User-Generated Content as cues for performance in LittleBigPlanet

Panagiotis Koutsouras University of York York YO10 5GH, UK +44 (0) 7769 626583 koutsouras.panayotis@gmail.com

ABSTRACT

More and more games incorporate mechanics for creating content these days. Even though there is substantial research regarding the modification communities for PC games, gaming ecosystems that are based solely on User-Generated Content are underexplored. The aim of this study is the investigation of how the gaming experience is formed inside the community of LittleBigPlanet through the use of discourse analysis. Discourse analysis provided us with the identities and practices that arise inside the community and the interactions between them, with the language in use and with what is deemed important by its members. The members of the community care about its growth, having pleasant experiences and developing relationships. What stands out though is the action of performance, which comes as an intuitive and not premeditated response to the creations of other players. It is an emerging experience that is achieved by bringing together the gaming world of the levels and the actual game play of the game. It gives a special meaning to the levels of the community, since they become a place for performance. The intertextual references and the tropes the creators incorporate are also crucial, since they act as cues for the players to perform.

1. Categories and Subject Descriptors

K.8.0 [Games]: General - games.

2. General Terms

Performance, Human Factors

3. Keywords

Gaming experience, User-Generated Content, Discourse Analysis, LittleBigPlanet

4. INTRODUCTION

The main reason why players play video games is their desire to have an enjoyable experience [14]. It is this experience that they mostly care about and not the game itself [9]. Its exact definition however is rather elusive and for this reason different groups of people interpret and research it, based on different perspectives. Gamers and game reviewers would use the term "gaming experience" as a reference to the quality of the game and the level of their satisfaction [12]. Academics, on the other hand, focus either on specific states of this experience, like immersion [3], or Paul Cairns University of York York YO10 5GH, UK +44 (0) 1904 32 5674 paul.cairns@york.ac.uk

on establishing models of evaluating it [14]. Participating in multiplayer activities can also lead to intriguing situations [9].

One such activity is the creation and sharing of content. With the advent of Web2.0, more and more services on the Internet are offering the means for these actions, like YouTube, blogs, forums and Facebook. Even though the types of content created inside them differ, they can all be encapsulated by the broader term User-Generated Content (UGC) [8].

In the case of video games, adding content can be traced back to 1962, but only with the rise of 3D graphics, has it become more profound [15]. The commonest kind of UGC in video games has been modifications (mods); an alteration of the original game that can range from small additions to complete reiterations [11]. Studies have also looked into the groups of people that participate in modification communities [11], [13] and to the motivations for taking up this activity can range from developing a more personalised gaming world, to participating in the development process of a game, acquiring professional experience and improving the original game [11], [13], [7].

Regardless of this trend, an emerging phenomenon can be observed in the last few years towards the incorporation of UGC inside the context of games like LittleBigPlanet [1] or Minecraft [2]. The main difference between this kind of UGC and modifications is that it takes place inside the context of the games and participates in the formation of their gaming experience [6]. These games provide an ecosystem which is co-developed by the members of the community and the producers of the games. In comparison, mods derive from exogenous to the gaming experience activities, as part of technical communities that exist in the real world or in digital spaces.

This emerging phenomenon in video games poses the question of what effect creating and sharing content inside the context of a game has on the gaming experience. In the aforementioned games, their UGC mechanics are both well-received and supported by the players. What we aim to find in this research project is what matters when sharing levels inside the community of LBP and how UGC affects the overall experience players have.

5. METHODOLOGY

The gaming community that we are analysing is the one that can be found in LBP and the research methods we are using are content analysis and discourse analysis.

LBP is a game for PlayStation 3 that is based on the creation and sharing of content. It is deemed a proper game for our research, due to its rich content and the intriguing characteristics it carries. It provides the player with two modes: a single player campaign with predefined content and with a creation mode, where players can develop their own levels and, consequently, share them with the in-game community. A notable aspect of the game is the ability to personalise the character the player controls (the sackboy) by dressing him and manipulating his gestures and his facial expressions. Furthermore, the aesthetics of the game are quite characteristic, being a rich combination of colourful graphics, cardboard and cloth materials and an overall cuteness.

Content analysis aims at addressing the question of what content to analyse. LBP, by the time this research paper is being written, has 7 million player-created levels. Through content analysis, we will be able to specify the creation tendencies inside the community and to pick levels from these categories. Emergent coding is used due to the lack of previous knowledge on this field, while the validity of the results is tested with Cohen's Kappa inter-coder reliability.

Our decision to adopt discourse analysis is based on our belief that creating and sharing content is not only a way of having fun, but also a means of communicating with the members of the community. We are following Gee's approach [6] for its critical orientation and because of the well-constructed paradigm he offers. He proposes the exploration of *seven building tasks* that represent what we *build* when we use language, through the use of *six tools of inquiry*. These tasks give *significance* to our speech, but also specify the *identities* and *practices* we enact while talking, the *relationships* and *connections* we form, the *knowledge* we carry and communicate and what we deem important inside the context in which we talk (the *social goods*).

The first four tools of inquiry are mostly related to how identities and practices are enacted and interact with each other. Social languages refer to the kinds of languages that are used; they may come from different contexts and give rise to a diversity of identities and practices. Discourses include the social languages, the identities, the practices and anything else that is needed for the enactment of specific roles in any given context. Conversations are related to discussions that bear a significant meaning due to the importance they have in the society (context). Intertextuality is a reference to another text that has been developed for another situation, which greatly affects what is being said in the current context and even characterises it. The other two tools of inquiry are situated meanings and figured worlds; the former are the special meanings that some words and phrases have inside a specific context, while the latter refer to what the speaker deems as common or usual about the topic s/he is talking about.

The method is applied both on written (reviews for levels) and multimedia content (the levels themselves). We expect that the reviews will provide us with an initial picture of the community (ie what are the main Discourses, practices and identities), while the levels will show us how players act inside various creations and what elements the creators incorporate in their levels.

In reporting the results of the analysis here we do not go into the full details of how each tool was applied to each building task. Space limitations and the high degree of correlation between the ideas found make it imperative to present only the major highlights of the discourse analyses that lead to our descriptions of the major Discourses indicated by the content we analysed.

The levels for the content analysis, as well as the reviews, were gathered from the official site of the game (lbp.me), while the discourse analysis on levels was based on YouTube videos.

6. CONTENT ANALYSIS

LBP's content is organised in its website (lbp.me) in 8 distinct categories, 6 of which are related to the quality of the levels (ie

Most Hearted, Highest Rated, Trending, Busiest etc). We elicit 300 distinct levels out of these 6 categories, 50 from each one.

The coding scheme that was developed (Figure 1) consists of 11 codes in total, showcasing the diversity of the creation tendencies inside the community. The three most prominent ones, which constitute the 66% of the total levels, are related to various forms of playable levels. Independent playable levels provide their own storylines and gaming experience, other media are based on films, books, music etc and act as references to them, while trials and mini games offer quick gaming experiences full of challenges. The rest of the codes are related to big playgrounds for the players to interact with (leisure levels), video levels that consist of films or trailers and levels that promote big contraptions (like calculators). There is also a sharing trend in the form of galleries, gifts or ideas and opinions. Lastly, there are the spam levels that cover the criteria for the acquisition of in-game awards or PlayStation 3 trophies and glitch levels that exploit game related bugs.



Figure 1. Frequency of appearance of each code

Concerning the inter-coder reliability, there were a total of 68 cases and 52 agreed ones. Consequently, the agreement percentage is 76.47%. As the agreement by chance is 0.09 (1/11), the Cohen's Kappa agreement is 74.11%.

The results of the inter-coder reliability show that the coding scheme that was developed is reliable, though there is surely some space for improvement. The high level of similarity between some codes may lead to confusion. For example, "other media" can encapsulate many codes, since its distinction lies solely on the reference to other media. Lack of knowledge of this reference can lead to a wrong classification. The code itself, though, is deemed proper, since it shows us the tendency of basing a creation on other media. It also opens up various questions: do the players enjoy a level more, if it bears a reference they understand? Is LBP a platform for creating re-imaginations of our favourite media?

Since the goal of this analysis is to set the groundwork for the further analyses, we deem that these findings are sufficient. The three most prominent categories constitute the majority of the creations inside LBP, so it is only reasonable to elicit levels from these ones for the discourse analyses that follow.

7. DISCOURSE ANALYSIS

The levels that were picked for the two discourse analyses are "The 2nd Li'l Platformer," "Little Dead Space," "Temple Trials" and "Clockworx 2," all deriving from the 3 most prominent codes defined above. The first is an independent level that offers an adventure inside a forest, while Little Dead Space is an "other media" level with horror aesthetics, based on the game "Dead Space." The latter two belong to trials and mini-games, offering quick but challenging experiences, constituted of precision movement, avoiding dangers and intriguing mechanics. We elicited 3 reviews from the game's official website for each one of

the first three levels, while we analysed the content of the latter three, based on YouTube videos (their IDs are mqhtX8ezDg0, EC3AhCxZq and TabSk9Qj-0A respectively).

Analysis of reviews. The social languages that are spoken by the reviewers vary, depending on what they want to achieve through them. When they want to criticise the gaming aspects of the level, they use words like "*heart*" (favourite) or "*platformer*" (a video game genre), which have situated meanings both inside the context of the game and in the general gaming universe. It is even possible for relationships to be developed; a reviewer calls a creator "bud," an action that creates a friendly bond between them. Another reviewer, though, characterises a level as "sloppy mess," which leads to a negative atmosphere between them.

The diversity of social languages is also an indication of sign systems and knowledge. The players seem to have a deep understanding on topics like how proper platformers should be made, since they refer to such matters ("platforming elements throughout were of the highest standard"). This knowledge is enhanced by the participation of the reviewers on Conversations both inside and outside the LBP community. Acquiring an enjoyable gaming experience is of interest for both gamers and members of the LBP community. Additionally, one reviewer calls the Temple Trials "the best minigame I've played yet," showing that s/he knows both about the minigame trend inside the community and the diversity of options that exist in that genre. Finally, there is the Conversation about the growth of the community. It is such an important matter that a reviewer goes as far as to put out a call for new creators ("The LBP COmynity need even more good creators. [...] everyone is welcome.").

Intertextuality, too, is important for the interaction between LBP players. For example, "*bud*" is a colloquial way to address your brother, but it is also used as "pal." The most intriguing instance of intertextuality is the level Little Dead Space itself: being a reimagination of another game, it acts as a reference to it. Failing to understand this can lead to a disappointing experience (as it may have happened with the reviewer who calls it a "*sloppy mess*").

From this data, two Discourses arise: the LBPer Discourse and the broader Gamer Discourse. The former one is only engaged in by an active member of the community who enacts the identities of player, creator, reviewer and the practices of playing, creating, sharing and reviewing content. What matters the most for an LBPer is the community and the development of relationships with other LBPers. For this reason, s/he communicates in the way we described above, criticises creations and takes up the activity of building a level her/himself. Her/his activities can also lead to the appreciation of other LBPers, which acts as a form of being distinguished and recognised inside the community, giving him motivation to keep on participating in the LBP ecosystem.

The latter Discourse can be perceived as a superset Discourse that encompasses all the gamers. The identity and practice that is enacted inside it is the player of a game. An enjoyable experience is her/his foremost goal, alongside with the acquisition of distinctions inside and outside the game. This appreciation of the gaming experience makes her/him focus mainly on how enjoyable a level is in her/his reviews.

Analysis of levels. We would first like to talk about the enrichment of the creator identity. Using the provided tools, s/he is able to develop personalised levels, by adopting tropes from other media. A suitable example is Little Dead Space, which incorporates elements not only from the original game, but also

common tropes from horror films. The same can be argued about Temple Trials and Clockworx 2, which bear the aesthetics and the atmosphere of the adventure genre, similar to Indiana Jones.

This discussion on tropes sheds some light on the social languages that can be found in the levels. There is the LBP language that amalgamates all the characteristics of the game into one aesthetical outcome. On the other hand, there are all the languages that derive from tropes; the horror trope, for example, bestows the horror social language to the creation, followed by dark colours, frightful moments and grotesque atmosphere. A particular moment in Little Dead Space bears significance to the incorporated horror trope, by acting as an intertextuality and Conversation: the metaphor of Heaven and Hell. The players manage to avoid a monster by entering an elevator. While the elevator goes up, the players, intuitively, feel as though they are going to a peaceful place (transcending to Heaven). This feeling is stopped when a monster intrudes, breaking the elevator and forcing in to fall down to a pit (falling to Hell).

The player identity is enhanced as well. From the YouTube video on Little Dead Space, we notice a particular interaction between the players: they slap and drag each other, pose together, smile at each other etc. This makes the levels a playground where players can interrelate. Further elaborating on this identity, players match the behaviours of their sackboys to what is happening on the screen. In a frightening moment, they attach a frightful expression to their sackboys' face, whereas to a joyful occasion, they make their sackboys smile. This leads to the practice of performance and to the transcendence of the player identity to the Player Discourse. The identities and practices of this Discourse depend on the nature of the game play style at hand; multiplayer leads to collaborative or competitive play and to a possible development of a relationship between the Players. As stated above, the genre of the level and the incorporated tropes also affect the overall performance. Consequently, the social languages that are adopted in real time by the Players are an outcome of their interpretation of the gaming world. If they like it, they will try to be an active part of it, while if they do not, they will probably quit.

All these actions that the Players take up give credit to some of the social goods that were pinpointed above, but also give rise to new ones. Players befriend one another as part of the experience, by interacting with each other and sharing the fun. Furthermore, creators, in an effort to acquire self-approval, promote themselves through their creations, as can be seen in the end of Little Dead Space, where its creator provides links to her/his other levels. Lastly, the leaderboards meta-game that exists in the LBP universe adds another layer to the formed relationships between the players, as they compete between each other for the first place.

8. DISCUSSION

Even though having fun, developing relationships and participating in the growth of the community is of importance for LBPers, what really stands out is the activity of performance.

The LBPers perform in order to match their sackboys' behaviour with what is happening on the screen. Even though this reminds us of the role playing that takes place in Massively Multiplayer Online Role Playing Games (MMO RPGs) like World of Warcraft (WoW), there are some unique elements in LBP that differentiate it from these games. MacCallum and Parsler [10] elaborate on the aspects that drive players of MMO RPGs to role play; the race, the classes and the sex of their characters influence the way they behave in the digital worlds of the games. The context of the game is also crucial, as it provides a predefined lore and storyline, quests and rules to which the players adapt. In contrast to the continuity that exists between all these aspects, LBP does not offer a unified experience between the varieties of its user created levels. Players have the opportunity to traverse from one level to the other and accumulate momentary experiences, but not going through a concrete world where their presence is of significance to the development of the storyline.

In this context, it is impossible for the players to role play, as they cannot build a concise character for their sackboys, which will be applicable to all the levels of the community. They can, however, perform by matching their sackboys' behaviours and emotions to the situation at hand. It is as though the whole game is built around this concept, as the sackboy is constantly on the centre of the screen, always ready for action. Even when the player is not controlling him, he tries to stay awake by stretching and yawning.

So, performing is a way for the LBPers to combine the levels of the community with the actual actions of the sackboys. This is reminiscent of the notion of Puppetry, proposed by Calvillo Gamez et al. [4]. Through Puppetry, players can enjoy the game by bringing together the environment and the game play of the game. LBPers create small stories inside the levels by consolidating the behaviours of the sackboys, the happenings in the level and the interactions with other players.

Performing can also bring equilibrium to the contradiction between the social languages that exist inside LBP. A horror language does not match with the diffuse LBP cuteness, not until the sackboy starts behaving accordingly. Then, the two social languages intersect and form one total experience.

Furthermore, since it is difficult (if even possible) to predict the content of a level before playing it, performance cannot be a premeditated act. Players enter a level without suspecting what they will find. The intertextual references or common tropes make them understand the aesthetics of the level; it is then that they start performing.

A similar kind of emergent experience, one that was not in the initial part of the "script" of the game but surfaced afterwards, can be found in Minecraft. In [5], new experiences that came out of the novel use of UGC, such as the Jason Rohrer's religion metagame, are pinpointed, stating not only the many uses of a UGC-based world, like Minecraft, but also how the act of creating content can lead to more innovative experiences.

9. CONCLUSIONS

In this research project, we investigated the effect of creating and sharing content has on the gaming experience of a game that is based on UGC, like LBP. Our methodology consisted of content and discourse analysis, with the latter drawing on the fact that content in such a game is a means of communication.

The main Discourses that emerged are related to the member of the LBP community (LBPer Discourse) and to the general gaming universe (gamer Discourse). Even though they include a diversity of practices and identities, the most prevalent ones are the player and the creator.

The gaming experience is a mixture of the practices of playing, creating, sharing and reviewing content. However, players seem to enjoy performing inside the context of the levels, by adapting to the aesthetics and the happenings that take place on the screen. Performing is an emergent experience that gives rise to the Player

Discourse and bestows an alternate meaning to the levels, as they become part of a script, created by the Players in real time.

10. REFERENCES

- [1] LittleBigPlanet, 2012. Retrieved November 15, 2012, from LittleBigPlanet: http://www.littlebigplanet.com/.
- [2] Minecraft, 2012. Retrieved November 15, 2012, from Minecraft: https://minecraft.net/. 3/12/2012. 2012.
- [3] Brown, E. and Cairns, P. 2004. A grounded investigation of game immersion. In *Proceedings of the CHI '04 Extended Abstracts on Human Factors in Computing Systems* (Vienna, Austria, 2004). ACM, New York, NY, 1297-1300.
- [4] Calvillo-Gámez, E., Cairns, P. and Blandford, A. 2008. Assessing the Gaming Experience using Puppetry. In *Proceedings of the CHI 2008 Evaluating User Experience in Games workshop*. ACM, New York, NY.
- [5] Duncan, S. C. 2011. Minecraft, beyond construction and survival. Well Played. (2011), 1-22.
- [6] Gee, J. P. 2010. *An Introduction to Discourse Analysis*. Routledge, New York.
- [7] Jansz, J. and Theodorsen, J. 2009. Modifying Video Games on Web2.0: An Exploration of Motives for Publishing Creative Game Content. In *International Communication Association*. Marriott, Chicago, IL.
- [8] Lastowka, G. User generated content in virtual worlds. 2008. Vanderbilt Journal of Entertainment and Technology LaW. 893-917.
- [9] Lazzaro, N. Why We Play Games: Four Keys to More Emotion Without Story. *XEODesign*, Retrieved November 20, 2012, from XEODesign: http://www.xeodesign.com/xeodesign_whyweplaygames.pdf
- [10] MacCallum-Stewart, E. and Parsler, J. 2008. Role-play vs. Gameplay: The Difficulties of Playing a Role in World of Warcraft. In Corneliussen, H. G. and Rettberg, J. W. eds. Digital Culture, Play and Identity: A World of Warcraft Reader. The MIT Press, Massachusetts, 225-246.
- [11] Postigo, H. Of Mods and Modders Chasing Down the Value of Fan-Based Digital Game Modifications. 2007. *Games* and Culture. 2, 4 (October 2007), 300-313.
- [12] Sheffield, B. Opinion: The First Person Immersion Myth. Gamasutra, Retrieved December 3, 2012, from Gamasutra: http://www.gamasutra.com/phpbin/news_index.php?story=24513#.ULyZuYOsh8E.
- [13] Sotamaa, O. When the Game Is Not Enough: Motivations and Practices Among Computer Game Modding Culture. 2010. *Games and Culture*. 5, 3 (July 2010), 239-255.
- [14] Sweetser, P. and Wyeth, P. 2005. GameFlow: a model for evaluating player enjoyment in games. *Comput. Entertain.* 3, 3 (2005), 3-3.
- [15] Van, D. B. F., Ribbens, W. and Van, L. J. 2011. Doing It Themselves! A Mixed-Method Study into the Motivations of Players to Create in the Context of Gaming. In Proceedings of the Think Design Play: The fifth international conference of the Digital Research Association (DIGRA) (Hilversum, the Netherlands, 2011). DiGRA/Utrecht School of the Arts.