
Exploring the False Affective Dichotomy in Games – Emotions and Meta-Emotions

Elisa D. Mekler
Center for Cognitive
Psychology & Methodology
University of Basel
4055 Basel, Switzerland
elisa.mekler@unibas.ch

Julia Ayumi Bopp
Center for Cognitive
Psychology & Methodology
University of Basel
4055 Basel, Switzerland
j.bopp@stud.unibas.ch

Abstract

Recent studies suggest that players paradoxically positively evaluate certain gaming experiences in spite of the negative affective reactions they evoke. We argue that the false dichotomy stems in part from vague conceptualizations of what constitutes positive player experiences, which conflate emotions with more generic experiential states, such as enjoyment. Drawing from media psychology, we introduce the notion of 'meta-emotion', exemplifying its processes with previous findings from player experience research, as a means to better understand and discuss when and why affective gaming experiences will be received favourably by players.

Author Keywords

Emotion, Meta-Emotion, Enjoyment, Player Experience

ACM Classification Keywords

J.4 [[Social and Behavioral Sciences]: Sociology, Psychology

Introduction

People play games for the experience [10], and one of the aims of player experience research is to understand what constitutes and contributes to positive gaming experiences [11]. Frustrating, moving or uncomfortable gaming experiences are far less researched, because they are

Paste the appropriate copyright statement here. ACM now supports three different copyright statements:

- ACM copyright: ACM holds the copyright on the work. This is the historical approach.
- License: The author(s) retain copyright, but ACM receives an exclusive publication license.
- Open Access: The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

This text field is large enough to hold the appropriate release statement assuming it is single spaced.

Every submission will be assigned their own unique DOI string to be included here.

seemingly at odds with the focus on fun [10], enjoyment [12] and positive affect [7]. Unfortunately, this may suggest that all negative affective experiences cannot by definition be considered positive experiences, and implies that it is not worthwhile to design for such experiences [11]. This not only limits the potential of game design to evoke novel, emotional experiences, but also hampers our understanding of why presently many games are enjoyed, in spite of (and occasionally thanks to) the negative affective reactions they sometimes elicit.

It seems to us that this 'false dichotomy' stems in part from the perhaps unintentional, yet prevalent assumption that positive user experience is congruent with positive affect (cf. [7]). A fact that is for instance also reflected in game enjoyment being commonly operationalized as positive affect [3, 12]. However, recent studies on player experience (e.g., [4, 8, 9, 14]), suggest that negative affective experiences must not invariably be experienced as negative. Drawing upon media psychology, we introduce the concept of meta-emotion. By linking it to recent research on emotions in games, we wish to illustrate its potential for discussing how and when players will receive affective experiences in games favourably or not. Or as Birk and Mandryk put it [3]: "*We must understand both how a player feels about a game [...] and how the game makes them feel about themselves*" (p. 685).

Meta-emotions in media psychology

A sizable amount of research within media psychology concerns itself with the question why many people find negative affective film experiences (e.g., drama, horror, etc.) rewarding. In an attempt to explain this paradox, Oliver introduced the concept of *meta-emotion* [13] – emotional reactions towards one's own emotions. In the context of the entertainment experience, meta-emotion

may be thought of as both the evaluation of the experience itself, as well as an emotional state that results from the evaluation of one's emotions during the experience [1, 2, 13]. Positive meta-emotions, for instance enjoyment or appreciation [1], are thus believed to result in a tendency to indulge and value emotions, and to seek media offerings that promise similar kinds of emotional experiences in the future. In contrast, negative meta-emotions, such as embarrassment (cf. [5]), are thought to foster suppression of emotions and avoidance of similar experiences.

Bartsch et al. [2] proposed an extended model that describes specific processes involved in the emergence of meta-emotion. Their model is based on appraisal theories of emotion (see [6] for an overview), whose core tenet posits that different emotions arise depending on how a given situation is appraised. For instance, the perceived pleasantness of an event determines whether a person experiences joy or disgust in that given situation. Bartsch et al. [2] assume that appraisal of emotions relies on the same set of appraisal criteria that evoke primary emotions: Is the emotion novel? Is it pleasant? Is it goal conducive? Is it controllable? Is it normatively adequate? We argue that this model of meta-emotion may also prove useful when discussing how and why players 'feel' about their affective game experiences, by exemplifying its processes with recent findings from research on emotional player experiences.

Affective game experiences and meta-emotions

Novelty is a salient concern in people's appraisal of emotion, and certain people are predisposed towards enjoying novel and/or intense emotional media experiences (cf. [1]). Similarly, in our own ongoing work on emotionally moving game experiences [4], several

players reported that while they felt negative emotions, such as anger or sadness, most of them valued these emotions, because they simply 'enjoyed' the novelty of experiencing these strong feelings in games. Concurrently, Iacovides and Cox found that "*regardless of subject matter, for those that expect to engage in more lightweight and familiar forms of gameplay and who aren't willing to revise their initial expectations, serious experiences will not lead to engagement*" ([8], p. 2253).

Pleasantness denotes the valence of the emotion. Some emotions (e.g., joy) are experienced as inherently pleasant, but people also experience an intermediate level of arousal as pleasant. People who are bored and under-aroused enjoy emotionally arousing media, whereas over-aroused or stressed people prefer soothing media, recalling Lazzaro's concept of serious fun [10]. On the other hand, certain affective experiences may not always be deemed pleasant per se, but are appreciated for being *conducive to one's goals*. The study of Steinemann et al. [14], for example, found that although people experienced little enjoyment when playing the serious game *Darfur is Dying*, they reported high appreciation. Similarly, emotionally challenging game experiences have the potential to inspire reflective thoughts [8, 11], which some people may find rewarding in itself [4] and/or which may be conducive to reinforcing one's values [10].

Goal conduciveness of emotions also adds to our understanding of the experience of co-op games. Johnson et al. [9], for instance, found that MOBA players experienced significantly more frustration, and less positive affect than players of other genres. Yet subsequent interviews with MOBA players revealed that this was not forcibly experienced as negative. Teamwork is a core component of the appeal of MOBA games [9] and

a certain degree of determination and perhaps even anger may be experienced as rewarding and motivate the individual team members to give their all [5]. Similarly, *controllability* of the experienced emotions is also relevant, as the pressure involved in succeeding, could as well turn to full-blown anger. 'Sore losers' do not control their emotions, as they are said to wallow in their own frustration and venting their anger onto others [5], ultimately dampening both their team members' as well as their own game enjoyment.

Finally, even if players display a willingness towards novel, emotionally challenging game experiences, it may not always be *compatible with personal or social norms* to experience and subsequently display certain emotions. Depending on the situational context, norm compatibility thus further determines whether an emotion is experienced as enjoyable, embarrassing or whether it arises at all [5]. In a series of interviews, Deterding found that some players reported more enjoyment during solitary gaming, when they perceived themselves as free from social demands and did not have to regulate their emotion display. Our own study supports these findings [4], as some players reported that while they were conscious of the negative valence of their emotions (e.g., sadness, anger), they liked experiencing feelings that would otherwise be considered unpleasant or inappropriate in real life.

Conclusion

As showcased by the aforementioned examples, we believe that the concept of meta-emotion forms one promising approach to exploring the false affective dichotomy in player experience research. Of course, the present position paper only offers post-hoc examples of the processes underlying the emergence of meta-emotions in games, and it remains to be seen whether the framework passes

empirical scrutiny. Moreover, more research is required to understand which specific processes actually afford particular meta-emotions, such as whether only norm compatibility determines if emotions are experienced as enjoyable or embarrassing.

References

- [1] Bartsch, A., Appel, M., and Storch, D. Predicting emotions and meta-emotions at the movies: The role of the need for affect in audiences' experience of horror and drama. *Communication Research* 37, 2 (2010), 167–190.
- [2] Bartsch, A., Vorderer, P., Mangold, R., and Viehoff, R. Appraisal of emotions in media use: Toward a process model of meta-emotion and emotion regulation. *Media Psychology* 11, 1 (2008), 7–27.
- [3] Birk, M., and Mandryk, R. L. Control your game-self: effects of controller type on enjoyment, motivation, and personality in game. In *CHI '13*, ACM (2013), 685–694.
- [4] Bopp, J. A., Mekler, E. D., and Opwis, K. It was sad but still good: Gratifications of emotionally moving game experiences. In *Ext. Abstracts CHI '15*, ACM (2015), 1193–1198.
- [5] Deterding, S. The joys of absence: Emotion, emotion display, and interaction tension in video game play. In *Proc. FDG '15* (2015).
- [6] Ellsworth, P. C., and Scherer, K. R. Appraisal processes in emotion. *Handbook of affective sciences* 572 (2003), V595.
- [7] Hassenzahl, M., Diefenbach, S., and Göritz, A. Needs, affect, and interactive products—facets of user experience. *IwC* 22, 5 (2010), 353–362.
- [8] Iacovides, I., and Cox, A. L. Moving beyond fun: Evaluating serious experience in digital games. In *CHI '15*, ACM (2015), 2245–2254.
- [9] Johnson, D., Nacke, L., and Wyeth, P. All about that base: differing player experiences in video game genres and the unique case of moba games. In *CHI '15*, ACM (2015), 2265–2274.
- [10] Lazzaro, N. Why we play: affect and the fun of games. *Human-Computer Interaction: Designing for Diverse Users and Domains* (2009), 155.
- [11] Marsh, T., and Costello, B. Experience in serious games: between positive and serious experience. In *Serious Games Development and Applications*. Springer, 2012, 255–267.
- [12] Mekler, E. D., Bopp, J. A., Tuch, A. N., and Opwis, K. A systematic review of quantitative studies on the enjoyment of digital entertainment games. In *CHI '14*, ACM (2014), 927–936.
- [13] Oliver, M. B. Exploring the paradox of the enjoyment of sad films. *Human Communication Research* 19, 3 (1993), 315–342.
- [14] Steinemann, S. T., Mekler, E. D., and Opwis, K. Increasing donating behavior through a game for change: The role of interactivity and appreciation. In *CHI PLAY '15*, ACM (2015).

About the authors

Elisa Mekler is a PhD student in psychology at the University of Basel HCI research group. Her research interests include motivational and emotional processes underlying game enjoyment. She also has a personal fascination with emotional gaming experiences, ever since tearing up at the ending of *Zelda Link's Awakening*.

Julia Ayumi Bopp is a masters student in psychology at the University of Basel HCI research group. For her master thesis, she explores the phenomenology of emotionally moving game experiences, as well as potential cultural influences.