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The interplay between immersion and appeal in video games

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ABSTRACT

Immersion and appeal are considered to be necessary constituents of the player experience. In this article their relationship is examined through a 2×2 factorial study ($n = 173$) in the context of two games, a first-person shooter and a massively multi-player online role-playing game, and in the context of two types of players: experienced players who have never played the game in one of the genres in question, and experienced players who have played one of the games in question. It is found that immersion and appeal are linearly correlated, and the repercussions of this finding are discussed.

1. Introduction

Immersion in computer games is considered an important factor for their enjoyment (Nacke & Drachen, 2011). Jennett et al. (2008) declare that "successful computer games all have one important element in common: they have an ability to draw people in", stating that immersion is a big part of successful games. Others also mention that immersion is an important factor of player experience (i.e. Ermi & Mäyrä, 2005; Ravaja et al., 2004; Sweetser & Wyeth, 2005).

On the other hand, it is obvious that for players to have any kind of experience with a game, they must first choose to play that game. But after players experience a game for the first time, they should also feel the urge to continue playing it, if the game is to be successful. Player retention is particularly important in the case of Massively Multi-Player Online Games (MMOGs) (Ducheneaut, Yee, Nickell, & Moore, 2006), because game revenues come not only from the initial sales of the game, but also from subscriptions, or from ads that are placed directly into these games. Therefore the ultimate challenge for a game designer is to create a game that has first-time appeal, so that it will entice people to begin playing it, and that also has long-term appeal, so that it will retain its players for a long period of time. For this reason, game appeal is an important factor that needs to be considered from the beginning stages of game design, especially if the game designed is expected to create significant revenue for its makers. And, like immersion, appeal is also considered to be an important factor when examining the player experience (Nacke & Drachen, 2011).

Klimmt (2003) argues that game enjoyment is based on three factors, one of which is the fascination from being drawn into an alternate reality. Yee (2006) agrees with this, mentioning that one of the reasons that players find MMOGs appealing is because they become immersed in a fantasy world. The concept of immersion is encapsulated in various game enjoyment definitions that have been proposed (Brown & Cairns, 2004; Ermi & Mäyrä, 2005; Jennett et al., 2008; Nacke & Lidndley, 2008). And as fascination implies appeal towards the object of fascination, in our case a game, it means that immersion and appeal must be factors that are intimately related. But the relation between immersion and appeal has not been studied, and thus we cannot gauge the actual effect of either factor on the other. Understanding the nature of the relation between immersion and appeal should allow us to further understand the nature of player experience, and the way that players become involved in games. The goal of this article is to examine the relationship between these two factors over the differences between the two games and the two groups.

In the rest of this article we briefly discuss previous research on immersion and appeal, and then describe a study that examines the relationship between these two factors. This relationship is studied across two video games that belong to two different game genres, one a Massively Multi-Player Online Role Playing Game (MMORPG) and the other a First-Person Shooter (FPS), and across two categories of players: those who have experience in playing one of the games of the study, and those who have not played the game before. It is widely known that because different players prefer to play different game genres, players' appeal will vary when they play different types of games. But is there a difference between the appeal that a player experiences when first coming in contact with a game, and after a player has experienced a large part of the game, or when she has finished it? And is there a difference between the immersion experienced by players who play a game

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for the first time, compared to experienced players of that game? The questions that the study presented here aims to answer are, specifically, the following:

1. Is there a difference in the depth of immersion experienced by the two categories of players (first-time and experienced) and that is created by the two different games (MMORPG and FPS)?
2. Is there a difference in the level of appeal experienced by the two categories of players and created by the two different games?
3. Is there a positive relationship between appeal and immersion across games, across player categories, and over both of the previous variables, or is the relationship between the two attributes different for the different groups in the study?

Some of the findings are a larger than typical relation between appeal and immersion, and an interaction effect between the appeal and the game played for inexperienced players. We discuss these findings and their impact on game design, and propose a preliminary model linking appeal and immersion.

1.1. Immersion

Presence is the term used for the feeling that one is inside a Virtual Environment. Presence is defined by Witmer and Singer (1998) "as the subjective experience of being in one place or environment, even when one is physically situated in another". They suggest that experiencing the feeling of presence in a virtual environment is a characteristic of the person interacting with the virtual environment. As such, the level of presence experienced by a virtual environment participant is defined by certain characteristics of that participant, and they name these characteristics "immersive tendency". Immersion is the term that is used to discuss the same feeling as that of presence, but in the field of video games (McMahan, 2003).

Immersion is generally accepted as one of the constituents of player experience (McMahan, 2003; Nacke & Lidndley, 2008; Poels, De Kort, & Ijsselsteijn, 2007; Qin, Rau, & Salvendy, 2009; Sweetser & Wyeth, 2005; Weibel & Wissmath, 2011). Ermi and Mäyrä (2005) write "... gameplay experiences can be classified as escapist experiences, where in addition to active participation, also immersion plays a central role". However, there is no immersion unless a player decides to play the game and engage into the process of willing suspension of disbelief (Coleridge, 1985). Willing suspension of disbelief was first proposed for theater performances by Samuel Taylor Coleridge (Coleridge, 1985). Coleridge suggested that if one wants to believe that a fictional tale can actually take place in reality, then one must be ready to disregard the shortcomings of the presentation medium, and ignore the implausibilities that are presented by the actors. Considering that video game players must also allow for the same willing suspension of disbelief for the games they play, immersion becomes an emergent attribute created by the interaction of the player with a game.

Immersion has been studied extensively, because it is considered a critical attribute of player experience (Nacke & Drachen, 2011). Specifically, research on immersion has revolved around understanding its nature (i.e. Ermi & Mäyrä, 2005) and understanding how it emerges and is experienced by players (i.e. Brown & Cairns, 2004; Nacke, Stellmach, & Lindley, 2011; Qin et al., 2009).

Research on how immersion emerges and is experienced by game players has found that there are various levels or depths of immersion. For example, Brown and Cairns (2004) propose three successive levels of player immersion – engagement, engrossment and total immersion. Each of these levels suggests that the player further loses touch with the real world and becomes more involved both physically and psychologically in the virtual world of the game. Each of the levels requires that the players invest into the game, and overcome specific boundaries through their emotional investments – choosing the game to play, then having easily understandable game controls and finally becoming emotionally invested in the game (Brown & Cairns, 2004). These features of immersion are further specified by Sweetser and Wyeth (2005) who propose GameFlow, a model of immersion that stems from Cszikszentmihalyi's concept of Flow – an experience "so gratifying that people are willing to do it for its own sake, with little concern for what they will get out of it, even when it is difficult or dangerous" (1990).

Immersion is different from Flow (Cszikszentmihalyi, 1990), with the difference lying in that Flow occurs during activities that are not necessarily performed with the specific goal of entertainment and fun (Weibel & Wissmath, 2011; Weibel, Wissmath, Habegger, Steiner, & Groner, 2008). However, there are also several similarities between the two concepts (Cowley, Charles, Black, & Hickey, 2008), a fact that led to the development of player experience evaluation frameworks that are partly based on Flow, such as GameFlow (Sweetser & Wyeth, 2005) and MicroFlow (Blythe & Hassenzahl, 2005).

GameFlow (Sweetser & Wyeth, 2005) maps the elements of Flow (1990) to their computer game counterparts. In the GameFlow framework (Sweetser & Wyeth, 2005), Brown and Cairns' (2004) suggestions on the levels of immersion become only parts of the Immersion definition. In GameFlow Immersion is described as "deep but effortless involvement in the game" (Sweetser & Wyeth, 2005). Instead of breaking immersion down into levels, the GameFlow framework offers several characteristics which could be seen as incremental in their application to understand the state of immersion. These are: (1) players should become less aware of their surroundings, (2) players should become less self-aware and less worried about everyday life or self, (3) players should experience an altered sense of time, (4) players should feel emotionally involved in the game, (5) players should feel viscerally involved in the game. However, there are also mentions on ease of game control, incremental challenge presentation, clearly defined goals, and support for player skill development and mastery.

Jennett et al. (2008) describe immersion as having three distinctive features: lack of awareness of time, loss of awareness of the real world, and involvement and a sense of being in the task environment (Jennett et al., 2008). These are in congruence with the GameFlow framework (Sweetser & Wyeth, 2005). Jennett et al. (2008) also discuss physiological changes that occur while players are immersed, and when they stop playing and "return to the real world. Jennett et al. (2008) found that the more immersed players were in a game, the more their real world task performance suffered after they stopped playing, indicating that players needed time to re-adjust to the real world. Also, they found that the players' eye-movements while playing were decreasing, showing an increase in attention towards the game. Their major contribution to the study of immersion though, is a questionnaire used to measure how immersed a person is in a game. This questionnaire consists of 31 questions that are designed to provide a total score of immersion for the player that answers them.

To explicate the nature of immersion, Ermi and Mäyrä (2005) propose an immersion model that consists of three distinct immersion forms: sensory, challenge-based and imaginative immersion. Each of these forms of immersion concerns a specific part of a game. Sensory immersion is related to the audiovisual execution of games, challenge-based immersion concerns the balance that is created between challenges presented in a game and a player's abilities. Finally, imaginative immersion concerns the absorption of the player by the story of the game, and the empathy towards the player's character in the game. These can be considered together as a summative experience of immersion that spans a game holistically.