Broadening and deepening emotional engagement in videogames with emphasis on rules, mechanics, systems and controls

Tom Cole and Marco Gillies

Department of Computing

Goldsmiths

London

t.cole@gold.ac.uk

Abstract

This PhD is investigating how we can broaden and deepen the palette of emotions found in video games by focusing on their unique interactive qualities, rather than those shared with other media. So far, analysis of games reviews has given rise to the notion of two different types of challenge to be found in games - emotional and functional. Further work seeks to define emotional challenge further, and then use technological probes to investigate how certain design patterns can be used to elicit this kind of gaming experience.

Introduction

Video games, with their unique properties such as interactivity, agency, control mechanics, feedback loops and gameplay systems, have the potential to impart deep emotional experiences some already do of course.

However, study of this emotional engagement remains lacking. Much digital games analysis has been done using techniques and theory appropriated from film, literature and cultural studies. Reliance on these areas alone yields limited results and there is little precise understanding of how procedural elements such as control mechanisms and gameplay systems can be leveraged (or synergised with narrative and/or audio-visual elements) for emotional affect.

Games should be studied as interactive systems, but are usually studied using techniques appropriate for non-interactive media. As developers, we are limiting ourselves, and not exploring the creative and expressive potential of digital games to their fullest. Out of the myriad of affective experiences possible, we generally only design and experience a fraction of what could be offered.

This project hopes to help address this by studying how game mechanics, gameplay systems and control methods can be used and interpreted to create meaning and elicit a wider range of emotional responses than is commonly seen in digital games at present.

Research So Far

Early work focused on a deep analysis of *Shadow of the Colossus* and *Ico*, and how they elicit emotion from the player (Cole 2015)

Subsequent work focused on players experiences of playing games and how they felt about their game-playing experiences. To this end language from multiple written reviews of several games was analysed for semantic content. Grounded theory methodology using a Straussian approach (Strauss and Corbin 1998) was used to analyse and identify any patterns present amongst data.

Broadly speaking, the games analysed seemed to offer two kinds of challenge; emotional and functional. Functional challenge is the kind of challenge often associated with videogames where the player needs to use strategy, physical skill or puzzle-solving skills to overcome obstacles presented by the game (whether they be environmental, character based or logic-based). Emotional challenge is where the player is required not to overcome challenges with skill and dexterity, but to deal with ambiguous or challenging messages and material presented by the game in question which required great cognitive effort on the part of the player. Emotional challenge was found to be more common in games that were considered to be more avant-garde by players and press, as opposed to more mainstream games aimed at the core gamer market (Cole, Cairns, and Gillies 2015)

The distinction between emotional and functional challenge also highlighted patterns in the language used by reviewers. There were differing notions of what players considered as representing good value from the purchase of a game, different types of language used to describe the formal qualities of the game (such as the graphics, sound and the environment) and the main kinds of emotions felt by players (Hollywood blockbuster-style emotions for core games similar to all reviewers, more reflective and varied sets of emotions for avant-garde games varying quite markedly between reviewers). Furthermore, there were certain trends or devices that avant-garde games tended to use to achieve their various effects, for example ambiguity and solitude.

I have also published an overview of the different types of grounded theory methodology that are available and how they pertain to games research (Salisbury and Cole 2016), which has helped to inform my future research plans.

Theoretical Models

As far as theory is concerned, various schools of thought have been investigated to see if any particular theories show

themselves as particularly useful. This is, of course, ongoing and at this stage I must be careful not to pre-empt and/or bias any results from my interviews, but psychology at this stage seems to be less useful than other theories such as phenomenology might prove to be. This is not what I would have expected, but the kind of knowledge that results from the use of psychological models does not bring me any closer to answering the questions that lie at the heart of this investigation.

This conclusion is the result of wide-ranging review of literature from the area. Encompassing the more physiological/embodied thinking of James (James 1884) and Schachter and Singer (Schachter and Singer 1962), the Darwinian school represented by Ekman (Ekman and Friesen 1971; Ekman 1999), Izard (Izard 2013), Plutchik (Plutchik 1991) etc., the cognitive school of Lazarus (Lazarus 1991) and Frijda (Frijda 2007), the social-constructivist school represented by Averill (Averill 1980), Harré (Harré 1986) and Gordon (Gordon 1981) and the more recent conceptual act model and proposed by Barret (Barrett 2006).

This investigation is more interested in what people feel rather than how people feel it. In the light of this, debates over the structure and internal workings of an emotional experience seem a little redundant, when only the end product is of interest. However, points raised by both the social-constructivist and conceptual act models - namely that the expression of emotional experience is affected and/or limited by pre-existing conceptual self-knowledge will be important ones to keep in mind as the investigation moves forward.

I have not yet had chance to explore other theoretical models (such as phenomenology) and this is a task to take up after the current phase of research. In any case, at this stage I need to limit my knowledge of other models so as to not prejudice the findings from my interviews and grounded theory methodology.

Next Steps

This idea of emotional challenge is worth further investigation. The next step in terms of research is to conduct interviews with players and developers of avant-garde games to see if more definition can be brought to the idea of emotional challenge. What kind of emotions are we talking about? What devices and methods are used to elicit this particular type of emotional experience? For this work, I am taking a more constructivist approach to grounded theory methodology (Charmaz 2014). I hope to further define my leading question into a set of smaller sub-questions for further investigation.

Once patterns, commonalities and questions have been identified, I intend to test out any theories and observations made with technological probes (Hutchinson et al. 2003) observing how people react to and interact with a piece of technology (this approach is derived from Gaver's well-known use of cultural probes (Gaver, Dunne, and Pacenti 1999)). In this case, it will be an iterative series of game prototypes. I hope to use this data on people's emotional experiences when using these technology probes to support and develop a theory/model for emotional engagement in video games.

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