Modeling Emotional Concepts in Games – Strategies on Tackling the Intangible

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Extended Abstract

This paper explores a special case of game design, namely the modeling of emotional concepts and personal issues. Basing games on e.g. responsibility, jealousy or anxiety can potentially enhance players' understanding of these ideas and foster insight and personal growth. However, modeling emotional concepts is hard, because they are by their nature abstract and intangible, their elements and mechanisms cannot be readily observed (Lakoff & Johnson, 1980, p.85).

This paper will provide a framework for the purposeful design of games dealing with emotional concepts. This framework will draw on theories from psychology, system theory, education research, linguistics and game studies as well as my own design experiences with making games about addiction (*Akrasia*), love (*The Bridge*) and depression (under development in collaboration with a psychotherapist from Harvard Medical and to be used in a clinical context but still lacking a name).

The paper will focus particularly on the initial phase of the design process in which the abstract concept, the game's ephemeral source system, is pinned down and made concrete. Through my own design experiences I came to identify three factors that are crucial for the exploration and understanding of emotional issues: tangibility, procedurality and play. These factors are the corner stones of the proposed framework, which will be illustrated with examples from my own design experiences. The goal of this paper is to facilitate the design of games that enable meaningful, thought-provoking and potentially transformative gameplay experiences for players.

Tangibility: The first step in basing a game on an abstract, emotional concept is to make the concept concrete. I have previously suggested the use of metaphors for that purpose (Rusch & Weise 2008; Rusch 2009). In this article I will discuss the benefits of building physical representations of emotional ideas during the analog prototyping phase.

E.g. in *Akrasia* we managed to understand the various stages of drug addiction by materializing their core elements, such as the High and the Craving. We asked: "what would high / craving look like? What does it want? How does it behave?" We built physical representations for each element, exploring how they interacted with each other and with our avatar.

Regarding the importance of tangibility for our understanding of the world, our reasoning, reflective processes and imagination skills I will draw on Turkle's work on *Evocative Objects* (2007), Sennet's research on *The Craftsman* (2008), Lakoff & Johnson on *Metaphors We Live By* (1980); Johnson on *The Body In The Mind* (1987); and Pinker on *The Stuff of Thought* (2007).

The second corner stone of the framework deals with games' **"procedurality":** since games are at their core procedural systems, their design requires system thinking. However, the systems in games are designed with a specific experience in mind. It is easy to lose track of the concept that shall be modeled if one is too concerned too soon with making a game. To strengthen the tie between a game's theme and its meaning (see Johnson, 2009) it is crucial to really understand the concept that shall be modeled, before one worries about turning it into a game. I find system theory helpful for this first step, because it focuses purely on understanding the system without bothering with any rhetoric or entertainment purposes and without accounting for player input. According to system theorist Donella Meadows

> A system is an interconnected set of elements that is coherently organized in a way that achieves something. (...) a system must consist of three kinds of things: *elements*, *interconnections,* and a *function* or *purpose*. (2008, p.11)

The purpose or function of a system is what the system is all about, what the behavior of its various elements adds up to. Before one can model the concept of e.g. depression in a game, one needs to understand how mood, agency and self-love relate and how the system functions to keep you "down". While never objective, even if based on clinical data, these

explorations help grasp a concept's systemic nature. They are crucial to create and uphold a coherent vision for the design and to ensure that every element and mechanic supports the message and experience the game aims to convey.

E.g. I had a very hard time wrapping my head around the idea of making a game about depression, since depression is pretty much the opposite of play (Brown 2009, p.126). I started exploring the relations between mood, agency and self-love based on a clinical model of depression. Only when I felt that I had a good overview of the mechanisms of depression and how it is integrated into other mood states (e.g. "normal" and happy), I started asking myself the questions that would eventually turn this tricky concept into a playable game. What exactly is the conflict? What is the goal? Can depression be "won"?[1] Should the game model "how it works" or rather "what it feels like"?[2] Who is my audience and what purpose should the game serve?

The third corner stone of the framework is **"play":** An element of play is intrinsic to every creative endeavor incl. game design (Brown 2009). However, when I emphasize the importance of play for the design of games dealing with emotional concepts, I am not simply referring to the designer's general attitude towards his / her work, but particularly towards the emotional concept itself. When we explored the mechanisms of addiction for *Akrasia*, or of fear-based love for *The Bridge,* we identified dysfunctional systems. To have an emotional issue means to be stuck in some way or another. It is not possible to base a playable game on a broken system, because there would only be conflict without a possible solution – the game would not have a goal or possible win / end state. This is where designers need to play

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[1] The answer is "no", but there are other satisfying ways to end the game.

[2] These are very different approaches in terms of player experience. Understanding how depression works does not necessarily get across what people suffering from it are going through. Since the purpose of the game is to educate family and friends of people suffering from depression what their loved ones are going through, conveying the emotional experience is more important than e.g. modeling strategies of how to break out of a depressive phase.

with the emotional concept and rearrange the elements and mechanisms of its broken system until potential strategies to break out of the conflict can be identified. When we made *The Bridge* we found this to be a frighteningly insightful process that taught as much about ourselves. Play gets you unstuck (Brown 2009). It fosters imagination of new ways of acting and being in the world (see Frie 2008 on psychological agency). This is why play is also such a crucial element in psychotherapy. (Winnicott, 1971).

The playful investigation of emotional concepts in the design process is a precondition for modeling these ideas in a way that not only captures the conflict but also offers opportunities for players to find solutions to overcome it. Games that afford players to explore personal issues as well as to find ways to deal with them productively are potent tools for self-understanding, reflection and personal growth.

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