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The Perception of Video Games

From Visual Power to Immersive Interaction

This paper highlights the different ways of perceiving video games and video game content, incorporating interactive and non-interactive methods. It examines varying cognitive and emotive reactions by persons who are used to play video games as well as persons who are unfamiliar with the aesthetics and the most basic game play rules incorporated within video games. Additionally, the principle of “Flow” serves as a theoretical and philosophical foundation. A small case-study featuring two games has been made to emphasize the numerous possible ways of perception of video games.

Most of the misunderstandings regarding the question of what a video game really is derive from the different ways of how a game can be perceived. A video game is, in very rough terms, a multi-medial, interactive piece of media that can be experienced in many ways. These range from just hearing audio or just looking at a screen while somebody else is playing to having a strong immersive experience as one has when one is actually playing. The notion to define what a video game is or, for example, how to define the term *gameplay* are very hard tasks, even for those who are submerged in video game culture and sciences. In everyday life this unclear state of the essence of digital games leads to a lot of misunderstandings, e.g. for the intricate debate about violence in games; and how video games in general might affect kids, their behavior and interpersonal actions.

When introducing people who have not played many video games in their lives to those games for the first time, questions like “What is the point behind all this?” will arise. It might sound easy to boil it down to the fact that the uninitiated just have to try out games

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themselves to understand what a game experience is like – but this is certainly just one part of achieving media literacy with regards to video games which have so much content to offer and where, in truth, there is no right or wrong when it comes to perception. Sending people away by saying “play for yourself, look and you’ll see” does not suffice when you want somebody to get some insight into the numerous ways of experiencing a video game, and it will, to name an example, not offer an explanation as to why some piece of entertainment software is woven together the way it is.

This paper intends to lay down the different possibilities of how to experience video games and what this means to the diverse forms of impact the appearance of a game (audio, video, interactive gameplay) can have on a certain person. To emphasize these different experiences, I put the various forms of perception into a small empiric research (case-study) involving two videogames, GEOMETRY WARS (2003) and STARCRAFT (1998).

Talking about a theoretical background, my assumption is that, as with the philosophical principle of Constructivism, there is no impartial, normative way of perceiving video game content but – according to the individual player’s social experience, gaming skills, and state of mind – there do exist many different perspectives in experiencing a video game and getting opinions and/or emotions out of the experience (with diverse reactions like “This looks very violent,” “These repeating noises remind me of techno music,” or “It felt like there was no border between me and the game!”). The premise within this research does *not* imply the (too) simple conclusion that because playing games is part of our life, like everything else we experience, video games just have to fall under the principle of Constructivism (if incorporated into the current pattern of thought). Instead, the principle of Constructivism serves as a theoretical foundation, and also as an analogy, for the various forms of video games and how they are perceived.

What a Video Game Can Be Like

Despite game studies having had some intense recent years of fruitful research and publishing, there are still very few approaches to the question of what a video game is – not to mention the more difficult questions that follow: “What is gameplay?,” and “Why are games fun?,” or, “Are they?” – In the book *Difficult Questions about Videogames* seemingly simple questions like these are asked by the editors James Newman and Iain Simons to “makers, players, writers, thinkers, all passionate about videogames” to provoke “erudite reflections and interpretations” that cover a broad spectrum in content and scope. The responses to the questionnaire from games researchers Lisa Galarneau (asked question: “What is gameplay?”): “[Gameplay is] the process of interacting with the game, either via the game designer’s agenda, or your own” (cit. by Newman/Simons 2004:65); and Christian McCrea (asked question: “Why is playing videogames fun?”) are as follows:

When playing is fun, it is because the technology becomes invisible, and you experience a moment of pure loss; where you’re being pushed forward towards a point (cit. by Newman/Simons 2004:235).

When approaching the field from a technical side of view, it is an easier task to find some kind of “solution” about the question of what a game is. Many people who work within academic research, journalistic fields, or are game designers themselves can agree on a description of video games as being: multimedia, complex, cultural products which have to be interactive.

One question has not been addressed thoroughly though (a result of describing a video game as mentioned above) – after having agreed about what it is in a basic, technical way (for now and in a certain context, at least) the most obvious follow-up question would

be: What does this mean when it comes to perceiving video games? There are lots of different ways of perception, with the following distinctions in experiencing them: Perceiving digital games as audio only, video only, or as audio and video (no personal interaction); as well as audio only, video only, or as audio and video with personal interaction. Certainly, when it comes to the term *play*, the non-interactive forms of appearance are not really important. Regarding reactions which arise from the experience of any kind of performance with relation to a video game in action (seeing, hearing, watching, playing, seeing other people play), things are different. Most of the political debates about how video games might influence children and teenagers have their roots in representative people never having experienced a game interactively. When asked about their knowledge of digital games, many say they have watched others playing or have only seen video-trailers or screenshots. While it is a fair call to blame their ignorance, the different interactive and non-interactive perceptions of video games are well worth an academic look.

Individual Players, Individual Actions

As with other forms of media, there is no explicit rule defining how to consume a video game and where the benefit lies or should lie when dealing with a game. From a commercial point of view – which is important because that is the field where advanced and complex video game projects are realized – video games are all about entertainment. Therefore, the primary objective of playing a game should be getting “fun” out of it. Why and how this fun is created is very hard to come by, especially with statements allowing for free interpretation that involve words like “ride”, “addiction” or “satisfaction”, as stated by different interviewees (Newman/Simons 2004:177, 241). When reading reviews about commercial video game products, there are certainly some specifications about what exactly makes a game a “good game” (referring to parameters like difficulty or diversification

in landscape). Nevertheless, how each individual person attains “fun” out of video game content differs from one individual to the next. The possibilities for consideration range from: good controls, and diverse challenges within the game; to freedom of play, and/or the possibility of hacking, or modding (extending) the game content. Dependent on experience, age, gender, skill, interest and other parameters, some players can only attain the fun factor from a narrow, tightly woven gameplay whereas other players would be bored if they could not cruise around in a virtual world like the one in GRAND THEFT AUTO 3 (2001) or hook up the map editor and create own content, e.g. in a First Person Shooter.

An additional factor to consider is – although at first, every game outlines the basic purpose of its content and challenges for the player – there is no right or wrong when it comes to playing a game. Hacking into DOOM (1993) via secret code words and thereby making your game character invulnerable or ignoring missions in GRAND THEFT AUTO: VICE CITY (2002) and just driving around in a car, listening to a certain in-game radio station, are not more valuable ways of playing the games than if players had chosen the “official” path of playing by the rules and recommendations set by the game developers. – It is clear that playing by the rules and playing with the rules of a game go hand in hand (Salen/Zimmerman 2006:15).

Basic Ways of Perceiving Video Games

Similar to the non-normative ways of playing a game and the individual focal points for each player (what is most “fun” for her or him), there is also the issue of the appearance of video games. As they are a complex mixture of audio, video, graphics, digital space, and artificial intelligence; they can evoke many different types of reactions from humans. Even if we have agreed that a video game has to be interactive – which means, the player has to act and re-act according to the things happening and the tasks assigned in a game – in order to define it as a video game, the performance can be received non-interactively as well.

In the following passages, I will compile the various possibilities of perception of video games and video game content. The premise here is that the game performs as intended (software in execution). That means that text description of a game, video-trailers, screenshots, artworks, etc. are excluded in this list (although these forms of video game representations are not unimportant when it comes to creating a mindset about a certain piece of interactive entertainment software).

Non-interactive (person watches/hears):

- Audio only
- Video only
- Audio and video

Interactive (person plays):

- Audio only (e.g. videogames for the blind)
- Video only
- Audio and video

Apart from these six basic forms of appearance, detailed distinctions include:

- Intended (original machine) or individual hardware setup (e.g. emulation)
- Original content (created by the game designer) or user generated content

In addition to this list, it is important to point out which parts of the individual game content are being watched/played and for how long; as well as place and situation where the video game content is being received. Furthermore, for the creation of cognitive processes and opinions/reactions about a passive or an active way of the perception of the game, the parameters of the individual person have to be taken in account.

Analysis in Relationship to Constructivism and Flow

The last two chapters have pointed out the basic parameters for the various possibilities of video game perception. Without going into psychological details with regards to how the acts of watching, hearing, and playing a game is transformed into cognitive and emotive reactions; there are few doubts about the broad range of feedback that these possibilities can evoke.

A precise study shows that we never use all given signals but, through our current state of consciousness, just choose a relatively small amount of signals. Furthermore, to this choice we add visualized perceptions we can remember (von Glasersfeld 2003:22).

According to Glasersfeld's theories as applied to games, the construction of an own, very personal perception of a digital game or video games in general is inescapable. Because of the complex nature of video games, the impact of this constructivistic aspect is much stronger than in other forms of entertainment media which are not interactive (theater, cinema, music) – unless one is the creator of theater plays, movies, or plays an instrument.

Even when one puts the non-interactive appearances of game content aside, focusing on the intended usage of video games – that is, to play them – the diversity of perception is still very strong. Expanding the personal parameters of the player's persona to the actual act of playing a game, the intensity, depth and speed of working through a game's content and the responses in behavior and emotions are always different. As a casual player, she or he would probably play a game just for one or two hours a day, choose an easy or medium skill level and focus on completing the main tasks in the game. A dedicated player, on the other hand, is liked to play longer in one go, choose a more difficult skill level and would generally be quicker and more intuitive in completing the tasks the game demands because

she/he is usually more experienced in understanding recurrent video game structures and “gameplay grammar.” For every new game, every type of gamer has yet to learn that “to play a game is the identifying of the different elements seen onscreen and understanding how they function and behave” (Wolf 2003:50).

Apart from these basic starting positions to gaming which differ from person to person, the act of playing the game is to be able to establish a very tight connection between the player, the game, and the necessary interfaces (controller, screen, etc.). Damian Stewart talks about “an extension of the body” which is the video game’s pendant to Mihály Csíkszentmihályi psychological principle of Flow as a mental state of immersion or the “state of mind when conscious is harmoniously ordered” (Csíkszentmihályi 1990:6):

Gameplay is the subjective experience of a particular state of mind. [...] [T]he player ceases being aware of pushing buttons on the controller and seeing the results on the screen, and instead engages their mind with the abstract conditions of the game directly (cit. by Newman/Simons 2004:69).

As the active state of flow demands a mixture of conditions like a minimum of skill and playtime as well as enough willingness for relaxation, it is an educated guess that the impact during and after playing a video game can vary radically between different persons – even if they play the same game for the same amount of time in the same place and share demographic data (age, gender, etc.).

Examples of Videogame Perception (Case Study)

The method of research for the following study is a qualitative content analysis which involves two video games, the arcade action game *GEOMETRY WARS* and the real-time strategy game *STARCRAFT*. Each game has been played for several hours as well as been watched for at least two hours. This basic analysis serves to cover the two main forms

of video game perception (audio and video, actively and passively). Although, for thorough empiric qualitative research, there would be a need for at least ten to fifteen test games and persons in order to get proper results; the primary intention of this study lies in highlighting the complexity of video game perception in accordance to case studies.

Case study researchers may seek only an idiographic understanding of the particular case under examination, or [...] case studies can form the basis for the development of more general, nomothetic theories (Babbie 2008:326).

Game Comparison

GEOMETRY WARS is a video game primarily developed for the Xbox console and its controller which involves two analogue sticks for giving direction commands. Both sticks are used in the game for steering a tiny spaceship (the player's "character") around the screen and for shooting laser bullets in a chosen direction. The basic gameplay feature lies in the possibility of steering and shooting in different directions. The enemies in the games are colorful geometric shapes that appear at certain points within the game space. Direct contact with the player's spaceship results in the loss of a life. The goal is to continually shoot down the emerging foes on screen which grow in numbers as time goes by, and who make the game harder.

STARCRRAFT is a real-time strategy game developed for Windows and Mac featuring a fictitious universe consisting of three different species (Terrans, Protoss, Zerg). The game is played via mouse and keyboard and has complex rules as each of the species are represented through different buildings and units which can perform various tasks (food supply, specific attacks, etc.). The main modes of play are a single-player campaign, where the player has to work through different missions, and multiplayer; where one can play with or against up to seven other human or computer players.

Analysis and Results (Geometry Wars)

When the game is being watched and heard, the distinctive feature is a constant frenetic action on-screen which is intensified by bright colors and glowing outlines of the shapes and the backdrop of the game space. The techno music score is in alignment with the visuals which present constant movement; accordingly, there are sound effects to match. The player's character shoots his laser bullets almost all the time. Later in the game (five minutes into the game and thereafter) the spawn rate of the enemies is so dense that the shooting never stops until the game is over (that is when the player has finally lost all of his lives).

When the action gets more intense, concentration on the spaceship model is essential in order to avoid becoming confused by the all the lights, colors, and shapes. The game results are optimized when the playing person remains alert and on the move, while finding a systematic way of keeping distance with the foes at all time.

In the passive perception of GEOMETRY WARS, the game makes a strong aesthetical impression and exposes the fast movements on the screen through intense colors and repetitive sounds. Without actively playing the game, this leads to the watching/hearing person becoming overexcited (and as a reaction to this annoyed and bored) rather quickly because there is no distraction (through gameplay) from the flamboyant audio-visual presentation.

While playing the game, the desire to achieve a good performance makes it necessary to blend out the multimedia presentation to a certain degree in order to not get distracted from the main task that is to avoid collision with the enemies and to stay alive. The overall experience is focused on the gameplay while the presentation serves only as an amplifier for subconsciously strengthening the possible state of Flow.

Analysis and Results (Starcraft)

STARCRAFT features on-screen action that oscillates between easy-going and fast-paced gameplay, according to the input of the player. The graphics are functional but not overexposed (like in GEOMETRY WARS); the musical score varies a lot. The sound-effects mostly consist of affirmative answers from the buildings and units, placed and built by the player ("Yes, Sir," "I'm on it!" etc.) that often repeat themselves.

When watching a person playing STARCRAFT, it is important to note whether one knows about the rules of the game or not as in GEOMETRY WARS (due to the more complex nature of the game) in order to evoke a positive reaction. If the rules of the game are not fully understood, the notion that a lot of repetition is happening (like in GEOMETRY WARS) tends to be stronger, which in this case nearly equals the (non-interactive) perception of both games (watching/hearing) – although STARCRAFT has much more depth to it in terms of gameplay than GEOMETRY WARS.

When playing STARCRAFT, it takes a long time to fully understand the rules and dynamic of it. If understood, the concentration while playing the game is usually very high because of the task of commanding different units and buildings at the same time. This brings both games – although they do not share much content in gameplay – in close proximity to one another with regards to the perception of a gamer. Also, the playing and the watching/hearing person who are both adept, has a stronger relationship with their perception of STARCRAFT than with GEOMETRY WARS.

Consequences of Video Game Perception

The following graph gives a short summary of the analysis above and shows – if only in rough terms – how the basic positions of perception usually affect the emotional reactions to the two games.

	GEOMETRY WARS	STARCRAFT
Hearing	slightly annoyed	annoyed
Watching (uninitiated)	excited	confused/bored
Watching/hearing (uninitiated)	annoyed	strongly annoyed
Watching (adept)	slightly focused	focused
Watching/hearing (adept)	focused	strongly focused
Playing (adept)	strongly focused	strongly focused

The ways of perceiving video games depend not only on how a certain person seeks contact with a specific game (or game content), but how literate that person is when it comes to video games. Many misconceptions and reproaches towards digital games which arise in the public arena lead back to the underestimation of that diversity of perception. To make a comprehensive discussion, e.g. about the affect of video game content on children and teenagers or cognitive and emotive processes, there is a need to establish a transparent method of showing gaps and differences in perception. If these differences can be pinpointed and defined more clearly, it will provide the discourse about video games with much more effectiveness and productivity.

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