develop like a snowball growing as it rolls downhill. For the study of emotions in play this means that the extremely emotional moments cannot constitute the whole area of interest, which, instead, should be the emotional side of the player’s mindset in general. In her empirical study of players’ emotions, Nicole Lazzaro [11] observed that “negative emotions” can have an important role in the players’ pleasant experiences with games. Such observation seems to support the conception that individual emotions are not either isolated from other emotions and mental states, but are involved in a system of hopes, wishes, desires and intentions. This is what Robert Solomon [20] called the *ideology* of an emotion. Taking emotions as something that is constantly involved in the experience casts a rather wide net, but such comprehensive understanding is ultimately necessary for the purpose of accessing the full emotional abilities of computer games as a medium.

To overcome the breadth of the whole subjective experience as an area of interest, I turn to the conception of intentionality. Intentionality is a characteristic not exclusive to emotions. It refers to our mental states’ ability to be directed toward something. In other words, to humans’ ability to have a sense of an object involved in an experience. All mental states that involve a conception about an object are intentional. [12] In the context of emotions, it means that an emotion necessitates an object. For example, there cannot be anger without there being an object of the anger. Another important characteristic of intentional emotions is their independence from the

existence of their objects. It means that emotions do not depend on the extra-mental existence of their objects or the qualities with which the objects exist in the world. We can, for example, love something that does not exist. More important than the object’s actual existence is the conception one has about the object. [12] To experience love, one must conceive an object as lovable.

Thus, emotions can be understood as relationships between the subject and the emotion’s object. Describing such relationship including its both ends, seems a more accurate way to describe an emotion than to rely on names given to emotions. The emphasis on objects is rather widespread in the phenomenological understanding of emotions. According to Solomon [21], an emotion is “an experience of the object from the peculiar perspective of that emotion.” To Sartre [17], who wrote a brief but enlightening text on emotions which ties in well with his later writings, emotions are “magical” qualities we impose on (objects in) the world to circumvent the glitches and shortcomings we encounter. Heinämaa & Reuter [7] note that emotions can be differentiated from each others only by their objects and ways of relating to the object.

#### **GAMES AS PLAYED**

The project of theorizing about the player’s emotions can be framed as a project of theorizing about his emotions’ objects and about the various reasons he has to relate to them in different ways. This seems to serve the purpose of differentiating the in-game objects and events which are important to the player’s emotions from those which are not. With this framing, the focus is not on the emotion or the experience themselves as having observable intrinsic values, but on the contents of games (or the magic circle) as they appear in the objects of the experience. Psychology, being the science of mind and behaviour, would be the discipline of choice for analysing the former subject matter. The latter area of interest calls for an understanding of games. Put more properly, understanding of games as already played.

As a player, I may know something about how the technology behind the game. For example, I may know that the landscape opening up behind the houses in the first person shooter game *Half-Life 2* (2004) is partly constituted by imposing an image on the insides of a skybox, which is an analogue of a backcloth in a stage play. Regardless, I can, thanks to conception-dependency and existence-independency of emotions, enjoy the charmed landscape in which the game lets me operate. If I had wished for a game with a fully operational world but would have had to settle for one in which a part of the world is just an image, my experience about the same feature would probably involve something else than enjoyment. And finally, if I don’t know about the construction of game worlds the conception about the game world involved in my emotions does not include anything about skyboxes.



**Figure 1:** View to a square in City 17 in *Half-Life 2* (2005)

While keeping in mind the fact that an emotion does not necessitate the actual existence of its object, but a conception about the object, allow me to look at another example. When playing *Grand Theft Auto: San Andreas* (2005) (later *GTA: SA*), I may need to get CJ, the protagonist, to a specific location in the city in which the game takes place. To get there, I make CJ to jump into a fire engine and use it as a means of transport. The fire engine in *GTA: SA* is a proper emergency vehicle, as it has sirens and blinking lights that can be turned on at will. When the lights and sirens are on, other cars steer clear of the fire engine's way. For the purpose of extinguishing fires it has a water cannon that can be aimed and turned on and off. If water is sprayed at a vehicle or a building on fire, the fire will eventually die. The sirens and lights and the effect they have on other traffic, combined with the ability to extinguish fires, constitutes sufficient grounds for calling the fire engine a virtual fire engine. (compare [1]) But if I played *GTA: SA* without knowing about the special abilities of the fire engine compared to an ordinary vehicle without experimenting with its abilities, the fire engine as it appears in my experience would not have the qualities that make it a virtual fire engine. The vehicle as a virtual fire engine is important to my emotions only to the extent I experience it as a virtual fire engine. I could also be a proud driver of a fire engine even if the fire engine actually was a fake fire engine with no sirens and water cannon. This could be the case if I was using a modified version of *GTA: SA*, whose graphics had been tampered with to make an ordinary vehicle look like a fire engine.

To make it possible to look at emotions in terms of their objects and to find out why some objects are more important than others, a way to categorize game content as it is experienced as emotions' objects is needed. For the study of the emotions experienced by a player, the particular qualities of game content are important only to the extent they are manifested in the experience. This can

be taken even as far as concluding that if the player is not aware of the game's goal, the game about which his emotions are is not a game that has a goal. This severely limits the usefulness of theories and classifications that rely on the objective knowledge about games and leads to a question: how could one categorize game content as it appears as played, as the objects of the player's (emotional) experience?

#### **ON THE POSSIBILITY OF DENIAL AND DISBELIEF**

Beliefs offer a way to put into words how intentional emotions work. According to Sartre [17], in genuine emotion, genuine belief (among other things) is involved. These beliefs can be either conscious or unconscious. In everyday encounters with the world, they can be rather self-evident. It is also perfectly possible that there are no actual sustainable grounds for the beliefs, as they can stem for example from prejudices or hallucinations.

To experience fear, we must have a conception about the dreaded object and we must believe that this object poses a threat. Walking in woods at night and hearing sounds suggestive of a predator constitutes a prime example. The imminence of the predator does not require much explanation as it is metered against the actual reality in which we exist as humans. But consider the same event taking place in a game and involving a virtual predator. To say that the virtual predators, like brown bears in *The Elder Scrolls IV: Oblivion* (2006), as consisting of pixels and existing in virtual woods, or, as non-real, could not pose threats for humans would be a crude simplification. Instead, it seems fair to say that the imminence of virtual predators is not as self-evident as the real predators'.

The objective view of a dangerous predator as game content is that it has the qualities necessary for calling it dangerous in the setting of the game. But from the perspective of lived experience, the virtual predator is dangerous by an agreement. In fact, all of its properties exist in the lived experience by an agreement. However, this does not mean that the threat it poses or the consequences of close encounters with it would be somehow less real or seem like such for those already engaged in the game.<sup>2</sup> The virtual predator can nevertheless be experienced as dreadful only by those who accept to believe in what the game offers. In this light, Nintendo's slogan at Electronic Entertainment Expo 2006, "playing is believing"<sup>3</sup>, is actually more fitting that one might have thought at first.

Willingness for such acceptance is close to what Suits [23] defined as lusory attitude. In Thorhaug's [24] view, the concept of lusory attitude implies a conception of the player as a position toward the rules of the game. Such conception

<sup>2</sup> This is in tone with Bogost, who questions the alleged safety of playing a game [2].

<sup>3</sup> [http://www.nintendo.co.jp/kessan/060607qa\\_e/04.html](http://www.nintendo.co.jp/kessan/060607qa_e/04.html)

is not the big picture of the player with lusory attitude as someone who can experience emotions. If lusory attitude is “the acceptance of constitutive rules just so the activity made possible by such acceptance can occur” [23], those interested in players’ experience should not limit themselves to see only that part of the activity which takes place in relation to the rules of the game. In exchange for believing in what the game sets forth the player gains possibilities<sup>4</sup> to not only affect certain states of affairs, but also to have emotions about things in the game. Thus, it seems fair to assume that more the player chooses to believe in the game, (as consisting of rules and fictional elements among other things) the more she is capable of experiencing emotions with the game. Solomon points out a similar give-and-take undertone in emotion, namely in anger. He suggests that in the end it boils down to an ethical judgement: “The measure of the intensity of anger is one’s sense of vulnerability and damage to the self. The measure of intensity, in other words, is an ethical judgement – how important the issue is in one’s life[.]” [22]

Huizinga [8] notes that “when the rules of the game are transgressed, the play-world collapses.” Contemporary computer games, however, are not constituted only of rules whose transgressing would have such severe consequences. Computer games differ from each other, more than non-digital games, in how much player’s disbelief they allow before depriving from the player his status of being a player. This may be resulting from the union of games and storytelling, which is rather new phenomenon in the field of games and human play. A voluntary player of a single-player game is also free to decide the extent to which she accepts the meanings<sup>5</sup> set forth by the game. The player is able to engage in disbelief toward the meanings of the game. At his free will, she can take his disbelief into its extreme form and deny all the meanings. This will result her becoming a non-player. The player’s possibility to invalidate the objects the game offers for his emotions by engaging in denial and disbelief toward the game may seem problematic at first sight. It may lead to a glib conclusion that volition is the biggest challenge to emotional games. This untenable conclusion would be that games can never elicit deep emotions in humans, because the agreement that justifies the beliefs on which emotions are based can be broken at will.<sup>6</sup> To overcome this, we have make the

<sup>4</sup> These possibilities are available also to for example an AI bot programmed to “know” the game in order to play it

<sup>5</sup> The word ”meaning” is used with a loose definition; to refer to that which the player derives from the game content.

Whatever that “deriving” means in practice is not within the scope of this paper.

<sup>6</sup> Such challenge is not exclusive to computer games; the challenge of rational or genuine emotions about something fictional is an issue often discussed within the philosophy of emotions. For an example of such discussion, see [6].

presumption that players, in general, are not constantly considering whether or not they should stop playing, but are, despite having a free will, to some extent committed to the activity. Those are the individuals, on whose emotions games can use all their means. For speaking about emotional experiences of players, instead of speaking about emotional experiences of humans in general, the possibility of denial and disbelief does not appear as a problem. This possibility together with the observation that games consist not only of rules that keep the play-world from collapsing, constitute a baseline for distinguishing between two kinds of game content. Such distinction follows.

### THE DENIABLE AND THE UNDENIABLE

In games there are meanings the player can deny without decreasing his possibilities to act in the game. There are also some, which cannot be denied without such consequences. The shape of Bismarck’s moustache in the strategy game *Civilization IV* (2006) is among the deniable meanings, whereas the importance of defending one’s cities in the same game is not. Everything related to the blond female co-driver in the racing game *Turbo Outrun* (1989), is deniable. In the heart attack mode of a sequel to the aforementioned *Outrun* title, *Outrun II* (1999), the case is rather different; the co-driver has to be impressed with fast driving and tricks. The player who was proud of his well-organized public transport system in the strategy game *SimCity 4* (2003) would be experiencing an emotion about the undeniable. Whereas the player who was proud of a street on which all houses are of the same colour would have an emotion about the deniable.

The undeniable and deniable meanings of games as played can be summarized as follows:

- Undeniable meanings are the ones the player cannot deny without decreasing his possibilities to act in the game, e.g. the importance of making it to the next checkpoint in time in *Turbo Outrun*
- Deniable meanings are the ones which can be denied without such consequences, like the shape of Bismarck’s moustache in *Civilization IV*

Being either deniable or undeniable is a rather constitutive property of game content as experienced by a player. It seems that it is the only property of game content as experienced, of whose existence one can be completely sure. As such, the difference between the deniable and the undeniable is a difference in the ontological status of the contents of games as played. In the light of examples presented so far, it can be seen as resembling many other distinctions, such as game and story, function and form, system and aesthetics, and so on. The distinction between deniable and undeniable is derived from the player’s possibility of denial and disbelief as demonstrated earlier, and not for example from the properties of game content or from a comparison between different forms of game content. Whereas for an objective eye the need to defend one’s cities in *Civilization IV*, the top speed of the sports car in *Turbo*

*Outrun* and Hans Voralberg's seemingly irrational quest for a distant land in *Syberia II* might not seem commensurate enough to be fairly paralleled, they can all be equal objects of the player's emotions. Thus, it is hard to compare the distinction presented here with dichotomies derived from the objective properties of game content.

One rather relevant related dichotomy, derived also from the differences in necessity, is Juul's [10] distinction between games with obligatory goals and games with optional goals. Former are the ones which are impossible to play without striving for their goals. His example of such game is *Scramble*, whose "player has no option but to 'invade the scramble system' - otherwise the game will end." *GTA: SA*, on the other hand, is, according to Juul, a game with optional goals; it states the goal to be to "saving Carl's family and cleaning up the streets", but does not force the player into pursuing the stated goal. An obligatory goal, as something which the player needs to pursue in order to be a player, is certainly undeniable. But it is worth of noting that also in games with optional goals, there are parts of the game content, which the player cannot ignore without being punished. From the player's point of view, these may appear as even more important than the goals of the game. One who did not acknowledge the importance of getting CJ out from a vehicle when it catches fire, would certainly decrease one's possibilities to act in *GTA: SA*. Burning vehicles in *GTA: SA* will eventually explode, causing immediate death to everyone still inside them. The importance of keeping CJ alive in *GTA:SA* is a meaning, which the player cannot ignore without risking her status a player.

#### **EMOTIONS ABOUT THE DENIABLE AND THE UNDENIABLE**

The prototypical view on the player's emotions is that that winners experience joy and losers experience sadness. This is the assumption made by Juul [9] in his classic game model. It should be noted that Juul's emphasis was not on the player's emotions, but defining on what is a game. In the context of formal study of games, such binary opposition may be feasible. Also the social context of playing often supports such polarized emotions. However, the problem is that human players, those who have emotions, seldom are ideal players. Sometimes losing a game can be more beneficial than winning, and thus winner experiences grief instead of joy. Also, it goes without saying that games elicit emotions not only when the game is over but during the game, too.

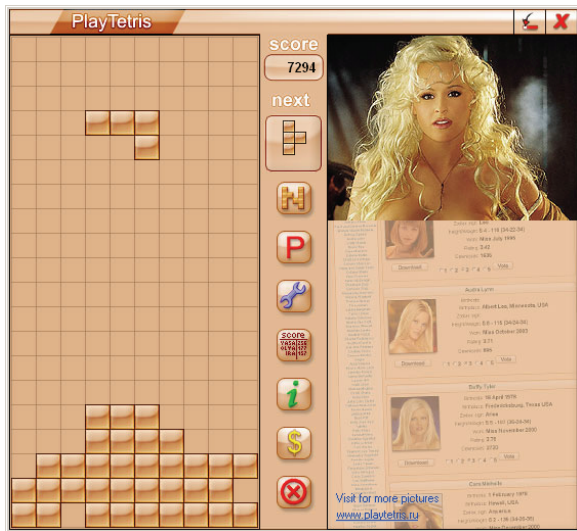
Allow me to expand the argument outside the binary distinction of winning and losing. For example, although managing to supply water to every corner of one's city in *Sim City 4* is a positive thing in relation to the game system, it does not necessarily make a human player happy. An achievement esteemed in the context of the game does not necessarily have the same quality for the player. That the undeniable meanings are important to the player's status as a player does not necessarily say that they are important to

his emotions as well. The meanings whose acceptance is required in order to facilitate playing are not the only meanings, or, identical to the meanings involved in emotions in play. If it wasn't so, the players could not be proud of, for example, their avatars' neat jackets that make no difference regarding their possibilities in the game. As long as denial is possible, or until an interface like the bioport in David Cronenberg's movie *eXistenZ* (1999) is invented, the reality against which the beliefs and conceptions involved in the voluntary player's emotions are metered is the actual reality of man, not a virtual reality or a half-reality.

This is a challenge to any theory that speaks about player's experience with the conscious or unconscious presumption that what takes place in the game is somehow isolated from the reality. In a purely theoretical sense we can look at games as not having consequences for the actual world and as activities whose participants are decontaminated of their personal worries. But in reality, such games seldom take place; the ideologies of emotions in play, the desires, hopes, and wishes involved, extend beyond the games.

To further illustrate the distinction between the undeniable and deniable game content, allow me to look at few of the variations of *Tetris*, particularly two with pornographic content, *PlayTetris* (2005) and *XTET* (1996). For the sake of the argument, allow me to assume that the designers of those games have attempted to elicit an emotion of sexual desire in the players of their games. With regards to Shaffer [19], I take sexual desire as an intentional emotion without further definition, which seems sufficient for the purposes of this paper. I have chosen such example games because they can be seen as having an identical design goal, eliciting a particular single emotion while they take distinctively different ways to attain their design goals. Given that Schott [18] observes that it is nowadays "possible to experience interactive photorealistic 3D bodies performing explicit sexual acts", the games I have chosen may not be the best examples of games that attempt to elicit sexual desire. Still they easily illuminate the difference between two kinds of game content as experienced.

*PlayTetris* the resembles original *Tetris* (1985) to a great extent. The player has to arrange blocks of different shapes so that they form solid lines. Once a line is solid, it is cleared. If blocks reach the upper border of the space, the game ends. The erotic or pornographic content in *PlayTetris* comes in as an incentive for the player. As the player clears more lines, more of a scantily clad woman on the right side of the screen is exposed.



**Figure 2:** Playtetris (2005)

In *XTET* (1997), the Tetris blocks represent humans, both male and female, in different postures. By arranging the blocks side by side and on top of each other, the player constructs crude representations of humans in coital positions. The game mechanics of *XTET* deviate from the original idea of *Tetris*. Solid lines are not cleared, as it would cause the humans represented in the blocks to be torn apart. Instead, when a matching male piece meets a matching female piece in a proper position, an animation accompanied by sound is played and both pieces are cleared. There is also an allegedly erotic background image beneath the blocks. To be able to view it, the player has to make sure that there are no heaping bodies blocking the view.



**Figure 3:** XTET (1996)

The player of *XTET*, who denied the erotic or pornographic meanings of the game, e.g. the necessity to distinguish

between the two sexes based on the appearance of the naked bodies in order to clear the blocks, would decrease his possibilities to act in the game and would eventually become a non-player when the heaping bodies would reach the top. In *PlayTetris*, the pornographic content is deniable. To retain one's status as a player of *PlayTetris*, one does not have to pay attention to the pornographic content. The makers of *XTET* may have drawn inspiration from the game *Sex Tetris* (1993) for the Spectrum ZX platform. The mechanics of *Sex Tetris* game faithfully mimic original Tetris, but the blocks represent female human bodies in the same manner than the pieces in *XTET* do. In *Sex Tetris*, the pornographic appearance of the blocks is not reflected in the game mechanics. The difference between *Sex Tetris* and *XTET* in the light of the proposed view is that in *XTET* the appearance of the blocks as naked human bodies is among the undeniable meanings.



**Figure 4:** Sex Tetris (1993)

Rusch [16] sees the “interplay between the fictional world and the game as a system” to be crucial for unleashing the full emotional potential of computer games. *XTET*'s existence as an “erotic game” seems to demonstrate such interplay. Without further empirical fieldwork it is impossible to say anything about the difference in the importance that the undeniable and deniable meanings have for the players' emotions. In the meantime we can look at the ways the games meet their supposed design goal; to elicit sexual desire in the player. Like any game designers, the makers of these games are rather toothless in defining how their games should be experienced. But we can observe that *XTET* uses more intrusive means than *PlayTetris* for subsuming erotic hues into the player's experience: to be a player of *XTET* requires one to acknowledge the erotic content of the game, whereas a censored version of *PlayTetris* could still be playable. More precisely, the beliefs (e.g. intercourse is a favourable thing) required from a player of *XTET* are the same beliefs that back up the emotions which we supposed as the design goal of the game.

The differences between the means *XTET* and *PlayTetris* use to elicit sexual desire can be summarized as follows:

- If *XTET* manages to elicit sexual desire in its player, this emotion will be an emotion about the undeniable.
- The sexual desire elicited by *PlayTetris*, on the other hand, would be an emotion about the deniable.

## CONCLUSIONS

In this paper I presented how emotions, instead of being reactions to individual game events, have an important role in the meaning-making involved in playing. Using the necessity of suspension of disbelief as a baseline, I drew a distinction between two kinds of game content as experienced. Whether or not the distinction has anything to do with game contents' actual importance to players' emotions is a question begging to be solved empirically. The route by which the distinction was attained excludes direct comparison with many previous theories about players' emotions. Paralleling the distinction between the deniable and the undeniable with the existing theories on games and emotions, such as Lazzaro's [11] conclusions of different kinds of fun made based on empirical observations and Perron's [15] three categories of emotions elicited by games should also be possible with empirical backup.

Apart from space constraints, there is no reason to concentrate on games only when analysing the players' emotions in terms of their objects. In the case of multiplayer games this becomes rather evident; the sphere of analysis should incorporate the social dimension of emotions. The biggest awaiting question is what happens to the distinction between deniable and undeniable when taken to the context of multiplayer games in a sufficient detail.

Computer game studies often hail the player as the one around whom the system revolves. However, the subjective dimension of playing is often left uncharted, while more attention is paid to what goes on inside the game. In this paper I identified the conflict between objective ludology and games as experienced. That is a topic regarding which there is a lot of work still to be done, and which can be of interest not only to those interested in player's emotions, but to anyone who is concerned with how games are experienced.

## REFERENCES

### Texts

1. Aarseth, E. "The Perception of Doors: Fiction vs. Simulation in Games" in *Proceedings of the 6<sup>th</sup> DAC conference. Digital Experience: Design, Aesthetics, Practice. IT-University of Copenhagen December 1<sup>st</sup>-3<sup>rd</sup>, 2005*. pp. 59-62
2. Bogost, I. "Unit Operations. An approach to videogame criticism" The MIT Press, Cambridge, MA & London. 2006

3. Caillois, R. "Man, Play and Games" Urbana and University of Illinois Press, Chicago. 2001.
4. Calhoun, C., & Solomon, R. (eds.) "What is an Emotion? *Classic Readings in Philosophical Psychology*" Oxford University. 1984
5. Freeman, D. "Creating Emotion in Games: *The Craft and Art of Emotioneering*" New Riders, Berkeley. 2004.
6. Gendler, T.S., & Kovakovich, K. "Genuine Rational Fictional Emotions" in *Contemporary Debates in Aesthetics*. Blackwell Publishing, Malden. 2005
7. Heinämaa, S. & Reuter, M. "Naisten tunneherkkyydestä" ("On women's emotional sensibility") in I. Niiniluoto & J. Räikkä (eds.). *Tunteet (Emotions)*. Helsinki University Press. 1996. pp.132-169
8. Huizinga, J. *Homo Ludens. A Study of the Play-Element in Culture*. Routledge, London. 2000
9. Juul, J. "The game, the player, the world: looking for a heart of gameness". In M. Copier & J. Raessens (eds.). *Level Up Digital Games Research Conference 4-6 November 2003 Utrecht University*. pp.30-45
10. Juul, J. "Without a goal" in T. Krzywinska & B. Atkins (eds.). *Videogame/Player/Text*. Manchester University Press. 2007. (In press.)
11. Lazzaro, N. "Why We Play Games – Four Keys to More Emotion in the Player Experiences". Xeodesign. Unpublished research report. Abstract available at <http://www.xeodesign.com/whyweplaygames>
12. McIntyre, R. & Smith, D.W. "Theory of Intentionality" in J.N. Mohanty & W.R. Kenna (eds.). *Husserl's Phenomenology: A Textbook*. Center for Advanced Research in Phenomenology & University Press of America, Washington D.C. 1989. pp. 147-179
13. Niiniluoto, I. "Tunne-kollokvion avaussanat" (Opening words for the Emotion colloquium) in I. Niiniluoto & J. Räikkä (eds.). *Tunteet. (Emotions)*. Helsinki University Press. 1996. pp. 5-10.
14. Parkinson, B. *Ideas and Realities of Emotion*. Routledge. London. 1995
15. Perron, B. "Cognitive Psychological Approach to Gameplay Emotions". In online proceedings of *Changing Views: Worlds In Play. DiGRA International Conference 2005*. Available at <http://www.gamesconference.org/digra2005/viewabstract.php?id=271>
16. Rush, D.C. "No need to cry. Thoughts about the unique emotional potential of computer games" in *Ludic Society* vol.2 no.2. (February 2006) p.30
17. Sartre, J-P. *Sketch for a Theory of the Emotions*. Routledge. London and New York. 2003.
18. Schott, G. "Sex in Games: Representing and Desiring the Virtual". In online proceedings of *Changing Views: Worlds In Play. DiGRA International Conference 2005*.

Available at  
<http://www.gamesconference.org/digra2005/viewabstract.php?id=17>

19. Shaffer, J. "Sexual Desire" in *The Journal of Philosophy*. Vol. LXXV No.4 (April 1978) pp. 175-189

20. Solomon, R.C. "The Logic of Emotion" in *Noûs* Vol. 11 No. 1. (March 1977) pp. 41-49

21. Solomon, R.C. "Emotions in Phenomenology and Existentialism" in H.L. Dreyfus & M. Wrathall (eds.). *A Companion to Phenomenology and Existentialism*. Blackwell Publishing, Malden. 2006. pp. 291-309

22. Solomon, R.C. "True to our Feelings" New York: Oxford University Press. 2007.

23. Suits, B. *The Grasshopper: Games, Life, and Utopia*. Broadview Press. 2005.

24. Thorhauge, A.M. "Player, Reader and Social Actor" in *Fine Art Forum* Vol. 17 Issue 8 (Special Issue - DAC 2003 Conference Papers) (August 2003). Available at [http://www.fineartforum.org/Backissues/Vol\\_17/faf\\_v17\\_n08/reviews/thorhauge.html](http://www.fineartforum.org/Backissues/Vol_17/faf_v17_n08/reviews/thorhauge.html)

## Games

Aleksej Pajitnov: *Tetris*. 1985. (PC)

Bethesda Softworks: *The Elder Scrolls IV: Oblivion*. 2K Games. 2006. (PC)

Firaxis Games: *Civilization IV*. 2K Games. 2006 (PC)

Maddox Games, ZES't corp & Auric Vision Ltd: *XTET*. 1996. (PC)

MC2-Microïds: *Syberia II*. XS Games. 2004 (PC)

Rockstar North: *Grand Theft Auto: San Andreas*. Rockstar Games. 2005. (PC)

Sashkosoft: *PlayTetris*. 2005

Sega-AM2: *Outrun II*. Sega. 2003. (Xbox)

Sega Enterprises Ltd: *Turbo Outrun*. US Gold. 1989. (Amiga)

Unknown: *Sex Tetris*. 1993. (Spectrum ZX)

Valve Corporation: *Half-Life 2*. 2004. (PC)