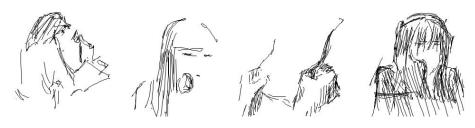
12.1 a game model

Games present challenges, invoke involvement, and are essentially interactive. Although it might seem far-fetched to regard game playing as a paradigm for interaction, it is definitely worthwhile to have a closer look at *game theory* for inspiration. According to HalfReal, from a theoretical perspective games may be said to have the following properties:

game theory¹

- system (formal) set of rules
- relation between player and game (affectionate)
- context negotiable relation with 'real world'

In particular, relation(s) and context determine the meaning of the game for the player, both on an individual/existential level and in relation to a societal context.



1

To characterize the defining characteristics of games in a more precise way, HalfReal presents a classic game model that may act as a reference for the description and evaluation of games:

classic game (reference) model

- rules formal system
- outcome variable and quantifiable
- value different valorisation assignments
- ullet effort in order to influence the outcome
- attachment emotionally attached to outcome (hooked)
- consequences optional and negotiable (profit?)

For current day video games, HalfReal observes that there is a tension between rules and the fictional or narrative component of the game:

rules vs fiction

game fiction is ambiguous, optional and imagined by the player in uncontrollable and unpredictable ways, but the emphasis on fictional worlds may be the strongest innovation of the video game.

 $^{^{1}}$ www.half-real.net

In some cases it might even not be clear what the *rules of the game* are, as for example in Second Life, where *presence* and *expecience* seem to be prevalent. In general, role playing games seem to be less constrained than skill-based games. Nevertheless, in both cases does the visual environment augment the experience, adding to the narrative context.



So, returning to our original question:

theory of interaction

2

are games relevant for a theory of interaction?

our tentative answer is yes!

In an attempt to formulate criteria for effective service management games, developed in cooperation with Getronics-PinkRoccade, Serious, we gave a characterization in terms of the reference game model, as outlined below:

effective service management game(s)

- ullet rules service management protocols
- outcome learning process
- ullet value intellectual satisfaction
- \bullet effort study procedures
- attachment corporate identity
- consequences job qualification

There is no need to emphasize that this is only a first approximation, and for that matter a rough one. What we must keep in mind, however, is that the model is not only applicable on a macro-level, to characterize an entire game, but more importantly may also be applied on a micro-level, to establish the criteria for each (relevant) step in the game play. To emphasize the relevance particular aspects of service management games, we added two more criteria to the model:

- \bullet scenario(s) problem solving in service management
- \bullet reward(s) service level agreements

After all, the goal of playing a service management game is to be trained in, as stated above, problem solving in service management situations, and reaching acceptable service level agreement(s)!

a game model 3

game (interaction) design pattern(s)

GamePatterns. no definition, no value judgement, but analysis of interaction patterns

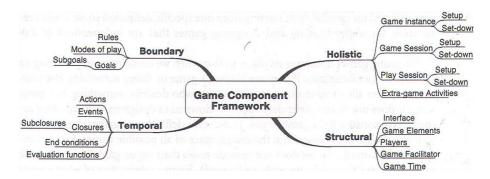
game play

... structure of interaction with game system and other player(s)

game playing can be described as making changes in quantitative game states.

component framework²

- holistic playing games as an undividable activity
- boundary limit the activities of people playing games
- temporal describe the flow of the game (interaction)
- structural physical and logical elements of the game system



3 pattern(s)

- resource management resource types, control, progress
- communication and presentation information, indicators
- actions and events control, regards and penalties
- narrative structures and immersion evaluation, control, characters
- social interaction competition, collaboration, activities
- mastery and balancing planning, tradeoffs
- meta games and learning replayability, learning curve(s)

example(s) - intimate media

From the company that used the slogan "let's make things better", and now advertises its products with "sense and simplicity", there is the MIME³ project, not to be confused with the multipart internet mail standard, which focusses on *Multiple Intimate Media Environments*.

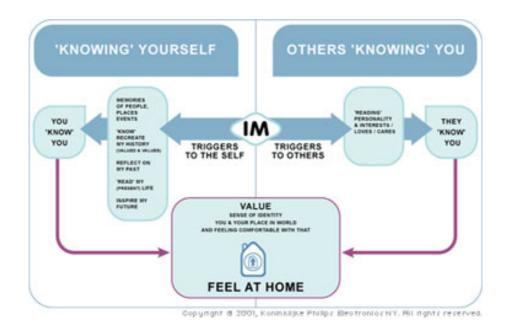
As concepts embodying their ideas they propose, among other:

intimate media object(s)

 $^{^2 {\}it www.gamedesignpatterns.org}$

 $^{^3} www. design.philips.com/about/design/section-13484$

- 1. $glow\ tags$ a subtle way to trigger the person who has placed it or who sees it
- 2. living scrap book to capture and collect information and media digitally
- 3. picture ball as an object of decoration and a focus for storytelling
- $4.\ lonely\ planet\ listener$ enabling people to listen to a real time connection to another place



4

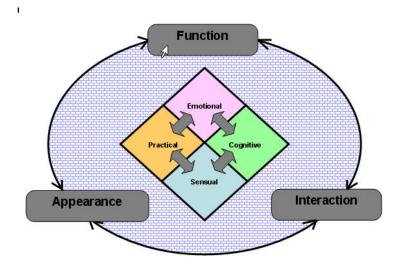
On a more abstract level, seven core qualities are identified which capture the essence of the intimate media experience:

intimate media experience(s)

- sensorial experience is visual, audible, tactile, olfaric
- personalized objects embody meaning and memories
- $\bullet \ \ {\rm analogue} {\it people} \ {\it relate} \ to \ physical \ objects$
- enhancement people already have extensive intimate media collections
- $\bullet \;$ serendipity it supports unstructured and flexible usage
- longevity objects may exist over generations

As can be read on their website: intimate media describes the things that people create and collect to store and share their personal memories, interests and loves. And: intimate media is central to how people make sense of their world by representing roots, heritage and a sense of belonging, achievement and connection.

a game model 5



5

research directions- experience as meaning

For the design and appreciation of the new category of digital systems, including games, we may, with (forward) reference to our discussion of the history of thought in section 12.4, well take *pragmatist aesthetics* as a common ground, since it does justice to the existential dimension of aesthetic awareness, and allows for a process of aesthetic literacy, that is becoming sensible to aesthetic awareness and reflection. You may wonder though, how we get to this conclusion.

In Presence it is observed that the aesthetic potential of the narrative space centered on the consumer product has received surprisingly little attention. The authors then argue that, motivated by insights from phenomenology, there should be a shift of attention from use to presence, where presence does not merely mean appearance but a more complex dialectic process of appearance and gradual disappearance dependent on the role the object plays in the life of the user/subject. The notion of expressional is then introduced, to convey the expressive meaning of objects, and in particular interactive objects, in our surroundings. For the design of presence, aesthetics is then considered as a logic of expressions, in which expressions act as the presentation of a structure in a given space of design variables.

So far, this makes perfect sense. We may further mention here the framework set up by Dhaval Vyas, Meaning, which characterizes the user's experience a the result of the process of constructing meaning. In diagrammatic form, the process of constructing meaning may be depicted as above.

In more detail, the validity of the *experienc as meaning* framework may be substantiated by the following observations:

experience as meaning

- experience occurs during the interaction between the user(s) and the interactive system(s) in the lived environment
- designers convey meaning (consciously or unconsciously) through the appearance, interaction and function of the system
- user(s) construct a coherent whole that is a combination of sensual, cognitive, emotional and practical forms of experience

In other words, an *interactive system* is determined by *function*, *interaction* and *appearance*. As such the framework may be called *pragmatist*, and has indeed been nfluenced by Pragmatics.

Returning to our argumentation, for objects that are not designed for usability in the functional sense the notion of use is too strict and is, using a dialectic argument, subject to the dialectics of presence, as argued in Presence. Conversely, using a similar dialectic argument, for new categories of objects, presence requires use, or getting used to, in other words a process in which the user becomes interested and familiar with the object. We may even speak of aesthetic affordance, with the realization that the notion of affordance, explaining an ecology of behavior, originally stems from the late-idealist phenomenology expounded in Sein.

But, however appealing the notion of expressional, in the light of our discussion in section 12.4, where we distinguish between aesthetic awareness as a given, or a priori, sensibility and aesthetic judgement as being of a more empirical nature, we would prefer to consider aesthetics as a logic of sensibility, which includes a dimension of self-reflection in the sense of its being aware of its own history. Put differently, to characterize the contextual aspect of aesthetics, as it certainly applies to art, we may speak of aesthetic literacy, that is aesthetic awareness that is self-reflective by nature.