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A pre-study on spectatorship in eSports

Jana Rambusch, Anna-Sofia Alklind Taylor, Tarja Susi
jana.rambusch@his.se, anna-sofia.alklind.taylor@his.se, tarja.susi@his.se

School of Informatics
University of Skövde, Sweden

Abstract

A pre-study of spectators’ perspectives on eSports was conducted in collaboration with two Swedish game development companies. The main goal was to identify factors that contribute to qualitative spectator experiences and how they can influence game design. A qualitative approach was chosen to explore spectators’ perspectives on eSports through observations and focus-group interviews of 28 participants in total. Results indicate that spectatorship is a complex issue that goes beyond the mere watching of a game. We identified four themes that are important for qualitative spectator experiences: the need for an overview of game events; highlighting and exposing hidden objects and events; viewer- and commentator-friendly game pacing; the importance of professional commentators and casters. Based on the results, we present design guidelines and recommendations for the development of games in eSports.

Keywords: eSports; spectatorship; spectator experience; user experience design; game design

Introduction and background

eSports is a rapidly growing phenomenon characterized by its own culture and community, comprising not only players and spectators, but also other stakeholders such as game development companies, media, and investors. Taylor and Witkowski argued in 2010 that eSports would become mainstream culture as computer games continue to spread into everyday life, and the latest statistics support them; eSports holds a considerable market value ($898 million in 2016, estimated to $1,238 billion by 2019) and attracts massive amounts of spectators (213.8 million spectators world-wide in 2016).1

eSports is an emerging area of research within the wider field of computer games research (e.g., Drachen et al., 2014; Faust, Meyer, & Griffiths, 2013; Seo & Jung, 2016; Smith, Obrist, & Wright, 2013; Taylor, 2016). Still, research on eSports is limited as previous research has mainly focused on theoretical discussions, such as aesthetics and comparisons between eSports and sports (e.g., Ferrari, 2013; Jenny, Manning, Keiper, & Olrich, 2016), and discussed eSports from a player perspective (e.g., Bowman, Weber, Tamborini, & Sherry, 2013; Carter & Gibbs, 2013; Johnson, Nacke, & Wyeth, 2015). In fact, player perspectives have attracted more interest from researchers than any other perspectives, or as Taylor put it, “accounts of how we watch others play lag far behind our understandings of play itself” (2016, p. 117), with notable exceptions (e.g., Cheung & Huang, 2011; Nascimento et al., 2014; Taylor & Witkowski, 2010).

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The significance of spectatorship in eSports has been the focus in this pre-study, with the main goal being to identify factors that contribute to qualitative spectator experiences and how they can influence game design. Currently, most spectators are players themselves since watching and understanding eSports competitions require thorough knowledge and experience of the game being played. Therefore, a challenge for many game developers and broadcasters is to make eSports accessible and attractive to wider or new audiences. Another design challenge is to cater to the needs of players and spectators alike because of the tension between what spectators like to see and what players are comfortable with ‘giving away’ (Fielding, Logan, & Benford, 2006). One way to address this challenge is Reeves, Benford, O’Malley, and Fraser’s taxonomy of four design strategies for spectator experiences (2005): secretive, expressive, magical and suspenseful interfaces (see also Figure 1). Although the taxonomy was not created with eSports in mind, it is useful for understanding how certain aspects of gameplay can or should be hidden, revealed or even amplified in order to create a pleasurable experience.

Research in the area of user experience design (UXD) has also promising potential to increase our understanding of spectator experiences in eSports. UXD has garnered increasing interest among game researchers and practitioners in recent years, to better understand different user groups’ gameplay experiences, and eSports has been no exception. eSports is a highly competitive market and the game development industry tries to gain a better understanding of both player and spectator experiences in order to develop successful multi-player games. The Mechanics-Dynamics-Aesthetics-framework, as developed by Hunicke, LeBlanc, and Zubek (2004), and games user research have provided useful perspectives on games and gameplay experiences. However, UXD offers a a more holistic perspective on games as it goes beyond (game) design aspects, the user interface, and also can take into account other user groups than just players. Hassenzahl and Tractinsky (2006), for example, discuss three facets of UX that need to be considered when trying to understand user experiences with interactive products (see also Figure 2):

**Beyond the instrumental** User interactions with different kinds of technology are not just about built-in functionality and task relevance, but need also be considered in relation to aesthetics and other less pragmatic needs such as surprise and intimacy.

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**Figure 1:** *Four approaches to designing the spectator’s view, according to Reeves et al. (2005, p. 746).*
Emotion and affect This facet highlights the importance of positive emotions and affect for the user experience, for instance, how fun or joyful it is. This view on human emotions and affect is in contrast to more traditional views, where the main design goal has been to avoid negative experiences. According to the authors, there are two ways of addressing positive emotions from a UX perspective, that is, “emotions as consequences of product use” and “as antecedents of product use and evaluative judgments” (Hassenzahl & Tractinsky, 2006, p. 94).

The experiential The third facet puts emphasis on the aspects of situatedness and temporality and their role in the use of technology. From such a perspective, the user experience is not just about interacting with technology as a material product that can be physically altered and manipulated; the ’where’ and ’when’ of technology usage are just as important.

The three facets of UX provide an interesting, additional tool to understand games and gameplay at a deeper level. For instance, the view on aesthetics differs from the MDA-framework. According to Hunicke et al. (2004), the term refers to the emotional responses invoked in a player, whereas from a UX perspective it is more about the perception of the gameplay experience, such as how beautiful or harmonious a design is perceived to be. Of course, these facets should be just as useful for understanding user experiences in eSports. Manipulations or actions carried out by the player can, for example, be at the interface level (e.g., button presses, movements or speech that the system picks up) as well as outside of the system’s sensor scope, such as “gestures, movements, and utterances that take place around the interface but that do not directly result in input to it” (Reeves et al., 2005, p. 742, italics in original). In an eSports setting, both types of actions are important for the user experience, which is why a UX perspective as a theoretical foundation is applicable in research on gameplay as well as spectatorship.

Methodology

The pre-study was carried out in cooperation with two Swedish game development companies, Stunlock Studios and Tarhead Studio, and Folkuniversitetet, a Swedish adult educational asso-
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Figure 3: **BATTLERITE** is a fast and action-packed MOBA game with focus on competitive PvP combat. © 2016 Stunlock Studios – reprinted with permission.

Most often, researchers find it hard to gain access to game companies or to evoke their interest in research, so this pre-study provided a unique opportunity to explore eSports and to enhance user experiences in collaboration with game development companies.

The game used in the pre-study was an alpha version of **BATTLERITE**, a multiplayer online battle arena (MOBA) game developed by Stunlock Studios (see Figure 3). By using an early version of the game, we had the opportunity to study spectators with limited knowledge about this particular game, making the results not only useful for further research on the topic of spectatorship in eSports, but also for the developers to improve the game from a spectator perspective. **BATTLERITE** is a fast and action-packed game, with focus on competitive PvP combat in short, intense matches.

We wanted to conduct an open-minded study to find interesting aspects of spectating, without framing the study too narrowly. We chose a qualitative explorative approach to investigate spectators’ perspectives on eSports, with the aim to find out factors that contribute to qualitative spectator experiences. The methods chosen for data collection were observations and focus-group interviews. The setting for the study was a home-like environment provided by one of the game development companies, where groups of spectators watched a pre-recorded tournament (ca. 15 minutes) with three matches played 2v2 in **BATTLERITE**, shown on a large TV screen. The company recruited 28 participants studying computer and information technology within an adult educational association. The participants (1 woman, 27 men, aged 19-28) were then divided into four groups of spectators, with 6-8 people in each group. The experience of playing and/or watching eSports varied from none to playing and watching every week. At their arrival, the participants were informed in general terms that the study’s purpose was to explore eSports for further knowledge about eSports as such, and what takes place during eSports tournaments. All participants signed a non-disclosure agreement regarding the game, and gave their consent to video recording during the observation and recording of a follow-up interview.

Each game session was observed (non-participant observation) and video recorded, and field notes were taken. Each session was then followed up by a semi-structured thematic focus-group interview (20-55 minutes) to probe into the participants’ opinions about the matches they had
just watched (e.g., memorable events, likes and dislikes, and what they focused on), and also their views on eSports in general (e.g., reasons for watching/not watching eSports, and positive and negative aspects of eSports).

The collected data consist of video recordings (60 minutes), recorded interviews (130 minutes), and field notes. The interviews were transcribed and then subjected to an analysis. The transcripts were coded individually by each researcher, for any items of interest. In a first step, the items were discussed and jointly categorized, ending up in a two-dimensional matrix; positive and negative aspects of the game BATTLERITE from a spectator perspective, and positive and negative aspects of eSports from a spectator perspective. Then, the model of Hassenzahl and Tractinsky, 2006 was used to identify the three facets of UX in the data material. The results discussed in the next section are based on this analysis.

Analysis and results

Our results show that spectatorship is a complex issue that goes beyond the mere watching of a game. In line with previous research, our study found that people watch eSports for many different reasons, such as interest in sports in general, following a specific game, following a specific player or team, or following a favorite commentator or caster. Many spectators are players themselves, watching not only for the thrill of the game, but also to study other player’s strategies and actions in order to improve their own skills (see also Cheung & Huang, 2011).

The qualitative analysis of the observational and interview data identified a number of themes all related to the issue of understanding the game, which in itself can be divided into three levels: (i) understanding the rules and mechanics of the game, (ii) understanding sounds, items and other interface artifacts, and (iii) understanding what is happening at a certain point of time during a battle. The subsequent sections will present the themes identified in the study and end with a presentation of design guidelines and recommendations based on the findings.

Overview and statistics

Although the arena in BATTLERITE is small and mostly fits into one screen, the participants sometimes had trouble following the battle. The interviews revealed that this is a prevalent issue in most eSports. Spectators want to be able to quickly switch between following a specific player or team (detailed level) and being able to see all game events at once (overview). Lack of overview was one of the most common complaints among the participants, both in terms of BATTLERITE and in general. Overview entails not only being able to view the whole map or arena, but also having access to statistics that inform the spectators on how the players are doing and how the game is progressing. This is especially useful for experienced spectators, but with careful design it can also facilitate understanding for less experienced viewers.

The study also found that being able to move the in-game camera is useful when switching between different levels of granularity. Most commonly, the spectator has little control over the camera view, since viewing is restricted to the players’ point of view. However, more and more game developers are adding a ‘spectator mode’ to their games, in which an independent camera can be controlled by the spectator or caster (for instance, Stunlock Studios). This has great potential for improving the spectator experience, but there is also a risk that critical game events are missed due to an ill-considered placement of the camera. Thus, providing overview and statistics is a critical feature to help spectators focus their attention to important game events.
Exposing hidden objects and highlighting important events

As mentioned in the introduction, there are conflicting interests and tension between players and spectators (cf., Fielding et al., 2006). These conflicting interests pose a potential design challenge for game developers, who need to account for the different needs of players, spectators and commentators. It becomes increasingly important to be able to highlight game events and objects to make the game ‘viewable’, while at the same time creating suspense by keeping certain things hidden from view. In our analysis, we found the approach presented by Reeves et al. (2005) useful in approaching this design challenge. A concrete example from Battlerite is the special ability of invisibility, that makes a character invisible to the other players for a short period of time. Unfortunately, the character is also invisible to the spectators, who miss an important opportunity of suspenseful interaction, like a movie viewer who can follow a murder scene from both the murderer’s and victim’s point of view. Thus, exposing hidden objects to the spectator can add an extra layer to the entertainment value of the spectator experience.

Similarly, highlighting certain items and actions (e.g., by visual or auditory effects) can direct the spectator’s attention towards significant events in the game, even if these are not highlighted for the players themselves. For instance, it might be challenging for a spectator to detect that a character is healed by another character, especially if the healing is done from a distance, but this action could be very important for understanding what is happening at a certain point in time of the battle. In our observations, we found that the participants were sometimes confused due to this particular issue and they reported that they would like to have important events highlighted. What constitute important events should be determined by careful analysis of gameplay data, from both player and spectator perspectives. Although some events might be useful to highlight to both players and spectators, this is not always the case, since players and spectators have different needs.

Lots of action, but not too much

What the majority of the participants found to be the most entertaining factor of Battlerite is its fast-paced, short battles. However, the less experienced participants also found that the pace made the game difficult to follow. There seems to be a breaking point at which a game contains enough action to make the game continuously interesting and exciting, but still being simple and slow-paced enough to be able to attend to all important stimuli at once. As mentioned in the previous section, highlighting important events might help direct the spectator’s attention to specific details and, thus, allow for a more fast-paced and complex game.

Commentators can make or break the spectator experience

All participants who regularly watch eSports exclusively reported that commentators play a significant role in the spectator experience. For instance, a majority of the participants prefer to watch eSports where the commentator speaks English, and actively avoided Swedish broadcasts. In their view, the Swedish translations of game events are ‘awkward’ and sometimes even annoying, significantly lessening the experiential part of the experience. It was also clear that individual commentators and casters have their own fan base; some participants reported not having specific preferences in what games they follow, but instead choose to view matches that are commented by their favorite caster or commentator.

Furthermore, professional commentators also play an important part in helping inexperienced spectators to understand the game by explaining the what and why of the game as it progresses. A good commentator not only explains the game, but is also knowledgeable about and invested in the game, and engages the spectators. One of the participants explained that a
good commentator makes efficient use of less eventful parts of a game. For instance, during the
time when players are acquiring resources, the commentator can present game rules, team or
player statistics and so on.

Some of the participants noted that BATTLERITE, with its fast-paced, short matches and
with only a few short intermissions, would be challenging for a commentator or caster to report
in real-time. To cater to less experienced spectators, the participants requested tutorials for new
viewers, as well as allowing pauses for replays and comments. Some of our participants also
pointed out that they wanted more narrative around the matches, such as knowing the players’
or characters’ back-story or the stakes of the game. This could also be added as an optional part
of the game.

Design guidelines and recommendations

From the result of our analysis, we identified a number of design guidelines and recommenda-
tions:

- Provide overview of game and player statistics during matches.
- Have clear visual and auditory feedback for important game events.
- Game characters should be easily distinguishable from one another.
- Design for spectator mode in which the spectator or caster can control the in-game cam-
  era themselves. The spectator mode should have default settings, such as being able to
  follow a specific player or team, and transitions between different camera modes should
  be smooth.
- Highlight player choices.
- Avoid hidden and illogical game events – spectators need to perceive aspects of the game
  that players might hide for one another.
- Design for commentary by adding pauses, re-plays and less eventful (but not boring)
  gameplay.
- Facilitate learning for novice spectators by adding (optional) tutorials that explain the
  goal of the game, prizes, points, rankings and other useful information from a spectator
  perspective.
- Be clear about the stakes in the game.

Conclusions

In this pre-study, we explored spectators’ perspectives on eSports, and found aspects that move
beyond the user interface or players’ needs. Our analysis also led to a number of design guide-
lines and recommendations. The results indicate that a UX perspective can help us pinpoint
design issues otherwise forgotten if, for instance, only user interface issues or player perspec-
tives are evaluated.
eSports needs to be explored in more depth to gain further scientific knowledge on this phenomenon. New knowledge will provide a foundation for the design of qualitative user experiences in eSports and make it accessible for, and inclusive of, spectators/players other than those who already are players.

Future work includes further investigation of spectatorship in eSports. Such studies require more holistic approaches considering the complexity of spectatorship, which includes many different stakeholders, perspectives, and interests, and also different forms of eSports consumption. Further knowledge on spectatorship in eSports is not only interesting from an acadamic perspective, but can also prove beneficial to game developers and broadcasters. An interesting future question would be the role of virtual reality and how it can successfully be implemented to enhance and extend user experiences in eSports.

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