On the logic of emotions in play

olli tapio leino, PhD fellow
Center for Computer Games Research
IT University of Copenhagen
Rued Langgaards Vej 7
2300 Copenhagen S, Denmark
<leino@itu.dk>
http://www.itu.dk/~leino/

Abstract

This paper concerns with the emotions of a single-player computer game's player. It identifies a challenge for games research trying to account for player's experience from the detached and objective 'scientific' point-of-view. The paper suggests that by looking at gameplay from the player's perspective, we can describe defining characteristics, based on which inter-subjectively plausible assumptions about player's emotions could be made. In this paper one such characteristic is identified as the gameplay condition, which is further elaborated in relation to goals in single-player games.

Motivation and introduction

Harnessing rather than *eliciting* emotions

As the demographics of computer game players continue to diversify (Pratchett 2005; ESA 2006, 2008), new kinds of expectations toward games emerge. Simultaneously the constraints set by technology for the artistic expression using the computer game medium are decreasing. According to Neil Young, the CEO of Electronic Arts at the time, (quoted in Loftus 2006) games are still in their "pre-Citizen-Kane era": they are easily paralleled with early movies of spectacle, whose creators had not yet discovered all the ways in emotion can be evoked using the medium of film.

Contemporary understanding in philosophy and sciences of mind no longer dismisses emotions as disturbances (cf. James 1884, 189-90) or as "animal spirits" (cf. Descartes quoted in Lokhorst 2008) but acknowledges them as part of our healthy mental and intelligent life, as for example ways "of being conscious or aware of the world" (Calhoun & Solomon 1984, 16), shaping how we make sense of our surroundings. So as long as we are assuming human players, we have no reason to believe emotions were not always already in play. Thus the question of "emotional potential" of computer games is not primarily a question of *eliciting* (cf. Freeman 2003) but a question of *harnessing* the existing mental structures involved in computer play to serve the task at hand, be it to entertain or to educate or something in between. For succeeding in that task, it is necessary to understand the logics of emotions in play: *why* and *how* do players undergo emotions when playing.

Outline of this paper

In this paper I will describe a characteristic of the relationship between a single-player computer game and its player. This characteristic contributes to the ways in which the contents of computer games become relevant to their players' emotions.

Building on this characteristic, it is possible to make intersubjectively plausible informed assumptions about the experienced significance of in-game events and objects. To motivate such aim, I begin by discussing the challenges the player's emotional experience poses for both qualitative game analysis and empirical games research. I suggest that those challenges could be countered by looking at the emotions involved in gameplay from the player's perspective.

To facilitate such analysis I adapt a 'cognitive-phenomenological' understanding of emotions, according to which an emotion is, roughly speaking, an interpretation of the world, following a logic of its own (cf. Sartre 1962; Smith 1979; McIntyre & Smith 1989; Solomon 1977, 2003, 2006). Given the constraints of a single paper, I will discuss the theory of emotions only to the extent that is necessary for the argument concerning computer game play, acknowledging that as a consequence my treatment of the theory becomes slightly simplifiying. I focus on the subjective emotional experience rather than on the behavioral or linguistic constituents or correlates of emotion. Taking Frijda's (1986) evolutionary-psychological theory of basic emotions as a proof-of-concept, I connect the rational-cognitive theory of emotions with the experience of computer game play.

I trace the origins of emotions in play as interpretations of the game's content to the requirements and limitations the game artefact imposes onto those who desire to play. With a nod towards Sartre's (1946) notion of the "human condition", I shall conceptualise these requirements and limitations as the *gameplay condition*. I will illustrate the notion of gameplay condition in relation to goals, as they are often considered as delineating player's meaningful experience with a game (cf. Lee 2003; Juul 2007).

By looking at how such condition is imposed by also games which can be seen as containing no goals or winning conditions at all, I find that the descriptive abilities of the notion of gameplay condition extend beyond the dichotomy of winning and losing. Thus the notion can be employed in descriptions of the logics of also those emotions which are not derivatives of loser's sadness or winner's happiness. I conclude by suggesting that the gameplay condition can provide intersubjectively plausible insights on emotions involved in single-player computer game play.

Approaching player's experience

<u>The explanatory gap[1] in games research</u>
If we assume player as anyone who desires to play, as anyone demonstrating what Suits (2005, 54) defined as the *lusory attitude*: "the acceptance of constitutive rules just so the activity made possible by such acceptance can occur", we can assume the computer game as constituting (part of) the surroundings which the player interprets through her emotions. The task of game designers, then, is to design the environment and the events and objects it contains so that when the player encounters them, she is equipped with the beliefs necessary for the emergence of a kind of emotion desired by the designer.

---

[1] I borrow the term "explanatory gap" from Levine (1983), who coined it to illustrate an argument concerning the inability of theories of mind to exhaustively explain mental phenomena. It is used here for a different, however slightly similar purpose.

How can research help game designers achieve such goal? For a successful harnessing of emotions it is necessary to understand their relation not only to the activity and attitude of play but also to the underlying computer game artefact. (Computer) game studies methodologies (Consalvo & Dutton 2006; Konzack 2002) can reveal in front of us the properties of what has become the player's "surroundings" and for example explain the dynamics of the game as a system. But how far does the knowledge derived from that which we have dissected into categories and their subcategories take us in studying "game and play activities" (cf. Frasca 2001), not to mention the player's emotional experience? When we attempt to study such human phenomena, the natural precondition for our success is that we are informed to the best of our abilities about the properties of the game artefact (or e.g. a game 'text', process, or system) involved. However, that does not conclude our project, as the artefact is not yet the big picture.

Empirical psychological studies might seem, for some, the most obvious way to proceed to make claims about players' emotions. Well-designed empirical metrics can give us clues which emotion the player is experiencing when. However, concerning *how* the player ended up experiencing what she did experience, their perspective alone would not make us any wiser than that of qualitative game analysis. For example, being able to assert based on a combination of empirical psychophysiological methods, such as galvanic skin response and brain imaging, that the player was afraid at a given time (which would already be an achievement) is only a starting point for understanding *why* and *how* she became afraid.

By transposing the two distinctive modes of inquiry, qualitative game analysis and empirical psychophysiological measurements, we would be able to assert facts about properties and states of affairs regarding the game (text/artefact/process/system, depending on the perspective chosen) at the time of the emotion measured. However, we would still have to resort to speculation when faced with a need to connect the dots, to explain how game content contributed to the emergence of the emotion.

Understanding what happens "in between" the areas targeted by these two modes of inquiry, how does game content (understood by qualitative game analysis) become objects of emotions (measured by empirical sciences), necessitates looking at the significance of in-game events, objects, and encounters from the player's perspective. Perhaps the reason why qualitative game analysis and empirical psychophysiological measurements both would face challenge, in equal amounts, in attempts to account for player's subjective experience is that they both employ a 'third-person' scientific perspective. Such perspective excels in asserting *facts*, but the experienced significance of things is out of bounds, as the researcher is to remain detached from the phenomenon under study (cf. Sartre 1962, 11; Buytendijk 1987, 120).

Implicit assumptions about how games are being played and what the player experiences are already in place. For example, designers have an idea about which in-game encounters are supposed to contribute to the player's emotion of fear, and a psychophysiologist can make an informed decision about during which in-game events the player's physiological properties shall be measured. However, there is no reason for these assumptions to remain implicit or at the level of tacit knowledge. Only if the principles by which such assumptions can be made are articulated and made explicit, can they develop from being subjected to criticism from a multiple

directions. This "intersubjective corroboration" (Gallagher & Zahavi 2008, 28) is important especially as any project aiming for a first-person perspective faces a real danger of falling into solipsism, where there would be as many completely unique player's experiences as there are players.

On the phenomenological orientation

Looking at computer game play from a "player's perspective" is best described as a phenomenologically informed inquiry, referring to the branch of continental philosophy originating in the writings of Edmund Husserl (1859-1938), modified and expanded upon by his successors. Phenomenology is here understood as an endeavour to describe phenomena, such as human experience, in terms of the meaning it has to the subject (cf. Smith 1979, 435). This implies a a pre-suppositionless first-person epistemology, that allows the study to approach its object as it is "given in the experience", without resting any claims or assumptions on knowledge originating outside the phenomenon (cf. Moran 2000, 9-10).

Thus phenomenology differs from natural sciences inasmuch as it does not seek to explain things in terms of causal relations, but aims for "an understanding and proper description of the experiential structure of our mental/embodied life" (Gallagher & Zahavi 2008, 9). Thus it can offer "unique resources that can enhance or complement the natural science of mind" (ibid., 41). Regarding the study of player's experience, a phenomenological approach can complement the empirical perspectives by describing the experienced significance of the events giving cause to the symptoms observable with scientific instruments. Understanding the experienced significance of events allows for designing experiments that target the human phenomenon under scrutiny in more specific detail and thus helps minimize the speculative "hit or miss" mode of scientific progress (ibid., 11).

For Husserl, phenomenology was first and foremost a method, allowing "a wide-sweeping 'critique of reason' and a 'complete reform of philosophical knowledge'" (Moran 2000, 60). However in this paper, not unlike for example in van Lennep (1987), phenomenology is primarily an epistemological orientation toward the object of study: a framework allowing insights on computer game player's emotions to be gained from the player's perspective.

A "first-person perspective" should not be confused with introspection: "the player's experience" as it appears from the proposed point of view, is no more my experience than anyone else's. Rather, by retaining a focus on the "structures that are intersubjectively accessible" (Gallagher & Zahavi 2008, 26), one can avoid solipsism and arrive at the conditions by which anyone can experience a game as its player, not at anyone-in-particular's experience as a player.

Distinguishing emotional experience and behaviour in context

The idea of multidimensional emotion is commonly accepted across disciplinary borders, encompassing for example "the distinctively bodily, the judgements that structure the experience, the experience of the object of the emotion, and the social context of the experience" (Solomon 2006). For this study, the most critical distinction is between the experience of the emotion and emotional behaviour in context.

While emotional behaviour, for example acting angrily, may sometimes especially in a social setting be deemed irrational, in the emotional experience of anger there are

various underlying 'rational' principles. According to these principles it would be foolishly irrational for an individual *not* to be angry at times. (cf. Aristotle, Rhetoric II/1-3) This "logic of emotion" (Solomon 1977) is the entry point for this paper into the players' emotional experience and in the following sections I will elaborate it in the specific context of single-player computer game play.

Surpassing linguistic ambiguity

The emotions' names are quite often dangerously misleading, as they give us an illusion that we have gained meaningful knowledge, while we have not in fact learned much in terms of detail. This is not to suggest that there would be ambiguity inherent in the names for emotions; our vocabulary allows for conveying a significant difference between 'fear' and `love', for example. However, "the words we use for emotions should not be confused with the emotions" (Solomon 2003, 117).

An example of a study with linguistic approach to emotion is Ermi and Mäyrä's (2005) study of "player's emotional experiences with digital games". Their informants were asked to self-report the involvement of five different emotional components (fear, anger, pleasant relaxation, joy and boredom) in their experiences with different games. Ermi & Mäyrä report that while joy and pleasant relaxation dominate the players' experiences, *Nethack* (1987) offers a less relaxing experience than *World of Warcraft* (2004). (Ermi & Mäyrä 2005, 3)

There are purposes for such knowledge, but to understand *how* the games contributed to the emergence of such emotions one has to go beyond the names associated with emotions. Attempting to address emotions without relying too much on their names is challenging as "there is no way we can 'get at' our emotions apart from the language we use to identify and discriminate them" (Solomon 2003, 117). However, the means with which we can articulate emotional experiences using language do not restrict us to the top-down perspective implied by emotion names.

Emotions as interpretations of the world

Even though the description of love as a 'desire to be with the beloved' applies to both 'loving one's job' and 'loving one's partner', between the two is a self-evident difference. This difference suggests that distinguishing between emotions is possible only by taking into account not only the "mode of directedness", approximated in the emotion's name, but also the object at which the emotion is directed, or in other words "about which" the emotion is (Heinämaa & Reuter 1996, 149; Sartre 1962, 35).

The relationship between an emotion and its object, known as intentionality, is an "idea that has been well-confirmed even by those theorists who set out to challenge it" (Solomon 2006, 2). Intentional mental phenomena, like emotions, are not as concerned with the actual existence of their objects as they are with the conception the individual has of the object. (McIntyre & Smith 1989, 148-151) Thus the object the of emotion is not the 'mere' actually existing object, but has both psychological and tangible properties and is *constituted* (cf. Gallagher & Zahavi 2008, 24) with the individual's beliefs as the object-as-experienced-in-the-emotion, as in "house *as one is proud of owning it*" (Solomon 2003, 52-3).

But the notion of intentionality alone is imprecise; while it allows us to acknowledge that an emotion is "about" something, it leaves us with an irreducible complex, for example "being-proud-of-my-house", an "unitary phenomenon" which is not divisible

into components or individual atoms (Solomon 2003, 53-55). Ultimately the object of every emotion is the world,[2] and what we can refer to as the object of the emotion is only its focus, its "minimal description" (ibid., 72). Closest we can get to a definition of emotion is that it is an *interpretation, judgement*, (Solomon 1977, 46; Green 1991, 66) or *apprehension* (Sartre 1962, 35) of the world.

To further articulate the details of intentional emotion is to dig deeper into the subject's understanding of the world. By understanding the beliefs involved in the emotion we can understand how a house is constituted as the "house as one is proud of owning it." This perspective, within which emotion is conceptualised primarily through its cognitive (or perhaps significant) constituents, for example as a judgement or as an evaluation, is often referred to as a 'cognitive theory of emotions' (Solomon 2003, 54) or 'Emotional Cognitivism' (Debes 2008, 2). A fundamental tenet of this position, which I have adopted for the purposes of this paper, is the assertion that we can describe emotions by describing their objects and the reasons the individual has to relate to the objects in the specific way. But how to trace these reasons, do they not belong to the subject's private mental life?

Anchoring the descriptions of emotions to the human condition

Tracing the beliefs that contribute to the constitution of an emotion's object is assisted by the assumption that emotions involve goals or purposes. Solomon (2003, 37) and Sartre (1962, 39) see transformation as emotions' purpose; to have emotion is to (desire to) change the world, either in objective or subjective way. Solomon (ibid.) suggests that it is one's 'image' of oneself that is at the stake at all emotions, that the common goal of all emotions is the maximization of self-esteem attained by transformative strategies.

However, when speaking of the "purpose" or "goal" of an emotion, we must flag that the "purposefulness" of emotions is multidimensional, extending beyond individuals to all humans. Frijda (1986) suggests that there is a biological purpose, a linkage between emotion, survival and evolution, based on which he postulates 17 "basic emotions". These are fundamental kinds of emotion, whose "basicness" derives from how each individual kind of emotion is geared towards assisting survival in its own way (88-9).

The theory of "basic emotions" is among the most disputed topics in the contemporary debates on emotions. (e.g. Ortony & Turner 1990; Ekman 1992; Solomon 2003, 115-42) The criteria for "basicness" can be accused of being too broad or narrow, not taking into account culture and technology, and so on. However, it is not necessary to form an opinion about the "basicness" or evolutionary psychology in general to appreciate Frijda's theory as a proof-of-concept of a way to describe the logics of emotions.

Taking as givens the requirements for humans' survival in the world it is possible to describe logics of emotions arising as transformational desires (or motivational states in Frijda's terminology) in certain prototypical encounters. For example, among

---

[2] Despite being ultimately about the world, the emotions' directedness toward particular objects should not be discounted, as that might lead to the inability to distinguish between *moods* and emotions.

Frijda's "basic emotions" is disgust, whose logic could be described by taking the survival desire as a given through the following example: rotten food is a threat to survival and the emotion of *disgust* arises to ensure the *rejection* of such threat.

It seems fair to assume that such logic could also be described in emotions arising in computer game play. As emotions "involve evaluations, they require appeal to some standards of criteria for judgement" (Solomon 1993, 204). Emotions arising in computer game play, however, can often seem trivial or irrational as appealing to the human condition. How could we, for example, describe a sane individual being genuinely afraid of events or objects which, materially speaking, are just pixels on the screen and pose only a marginal threat? How could we explain that a bunch of pixels is constituted as "the object as the player is afraid of it"? In relation to *what* can an in-game encounter be constituted as an object of fear?

Rational emotions in play

<u>Articulating the 'gameplay condition'</u>
Even though not all rules or features in contemporary computer games are those whose transgressing would make the "play-world collapse" (cf. Huizinga 1998, 8), there are, in all computer games, things which the player is required to take into account given that she wants to continue being a player. For example, a player of *Civilization IV* (2005) needs to acknowledge that a panzer tank is more powerful a military unit than a spearman, whereas a player of *Tetris* (1986) has to make sure the blocks do not reach the top of the container. In terms of their significance, these are not unlike water, food, and all the other requirements of survival (cf. Frijda 1996, 88-9; Solomon 2007, 248; Levinas 1969, 110), which together constitute what can be called the "human condition".

Sartre (1946) defines human condition as freedom founded on "all the limitations which *a priori* define mans fundamental situation in the universe". He asserts that there are both subjective and objective aspects to these limitations. They are subjective as they need to be "lived" and a human must "freely determine himself and his existence in relation to them", while they are objective inasmuch as "we meet them everywhere and they are everywhere recognisable."

Beyond having to fulfil the necessary requirements, the computer game player is often able to do other things. In *GTA IV* (2008) the player can become a taxi driver or a tourist or go for a swim. However, the limitations and possibilities for what the player can do, no matter how "emergent" (cf. Juul 2002) they are, are defined by what is already hard-coded in the game artefact. It is impossible for the player of *GTA IV* to engage in gardening.

Following Sartre (BN 503-530), characteristic to human condition is that we are responsible for the freedom we enjoy. We operate based on the *a priori* limitations, and while we must choose to take on different "projects" (cf. Moran 2000, 362) which make the things in the world appear to us in different ways, (e.g. as coefficients of adversity or utility), we cannot escape the fundamental project of freedom; the necessity to choose. To escape would be to commit suicide, which in itself would always already be a choice.

Not unlike a human in the world, the player is also bound to choose, and in her choices she carries a responsibility for this freedom of choice. Some choices for

example may open up new possibilities for choosing (like new parts of the level in *GTA IV*), while other choices can lead to the freedom of choice being taken away altogether (i.e. 'game over'). Based on analysing a game as played we can articulate a "condition" that bears a structural resemblance to the human condition; we can identify the necessities of surviving as a player and acknowledge the limitations of player's freedom imposed by the game artefact.

Gameplay condition can be defined as the freedom of choice the game imposes on its player and of which the player is responsible in her choices. This condition is not specific to any (or anyone's) particular playing of the game, as it is hard-coded in the game artefact before the player sets out to play. Thus it is a foundation for inter-subjectively plausible claims of player's experience, not unlike human condition is for claims about human experience.

If we take the details of this condition as givens we can, based on qualitative analysis of a game as played, make informed assumptions about the emotions the player of the given game will go through. We should be able to get rid of one unknown quality in the logics of emotions in play: a reason the player has for relating to game content in specific ways. The condition is the key for deciphering how games make their contents appear meaningful to their players: what kind of beliefs arise in which situations, how game content is constituted into the objects as experienced, and ultimately, what kind of emotions arise in which situations.

The analytical scope facilitated by taking this condition into account is not limited onto emotions arising in playings of games that involve the player in an agônist struggle (cf. Caillois 2001, 12). The scope extends beyond 'winner's happiness' and 'loser's sadness', onto the emotions that arise from *playing with* the game. This can be illustrated with an example of the emotion of pride involved in a playing of *Tetris*.

Consider the game *Tetris*: the colour of the blocks is largely insignificant in relation player's success. However, it is possible for the player to take on a project of trying to clear only lines in which all the blocks are of the same colour. Given that she succeeds, recognizing the success an impressive achievement is possible only by taking into account the lived condition of playing *Tetris*: for example how hard it is, for any player, to store aside the blocks of wrong colour given the pace by which new blocks keep appearing.

The judgemental logics of emotions in play can be described as appealing to the lived aspects gameplay condition as their criteria. Schopenhauer asserts in The Wisdom of Life (IV/2, 1.par) that "pride is an established conviction of one's paramount worth in some respect". While being proud of clearing only uniformly coloured lines of blocks in Tetris might seem irrational or trivial to a passive on-looker, it is perfectly rational in respect to the condition imposed by the Tetris game artefact on its every player.

Like the *Tetris* example suggests, the gameplay condition is imposed not only on those who consciously strive for being successful players but also on those who have different purposes for playing (with) the game. This idea can be expanded not only upon games which are said to contain no pre-defined goals at all, but also upon playings that intend to transgress the goals pre-defined in the game being played.

On the relation between gameplay condition and goals

As challenges in games are usually defined by means of goals for the player to strive for, goals can be taken, like Lee (2003) suggests, as "the ultimate fulfilling factor[s] in what we know of computer games so far". Games like *The Sims 2* (2004) and *Sim City 4* (2003) are sometimes referred to as "border-line cases" (Juul 2003, 39-40) among the phenomena of games, as they do not contain goals for player's actions in the ways how many other games do.

Juul (2007), when discussing "open and expressive games", asserts that a goal of a game is an imperative contained by an activity. He distinguishes between "obligatory goals" and "optional goals". The arcade game of *Scramble* contains "obligatory goals", suggests Juul, as the player has no option but to "invade the scramble system". *GTA IV,* on the other hand, is, according to Juul, a game with "optional goals", as the player is not forced "into pursuing the stated goal" whereas *The Sims 2* is "without a goal" at all.

Costikyan (2002, 11-14) makes the distinction between *explicit* and *implicit* goals. He suggests that the former are what we find in most games: the "victory conditions" toward which the players should strive. *Sim City* (1989), according to Costikyan, contains no explicit goals, but is "susceptible to so many goal-directed behaviors" and "supports a wide variety of possible goals". In *SimCity 4* I may choose to strive for goals that I have personally set for myself. For example, I may choose to replicate the social-realist esplanade Karl-Marx-Allee of East Berlin by constructing a road of two driveways with park in between and an underground train line underneath, lined up with land zoned for high-density residential buildings. We might be tempted to think that it would be hard, if not impossible, to assume anything about players' experiences with a game like *Sim City 4* due to its open-ended structure, as each player can take on a different project and by doing so constitute objects for her emotions according to different principles.

The issue of multiple projects and objects of emotion can be illustrated with an example of a landscape feature in *Sim City 4*. Consider a deep pit in the landscape on which the player is to build her city. It can have great utility value for a player trying to tuck away a coal power plant in order to delimit the area the plant will eventually pollute with the black smoke it belches from its chimneys. On the other hand, a player about to improve the city's highway network by building an elevated highway interchange at the pit's location would most likely find the pit as an annoyance, as needs to be levelled before an elevated highway interchange can be constructed at its location and levelling costs in-game money and destroys any adjacent buildings. Depending on the project the player has taken on, the same landscape feature becomes constituted as an object of two very different emotions.

Without engaging in empirical ethnographic research we have limited capacities of understanding and making claims about how players experience in-game objects and events as significant. The open-ended nature of a game like *Sim City 4* undeniably adds to the multiplicity of open possibilities one faces when trying to make assumptions about what a player will go through. As there is no single goal (or even multiple ends in a branching goal structure) in *Sim City 4*, against which the meanings of events, objects, and encounters could be described, but an infinite amount of different goals set by different players, how could we say anything about the experienced significance of game content beyond them being mere pixels on the screen?

Costikyan (2002, 13) suggests that *Sim City* "works because it allows players to choose their own goals". How, and on which terms, does it exactly do that? My project of striving for my own goal in the game, for example replicating Karl-Marx-Allee, can fail in two ways; not only by not resembling its Berlinese counterpart but also by causing me to run out of money during the construction. The former failure might make me disillusioned and disappointed about my capabilities as a city planner, but the latter failure has also consequences upon the game artefact facilitating play. As a consequence of the latter failure I am relieved from my duties as a mayor and the particular playing of the game is over.

That I can fail in *The Sims 2* (if all sims die) and *Sim City 4* (e.g. if my city council runs out of money) suggests that both games make me responsible for the freedom I enjoy as a player: had I chosen differently somewhere along the way, I might still be playing. Underneath the ability to choose my own goals in *Sim City 4* lies the necessity to for example, keep my spending lower than my earnings over an extended period of time. Even if the games lack goals to the extent that we can refer to them as "open-ended", they do impose a gameplay condition on their players. Choosing one's own goal in *Sim City 4* and is possible only as long as the gameplay condition remains fulfilled.

What is common with all players' experiences with single-player computer games, even those with an open-ended 'simulation game' like *Sim City 4*, is that they can be described in terms of negotiating the gameplay condition in one way or another. This applies also to also "transgressive play", those players' actions which are "symbolic gesture[s] of rebellion against the tyranny of the game" and attempt to break out from the role of "ideal player" implied by the game (Aarseth 2007, 132). Consider for example constructing a city in *Sim City 4* just to raze it by refusing to call in the fire brigade when an accidental blaze breaks out involves negotiating the gameplay condition. Describing the emotions arising from both 'constructing' and 'razing' the city (including all the smaller-scale projects involved) as meaningful and rational equally necessitate appealing to the gameplay condition as the criteria.

Conclusions

It was suggested that the project of understanding *why* and *how* games contribute to players' emotions is a project of describing the reasons why game content becomes constituted as objects as experienced in the emotions. Such description necessitates analysing gameplay from a first-person perspective to identify the experienced significance of in-game events, objects, and encounters. Striving for intersubjective plausibility, our claims should be rested on "structures that are intersubjectively accessible" (cf. Gallagher & Zahavi 2008, 28).

The examples of *Sim City 4*, regarding both transgressive play and players' own goals, suggest that it would not be feasible to take goals as the 'intersubjectively accessible structures', because often, namely in cases of games without "obligatory goals" (Juul 2007), the player can ignore the goals and still remain a player, or, the goals do not exist independent from the players in the first place. Being able to set one's own goals in *Sim City 4* depends on fulfilling what was identified as the gameplay condition: the freedom of which the game makes its players responsible, originating in the limitations and requirements hard-coded in the game artefact already before play. In the playings of single-player computer games, gameplay condition thus seems more fundamental a structure than goals, meaning that it can

be described also in those playings where goals are absent. Its is imposed on the player not only when play proceeds according to the designers' plans, but also when the player deliberately transgresses the goals of the game and even in games where there are pre-defined goals at all.

It was observed that emotions, understood as evaluations and interpretations of the world, necessitate appealing to a criteria. While goals cannot be, for the reasons discussed, plausibly described as constituting the fundamental criteria to which emotions in play appeal, gameplay condition seems to be such criteria, as demonstrated with the example of pride and *Tetris*.

Sartre (1946) observes a certain permanency in human condition: while historical situations may vary "the necessities of being in the world, of having to labor and to die there" remain constant. We have identified the gameplay condition as having similar intersubjective permanence, shaping the experiences of those who desire to play (and to play *with* and *against*) a particular computer game.

Author information

olli tapio leino (MA, PhD fellow, Center for Computer Games Research, IT University of Copenhagen, Denmark) has participated in research projects around the themes of mobile and multiplayer games and emotions with partners such as Nokia and Ubisoft. He co-edited the anthology *Extending Experiences: Structure, analysis and design of computer game player experience*, published in 2008. Currently he is writing his PhD for ITU Copenhagen, visiting the Play Research Group of the University of the West of England and is on a guest residency at the Pervasive Media Studio in Bristol, United Kingdom.

List of references

Aarseth, E. (2003). Playing Research: Methodological approaches to game analysis. *Fine Art Forum* 17:8.

Aarseth, E. (2007). I Fought the Law: Transgressive Play and The Implied Player. In: Baba, A. *Situated Play, Proceedings of DiGRA 2007 Conference*, 130-133.

Aristotle. (1887). *Rhetoric*. Cambridge University Press. (URL: http://www. archive.org/stream/rhetoricaristot02sandgoogi)

Blizzard Entertainment. (2004) *World of Warcraft*. Blizzard Entertainment. Computer game.

Buytendijk, F.J.J. (1987). The Phenomenological Approach to the Problem of Feelings and Emotions. In: Kockelmans, J.J. *Phenomenological Psychology*. *The Dutch School*. Phaenomenologica, Volume 103. Dodrecht, Boston, Lancaster: Martinus Nijhoff, 119-32.

Caillois, R. (2001) *Man, Play and Games*. Urbana and Chicago: University of Illinois Press.

Calhoun, C. and Solomon, R. (1984). *What is an Emotion? Classic Readings in Philosophical Psychology*. Oxford UP.

Consalvo, M. and Dutton, N. (2006). Game analysis: Developing a methodological toolkit for the qualitative study of games. *Game Studies* 6(1). (URL: http://gamestudies.org/0601/articles/consalvo_dutton)

Costikyan, G. (2002). Have No Words and I Must Design: Toward a Critical Vocabulary for Games. In: Mäyrä, F. *Proceedings of Computer Games and Digital Cultures Conference*. Tampere University Press, 9–33.

Debes, R. (2008). Neither here nor there: the cognitive nature of emotion. *Philosophical Studies* July 2008.

Ekman, P. (1992). Are There Basic Emotions? *Psychological Review*, 99(3) 550–553 (URL: http://www.paulekman.com/pdfs/1990%20-%201993/Are%20%20There%20%20Basic%20%20Emotions.pdf)

Ermi, L. and Mäyrä, F. (2005). Players' Emotional Experiences with Digital Games. In: *Short Papers, Companion CD to the DAC 2005 proceedings, Digital Experience: Design, Aesthetics and Practice. IT-University of Copenhagen Dec. 1-3., 2005.*

Facts about the Computer and Video Game Industry. (2006) Entertainment Software Association. (URL: http://www.theesa.com/facts/ pdfs/ESA_EF_2006.pdf)

Facts about the Computer and Video Game Industry. (2008) Entertainment Software Association. (URL: http://www.theesa.com/facts/ pdfs/ESA_EF_2008.pdf)

Firaxis Games. (2005). *Civilization IV*. 2K Games. Computer game.

Frasca, G. (1999). Ludology Meets Narratology: Similitude and differences between (video)games and narrative. Originally published in Finnish in *Parnasso* 3/1999, 365-71. (URL: http://www.ludology.org/articles/ludology.htm)

Freeman, D. (2003). *Creating Emotion in Games. The Craft and Art of Emotioneering*. Berkeley: NRP.

Frijda, N. (1986). *The Emotions*. Cambridge UP, Studies in Emotion & Social Interaction.

Gallagher, S. and Zahavi, D. (2008). *The Phenomenological Mind. An introduction to philosophy of mind and cognitive science*. London and New York: Routledge.

Green, O. (1991). *The Emotions: A Philosophical Theory*. Dodrecht, Boston, London: Kluwer Academic Publishers.

Heinämaa, S. and Reuter, M. (1996). Naisten tunneherkkyydestä. (On women's emotional sensibility). In: Niiniluoto, I & Räikkä, J. *Tunteet (Emotions)*. Helsinki: Yliopistopaino, 132–69.

Huizinga, J. (1998). *Homo Ludens: A study of the play-element in culture*. Taylor & Francis.

James, W. (1884). What is an Emotion? *Mind*, 9, 188-205. (URL: http://psychclassics.yorku.ca/James/emotion.htm)

Juul, J. (2002). The Open and the Closed: Games of Emergence and Games of Progression. In: Mäyrä, F. *Proceedings of the Computer Games and Digital Culture conference, Tampere, Finland*. 323–9.

Juul, J. (2003). The Game, The Player, The World: Looking for a heart of gameness. In: *Level Up. Digital Games Research Conference. 4-6 November 2003 Utrecht University,* 30-45.

Juul, J. (2007). Without a Goal. On open and expressive games. In: Krzywinska, T. & Atkins, B. *Videogame/Player/Text*. Manchester UP, 2007.

Konzack, L. (2002). Computer Game Criticism: A Method for Computer Game Analysis. In: Mäyrä, F. *Proceedings of the Computer Games and Digital Culture conference, Tampere, Finland,* 89-100.

Lee, S.-S. (2003). "I Lose, Therefore I Think". A Search for Contemplation amid Wars of Push-Button Glare. *Game Studies* 3(2) *(URL:* http://gamestudies.org/0302/lee/)

Lennep, D. van. (1987). The Psychology of Driving a Car. In: Kockelmans, J.J. *Phenomenological Psychology. The Dutch School*. Phaenomenologica, Volume 103. Dodrecht, Boston, Lancaster: Martinus Nijhoff, 217–28.

Levinas, E. (1979). *Totality and Infinity. An essay on exteriority*. Pittsburgh, PA: Duquesne UP.

Levine, J. (1983). Materialism and Qualia: The Explanatory Gap. *Pacific Philosophical Quarterly*. 64, 354-61

Loftus, T. (2006). Bringing emotions to video games. MSNBC. (URL: http://www.msnbc.msn.com/id/4038606)

Lokhorst, G.-J. (2008). Descartes and the Pineal Gland. In: *Stanford Encyclopedia of Philosophy*. (URL: http://plato.stanford.edu/entries/pineal-gland/)

Maxis. (1989). *SimCity*. Electronic Arts. Computer game.

Maxis. (2003). *SimCity 4*. Electronic Arts. Computer game.

Maxis. (2004). *The Sims 2*. Electronic Arts. Computer game.

McIntyre, R. and Smith, D. W. (1989) Theory of Intentionality. In: Mohanty, J.N. & McKenna, W.R. *Husserl's Phenomenology: A Textbook*. Center for Advanced Research in Phenomenology and University Press of America, 147–79.

Moran, D. (2000). *Introduction to Phenomenology*. Routledge.

Nethack DevTeam. (1987). *Nethack*. Computer game.

Ortony, A. and Turner, T. J. (1990). What's Basic About Basic Emotions? *Psychological Review*, 97(3) 315–31. (URL: http://www.cs.northwestern.edu/~ortony/Andrew%20Ortony_files/Basic_Emotions.pdf)

Pajitnov, A. and Gerasimov, V. (1985). *Tetris*. Computer game.

Pratchett, R. (2005). Digital play, digital lifestyles. BBC. (URL: http://open.bbc.co.uk/newmediaresearch/files/BBC_UK_Games_Research_2005.pdf)

Ravaja, N. (2005). The Psychophysiology of Video Gaming: Phasic Emotional Responses to Game Events. In: *Changing Views: Worlds in Play. DiGRA 2005 Proceedings*.

Rockstar North. (2008). *Grand Theft Auto IV*. Rockstar Games. Computer game.

Sartre, J.-P. (1962). *Sketch for a Theory of the Emotions*. Methuen & Co.

Sartre, J.-P. (1946). *Existentialism Is Humanism*. Lecture. (URL: http://www.marxists.org/reference/archive/sartre/works/exist/sartre.htm)

Sartre, J.-P. (2003). *Being And Nothingness. An essay on phenomenological ontology*. Routledge Classics.

Schopenhauer, A. (1851). *The Wisdom of Life*, 1851. (URL: http://ebooks.adelaide.edu.au/s/schopenhauer/arthur/wisdom/)

Smith, Q. (1979). Sartre's theory of the progressive and regressive methods of phenomenology. *Man and World*, 12(4) 433–44.

Solomon, R. C. (1977). The Logic of Emotion. *Nôus*, 11(1) 28–30.

Solomon, R. C. (1993). *The Passions. Emotions and the Meaning of Life*. Indianapolis/Cambridge: Hackett Publishing Company

Solomon, R. C. (2003). *Not Passion's Slave. Emotions and Choice*. Oxford UP.

Solomon, R. C. (2006) Emotions in Phenomenology and Existentialism. In: Dreyfus, H.L. & Wrathall, M.A. *A Companion to Phenomenology and Existentialism*. Blackwell Publishing, 291–309.

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