

People, Places, and Play: A research framework for digital game experience in a socio-spatial context

Yvonne A. W. de Kort, Wijnand A. IJsselsteijn, & Brian J. Gajadhar

Game Experience Lab, Human-Technology Interaction Group

Eindhoven University of Technology, Netherlands

Y.A.W.d.Kort@tue.nl W.A.IJsselsteijn@tue.nl B.J.Gajadhar@tue.nl

ABSTRACT

Electronic games frequently give rise to engaging and meaningful social interactions, both over the internet and in the real and tangible world of the gamer. This is the focus of the present paper, which explores digital gaming as a situated experience, shaped by socio-spatial contingencies. In particular we discuss how co-players, audience, and their spatial organization shape play and player experience. We present a framework describing social processes underlying situated social play experience and how these are shaped by the game's socio-spatial context. The core of this framework describes various 'sociality characteristics', and discusses these both in terms of co-located and mediated social game settings.

Author Keywords

game experience, social context effects, situated play, theory

INTRODUCTION

Digital gaming brings many opportunities for social interaction. The importance of such interactions for shaping the gaming experience is testified by the overwhelming participation in virtual communities and massively multiplayer online games (MMOGs), and the personal relevance of these communities to those intensely involved in such games. But electronic games also give rise to frequent and meaningful social interactions in the real and tangible world of the gamer. Naturalistic observations in home environments have rendered interesting findings concerning the 'social act' of gaming. In a study which was originally intended to study solitary game play, Carr et al. [14] report stumbling upon unexpected instances of cooperative play, as friends were actively involved in the game, even though only one was actually playing. Several studies report of electronic games' opportunities for social interaction and the enjoyment that results both from playing together or watching others play, enjoying the spectacle and sharing comments, and the enhancement of emotional

experience that comes from a crowd (e.g., [31,35,40,54]). Some even argue that it is the social interaction and participation that, to a large extent, explain game enjoyment [13,14]. These effects are reported for settings ranging from public (arcade games, LAN events) to private (living room at home), and extend the findings from earlier studies on family life and television viewing, which demonstrated that viewing with the family is a more positive experience (more challenging, cheerful and sociable) than viewing alone (e.g., [38]).

The social embedding and effects of digital gaming exist on multiple levels of interpersonal relations. For instance, Kubey and Larson [39] note that children often play electronic games together with companions. Most gamers were introduced to gaming while playing with others or watching others play [25]. In the past, video game arcades were reported to represent important social environments for young people, as places to build friendships and meet with one's peers [52]. Further research demonstrated that kids who played video games on a regular basis had equal amounts of friends to those who did not [47,50], that video game playing actually increased social contact [11], and that heavy gamers met each other more frequently after school than children who were not gaming frequently [17].

These findings are in stark contrast to the image of social isolation digital gaming has for many people. In spite of concerns and criticisms raised against electronic gaming by teachers, parents, researchers and policymakers [13], the literature does not provide convincing evidence to this effect. On the contrary there are a number of studies demonstrating that games often elicit beneficial effects, on cognitive skills, but also in affective and social terms [15,26]. Carr et al. [14] report that, in the same way that traditional games foster and incorporate social interaction, 'interactivity experienced with personal console systems transformed a one-player game into an effective and highly structured social hybrid of gameplay' (p.26). In many

Situated Play, Proceedings of DiGRA 2007 Conference

© 2007 Authors & Digital Games Research Association (DiGRA). Personal and educational classroom use of this paper is allowed, commercial use requires specific permission from the author.

respects, electronic games are not all that different from traditional games (e.g., card games, board games), which have often been viewed as desirable materializations of family and peer interaction and involvement, and as sources for entertainment and liveliness in the public arena. Games present condensed forms of interaction, entertainment and liveliness, triggering interactions, not only between players, but between spectators and passers-by as well, enriching the social life of parks, urban spaces, cafes and bars (e.g., [44,57]).

MODELLING SOCIAL SITUATED PLAY

Our work is strongly inspired by the realisation that gaming is often as much about social interaction, as it is about interaction with the game content. Thus, the rich interactive experiences associated with gaming can only be fully understood when the game is conceptualised as more than the software and hardware one is interacting with locally, but includes a larger situational perspective, tapping in on the social-contextual contingencies that powerfully influence game interactions and associated experiences.

Given the growing anecdotal and empirical support for the social richness of digital gaming, it is increasingly surprising that social processes and interpersonal dynamics are underrepresented in conceptualisations and theoretical deliberations of game experience and game enjoyment. In most models a marginal role, at best, is reserved for social influence (e.g. see, [22,37,41,54]). The relevance of social factors in gaming is generally acknowledged by most of these scholars, yet it does not translate into the explicit incorporation of social processes into the models. The accounts of social interaction and social context effects do not lend themselves easily for combination with conceptualisations of flow and immersion, phenomena which are generally acknowledged as central to game experience and are thought to be highly sensitive to external distractions such as, for instance, the presence of other people. Explanations of flow and immersion experiences often consist of descriptions of 'mental absorption, a trance-like state, focus, or the loss of awareness of others'. From this perspective, social interactions and experiences of flow and immersion represent potentially conflicting mechanisms of game enjoyment. This is also noted by Sweetser & Wyeth [54] who state: 'social interaction is not an element of flow, and can often interrupt immersion in games [...] However, it is clearly a strong element of enjoyment in games' (p.10).

As a first step towards understanding the interplay of social and the more 'intra-individual' experiences of digital gaming, the present paper focuses on the psychological experience of social context effects while playing.

Borrowing mainly from social psychology, we introduce the most relevant social context effects on performance and experience (i.e., arousal and emotion) and discuss the first empirical studies that indicate the existence of these mechanisms in digital gaming. We then return to gaming as a situated experience and illustrate how these mechanisms are shaped by the gamer's socio-spatial context. In particular we discuss socio-spatial contingencies between player, co-player(s) and audience. The core of this framework describes the 'sociality characteristics' of game settings and discusses these both in terms of co-located and mediated others.

SOCIAL CONTEXT EFFECTS AND GAME EXPERIENCE

Research into the social interactions during game play has focused mainly on the influence of play configuration on the use and experience of educational games. Positive effects are reported on performance, social interaction, and motivation for small group interactions around computers in classrooms [29,45,56]. Comparisons of solo, parallel and integrated play configurations indicate that children playing together have better performances than those playing alone and that motivation is highest in integrated play configurations (i.e., playing together on one computer) [32]. Outside the arena of 'serious gaming', investigations of social interactions and the prevalence of aggressive behaviour during gaming episodes suggests that children's behaviour can generally be characterized as positive towards each other, regardless of game theme [31].

The literature above mainly concerned children involved in digital game play, but recent research with adolescents and adults has also demonstrated that playing games with others adds to game experience. Recent studies by Mandryk, Inkpen, and Calvert [43] and by Ravaja and colleagues [49] employed subjective measures and psychophysiological indicators to demonstrate that playing against a co-present friend elicits higher engagement, arousal and more positive emotions (fun) than playing against a computer. Playing against a stranger is also more arousing than against a computer, though not quite as much as competing with one's friend [49].

Accounts of the psychological processes behind these findings are still speculative. In Ravaja's study, playing against a human generally elicited higher anticipated threat, and post-game challenge ratings tended to exceed those in person-computer competitions. Mandryk et al. [43] however, demonstrated higher arousal levels for playing against a friend, irrespective of perceived challenge, which seems to rule out perceived challenge as the cause for higher arousal levels.

