Spatial Presence, Psychophysiology, and Game(play) Emotions

Dooley J. Murphy
Department of Media, Cognition and Communication
University of Copenhagen
Karen Blixens Vej 4, 2300 Copenhagen
+45 52 60 58 10
doolymurphy@gmail.com

Keywords
Affect, emotion, cognition, embodiment, experience, reflex, startle, presence, VR

EMOTION-DIRECTEDNESS
This extended abstract proposes a means of classifying the “residual affect” of vertigo, startles, and similar forms of innate, autonomic response easily triggered in and by immersive Virtual Reality (VR). Employing a formal–functionalist approach, I first summarise relevant work on cognition and game emotion, then discuss how acute, involuntary responses to VR stimuli (1) necessarily feed into player experience and (2) correspond with existing categories for game emotion.

Perron (2005; 2013), in line with Tan (1996) and cognitive media theory more broadly (Gregersen, 2014: 422), refers to diegetic and extradiegetic concerns in distinguishing between narrative emotions and those tied to our active, embodied experience of games. Fiction emotions (F emotions) are those cued by diegesis. They are vicarious, empathic concerns directed at narrative agents' relations and situations. Consider the death of Aeris in Final Fantasy VII (Squaresoft, 1997). Players moved by this narrative kernel can be said to have experienced F emotions. Oppositely, players who relished Aeris's slaying may have done so because they were unimpressed with her performance in battle. These players can be said to have responded more with reference to their own (extradiegetic) gameplay concerns than those of the narrative agents. Such are gameplay emotions (G emotions), which stem from—and are directed towards—mediated action. G emotions pertain primarily to players' exercise of in-game agency and the subsequent response of the game-world. By contrast, artefact emotions (A emotions) refer to (meta-)emotions or affective states brought about by the player's recognition of a game artefact's status as human-made. Typical A emotions include our responses to artful plot devices, graphical finesse, cunning AI behaviour, or, conversely, glitches and rickety mechanics.

What, then, can be said of affect generated in and by immersive VR experiences? Here the media apparatus strives for immediacy or transparency and, in bootstrapping an often insurmountable impression of spatial presence, is capable of tricking us—if only momentarily—into believing that a simulated threat is real. Crucially, users react to such situations as though it is themselves (and not their avatars) who are in actual danger.

(One may note, at this juncture, that I refer to the work of Russell and Barrett (e.g. 1999) in differentiating between core affect and prototypical emotional episodes.)

© 2016 Authors. Personal and educational classroom use of this paper is allowed, commercial use requires specific permission from the author.
GEARED TO AROUSE & AFFECT
Certain VR tropes are remarkably dependable in eliciting intense psychophysiological–affective responses. The much-replicated “pit demo”, for instance, leverages spatial presence by exposing its users to the perceptually convincing illusion of a sheer drop. Further examples can be seen in VR setups devoted to the clinical study and experimental treatment of phobias and other maladaptive thought patterns. Here I refer to the sensation of vertigo imparted by VR demos simulating heights, to the startle response, and (implicitly and by extension) to motor responses such as the withdrawal reflex also.

VR scenarios that co-opt visuo-vestibular channels or startle us exploit our relative inability to override sub-personal physiological responses. Imagine you are in a VR demo in which you overlook a precipice. You stare down into the void and feel dizzy in spite of the fact that you know, consciously and rationally, that you are standing in Oculus's booth at E3. Suddenly, a monster jumps into view and knocks you into the canyon. The beast's unexpected appearance evokes a startle response. As you plunge towards the virtual ground, your viscera lurch further. In all, you remember the experience as having been more tense and taxing than fun. This vignette hints at how physiological arousal can modulate “higher” cognitions: Core affect tied to reflexes and viscera states can persist, colouring players' ongoing emotional appraisal of a VR experience.

The key issue is whether or not autonomic affect is subsumable under current categories for game emotion. The VR stimuli described here are acted upon by the embodied player instinctually and as if veridical; understood at first as heralding real threat. In this way, VR affect distances itself from G emotions, since these typically emerge in relation to action that the player recognises as mediated. A good VR experience will, upon reflection, draw attention to the subtlety of the medium, thus eliciting A emotions also. Yet VR-cued reflexes are egocentric and do not (initially, at least) acknowledge diegesis, gameplay, or apparatus. Pre-rationally affective VR events can be seen as inviting the creation of a new sub-category of game emotion. The term “I emotions” might sensibly denote the spatial presence effects discussed here. (“I” referring jointly to immersion and to the subjective self.) I emotions entail the psychophysiology of core affect and self-reflexive emotional episodes brought about involuntarily by VR events misperceived as actual. The most intuitible examples of I emotions are synchronous with the sensations that accompany falling, flinching, or being startled.

BIBLIOGRAPHY & REFERENCES