Dark game design patterns in online games: exploitation, loyalty and engagement

Faltin Karlsen
Westerdals Oslo School of Arts, Communication and Technology
Schweigaardsgate 14
0185 Oslo, Norway
+4790737088
fk@westerdals.no

Keywords
Social network games, MMORPGs, dark game design patterns, temporal aspects

EXTENDED ABSTRACT

Negative effects of computer games have been discussed for several decades. Currently, the academic discourse mainly revolves around the possibility of being addicted to online games, also framed as problem gaming, pathological gaming, and more recently as *Internet gaming disorder* (Griffiths et al 2014, Petry et al 2014). Although underlying psychosocial elements are acknowledged as important for excessive use (Karlsen 2013, Rooij et al 2014), game genre and reward structures are also ascribed a significant role in «[t]he initiation, development and maintenance of problematic video game playing» (King et al 2010, see also Charlton and Danforth 2007, Caplan et al. 2009).

A different strand of research has focused on negative aspects of computer games from a design perspective (Lewis 2012, Zagal et. al 2013). Most prominently, Zagal et al. have launched the concept *dark game design patterns* which is a game design that is «used intentionally by a game creator to cause negative experiences for players which are against their best interests and likely to happen without their consent» (2013). This group of researchers have created a catalogue over dark design patterns grouped according to three different criteria, namely designs that increase the time spent, the amount of money spent, and design that exploit the social network of the player. Of these three types, the time dimension is the one that most directly ties into the concerns of excessive use of computer games.

While the concept of dark game design pattern provides a good conceptual framework for explaining how game design might stimulate increased use, so far it has not, to my knowledge, been conducted any in-depth analysis of particular game titles with this perspective in mind. The aim with this paper is to provide an in-depth analysis of two different types of online games, World of Warcraft (2004) and FarmVille 2 (2012), representing MMORPGs and social network games, respectively.

The three main goals of this paper is, a) to provide a description of time-related game design patterns in these two games, b) to analyse how these game patterns are related to more general objectives of the games, and c) how these patterns may be experienced from the position of the player. In addition to employing the concept dark game design patterns, self-determination theory and the concepts intrinsic versus extrinsic rewards will be employed in this analysis (Ryan et al 2006). The analysis will focus especially on how game patterns may alter the *routines* of the player and how it may contribute to an

Proceedings of 1st International Joint Conference of DiGRA and FDG

increased *loyalty* toward the game in question. Marketing research on loyalty programs will therefore also be used in the analysis. The focus is not whether these design patterns may have severe detrimental effects on the player, but rather how it stimulates increased used for all players.

The analysis shows that both games have a long range of discrete design patterns which stimulate different types of time investment and involvement. World of Warcraft gives the player the opportunity to pursue *play-by-appointment* goals ranging from an hourly basis (garrison activities) to a yearly basis (seasonal events like Feast of Winter Veil). FarmVille 2 has more emphasis on activities in a shorter timeframe, on hourly and daily basis, reflecting also the different economical logics of the games, e.g. subscription versus micro transactions. The long array of parallel goals the player has available, as well as the social aspects of the games, mediates how the particular game design patterns may be used and also experienced. Players may find satisfaction (intrinsic rewards) through patient earning rather than skills, as long as the overall game provides enough choices and a minimum of strategic challenges and may in the process embrace design that has as its main purpose to stimulate loyalty.

BIBLIOGRAPHY

Blizzard Entertainment (2004) *World of Warcraft* [PC Computer, Online Game]

Caplan, Scott, Williams, Dmitri, and Yee, Nick (2009). Problematic Internet use and psychosocial well-being among MMo players. *Computers in Human Behavior,* 25(6), 1312-1319.

Charlton, J.P. and Danforth, I.D.W. (2007). Distinguishing addiction and high engagement in the context of online game playing. *Computers in Human Behavior*, 23(3), 1531-1548.

Griffiths, M. D., Van Rooij, A. J., Kardefelt-Winther, D., Starcevic, V., Király, O., Pallesen, S., ... & King, D. L. (2016). Working towards an international consensus on criteria for assessing Internet Gaming Disorder: a critical commentary on Petry et al.(2014)[forthcoming]. *Addiction*, *111*(1), 167-175.

Karlsen, Faltin. *A World of Excesses: Online Games and Excessive Playing*. Ashgate Publishing, Ltd., 2013.

King, Daniel L., Delfabbro, Paul H., and Griffiths, Mark D. (2010b). Video game structural characteristics: a new psychological taxonomy. *International Journal of Mental Health and Addiction*, 8(1), 90-106.

Lewis, C., Wardrip-Fruin, N., & Whitehead, J. (2012, May). Motivational game design patterns of'ville games. In *Proceedings of the International Conference on the Foundations of Digital Games* (pp. 172-179). ACM.

van Rooij, A., Kuss, D., Griffiths, M., Shorter, G., Schoenmakers, T., & Van de Mheen, D. (2014). The (co-) occurrence of problematic video gaming, substance use, and psychosocial problems in adolescents. *Journal of behavioral addictions*, *3*(3), 157-165.

Petry, N. M., Rehbein, F., Gentile, D. A., Lemmens, J. S., Rumpf, H. J., Mößle, T., ... & Auriacombe, M. (2014). An international consensus for assessing internet gaming disorder using the new DSM-5 approach. *Addiction*, *109*(9), 1399-1406.

Ryan, R. M., Rigby, C. S., and Przybylski, A. (2006). The motivational pull of video games: a self-determination theory approach. *Motiv. Emot.* 30, 344–360. doi: 10.1007/s11031-006-9051-8

Zagal, J., Björk, S., & Lewis, C. (2013). Dark patterns in the design of games. In *Proceedings of the Foundation of Digital Games 2013* (pp. 39-46).

Zynga (2009) FarmVille [PC, online game]

Zynga (2012) FarmVille 2 [PC, online game]