What's Love Got To Do With It? (Draft version)

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Introduction

Recently several games have been published which can be called abstract games about love (LOVE 2010 and THE MARRIAGE 2006, THE DIVORCE 2010). At first *play* they do not really reveal what they are about as they are abstract. Abstract shall in this context mean that neither the game objects nor their behavior seem to be similar to any real-world referent. Especially on the audiovisual layer the games consist of geometrical objects like squares and circles which behave in a certain manner according to the player input. Nevertheless, these games pretend to be about the topic of a love relationship. On the opposite are non-abstract simulation games like THE SIMS 3 (2009) in which one can recognize immediately when the player is choosing to play a more or less realistically simulated love relationship. The question to be tackled is: If THE SIMS 3 is a simulation can THE MARRIAGE then be considered as a metaphor for a love relationship? My thesis shall be that THE MARRIAGE is a simulation of our metaphorically structured understanding of love.

THE MARRIAGE (2006)

The focus of my presentation will be on the graphically abstract game THE MARRIAGE which is about a love relationship. However this is not immediately recognizable as the game does not, for instance, depict any anthropomorphic avatars like THE SIMS 3 but consists of geometrical shapes. THE MARRIAGE has already received some academic attention for example by Doris Rusch who used THE MARRIAGE as an example for how games can convey a deeper understanding of the human condition (Rusch 2009) and by Jason Begy (2010) as an example for an abstract simulation. To Begy's master thesis I owe the inspiration for this paper.

THE MARRIAGE consists of two squares, blue and pink, and circles, colored or black, moving through the rectangular game space. Over time during game play the pink square becomes more and more transparent if it does not collide with the blue square. On the contrary this collision makes the pink square less transparent and lets it grow a bit. The blue square gets more transparent if it collides with the pink square. However, it grows and becomes more opaque when it collides with colored circles. If one of the squares is invisible the game ends. The basic condition to play the game is to prevent the squares from fading out. Another goal might be to play the game well. Thus, the squares grow so big that they almost fill the whole game space which corresponds to a good gaming session as this is the game state which will most likely not lead to lose the game but to win it.

Doris Rusch's interpretation of the game reads very metaphorical. Where one sees squares she sees "partners," where one sees colliding squares she sees them "kissing," where one sees squares which react differently according to certain inputs and game states she sees different "needs" of the partners in a relationship. Of course, Rusch reads the game according to the explanation given by its author Rod Humble on his website (Humble 2006). Humble explains that THE MARRIAGE is based on his personal experience with his marriage. The squares symbolize man and woman and the black circles correlate with negative events. A collision with them makes the squares shrink. Whereas the colored circles correlate with positive events as they make the squares grow. Following Rusch (2009) one can read a biased concept of a marriage into the game. According to the game rules the female square is clingy as it grows and gets more opaque when colliding with the blue square. The blue square on the opposite needs some

freedom and thus needs to collide with colored squares to become less transparent and grow bigger.

I believe with reference to Jason Begy that the game poses the question if it conveys its meaning as a metaphor or as a simulation. Thus, I will present a notion of simulation followed by a notion of metaphor.

Simulation

According to Gonzalo Frasca "to simulate is to model a (source) system through a different system which maintains to somebody some of the behaviors of the original system. The key term here is "behavior". Simulation does not simply retain the – generally audiovisual– characteristics of the object but it also includes a model of its behaviors. This model reacts to certain stimuli (input data, pushing buttons, joystick movements), according to a set of conditions" (Frasca 2003). For Frasca a simulation implies that the behavior of a source system gets modeled by another system. Regarding THE MARRIAGE this would be to model the behavior of a love relationship. However, Frasca says as well that a simulation also implies the audiovisual characteristics of the source system. As such one would expect the game to consist of two anthropomorphic agents which somehow engage in actions that we would relate to love. Furthermore, those actions would have to be manipulable by the player. This is clearly the case with THE SIMS 3 where the player can choose to play a love relationship. But this is not apparent in THE MARRIAGE.

As opposed to Frasca who emphasizes the modeling of the behavior of the simulated system Jesper Juul emphasizes the audiovisual aesthetics of the simulated phenomenon. He defines a simulation "as the implementation of a fictional world into the rules of a game" (2005:170). In his reading it is the audiovisually recognizable fiction of the game which is supported by the rules to be regarded as a simulation. That means the football simulation FIFA 2002 (2001) can be considered as a simulation. Because it looks like football and the rules support this since some aspects of football are playable as we would expect them. The same still counts for THE SIMS 3 but not necessarily for THE MARRIAGE.

Taking Espen Aarseth's idea that "the hidden structure behind [...] most [...] computer games is [...] simulation" (Aarseth 2004) one could say most games are simulations per se. A perhaps more convincing argument is made by Jason Begy. He says that an abstract simulation always communicates its topic or its source system which is modeled by the rules and the game mechanics either on the audiovisual level of the game itself, with its title or through its paratexts (Begy 2010). Thus, also abstract games which do not communicate their source system on the graphical level but whose rules and mechanics are based on a source system qualify as simulations (Begy 2010:23). According to Begy this is the case with THE MARRIAGE since it communicates its topic in its title and the author's statement that it models the rules of a marriage. Finally, the central game objects, the pink and the blue square, symbolically represent wife and husband (Begy 2010).

So, the question is not if the abstract game THE MARRIAGE is a metaphor *or* a simulation but if it can be a simulation *and* a metaphor? The question might be as well *what* does THE MARRIAGE simulate? Love, a general concept of love, or a metaphorically structured concept of love? The latter would be my intuition. Therefore, I will shortly introduce the cognitive linguistic theory of metaphor by George Lakoff and Mark Johnson (1980).

Metaphor

The "cognitive linguistic view of metaphor" (Kövecses 2010:x) was established by George Lakoff and Mark Johnson. According to Lakoff and Johnson "*the essence of metaphor is understanding and experiencing one kind of thing in terms of another*" (Lakoff/Johnson 1980:5, italics in original). For instance, if we say to "*shoot* a goal" we understand FOOTBALL in terms of WAR.

However, Lakoff and Johnson consider metaphor firstly not as a property of words but of concepts. Secondly, metaphor is not only mere decoration of speech; it structures our actions, experiences and understanding in everyday life (1980). The metaphor works because the two concepts associated in a metaphor either share a similarity if the metaphor is sufficiently conventionalized or a similarity gets created through metaphor if both metaphorically associated concepts seem to be incongruent at first sight.

Following Lakoff and Johnson most of our understanding of the world is structured through metaphorical concepts. Central in Lakoff and Johnson's theory is the so called CONCEPTUAL METAPHOR. That means one conceptual domain is understood "in terms of another conceptual domain" (ibid.:4). These two domains are called the *source domain* and the *target domain* of meaning. Many metaphorical linguistic expressions are not only singularities but belong to a metaphorical framework of the two conceptual domains and thus to a larger more or less coherent construction of metaphors. For example our basic understanding of FOOTBALL (target domain) is mostly verbalized in terms of WAR (source domain). The appropriate conceptual metaphor is FOOTBALL IS WAR. The empirical evidence of CONCEPTUAL METAPHORS is derived from "metaphorical linguistic expressions" (ibid.). In the case of FOOTBALL we speak of "the *attacker*", "the *shot*", "to *defend* the goal", "an *explosive* game" and so on.

Jason Begy's approach on abstract games as metaphors and simulations

Jason Begy (2010) found an interesting solution for the problem how abstract games can be considered as simulations or metaphors. He considers simulation and metaphor as two different approaches to the meaning of abstract games. Begy differentiates between a meaning of a source system that is implemented in the game on the level of rules, mechanics and aesthetics due to authorial intention which he calls simulation and a meaning which is projected on the game by the player called *metaphorical interpretation*. In this case the player associates the game with a similar experience or system he knows from elsewhere (2010:11).

Metaphorical projection on the other hand is executed by the players on games which do not communicate the meaning which is projected on them as a simulation. For example TETRIS (1989) can be metaphorically interpreted as the enactment of overtasked lives of Americans in the 1990's like Janet Murray did (1997:144). Although, the inventor Sergej Pajitnov perhaps never had the intention to model this kind of experience with the game. Thus, metaphorical meaning can be projected on a simulation if it is *different* from the meaning that the simulation communicates. To be valid the *metaphorical projection* of another concept has to correlate with formal aspects of the game such as game states, mechanics, and rules (Begy 2010:55) which coincides with the existing or constructed similarity between the two domains of a metaphor.

Begy observes two ways of interpreting a game. In a simulation the player automatically relates the games' source domain to his concept of the source domain of the game and the game itself. Through the comparison between his idea of the source domain and the game he can reconstruct its meaning.

On the other hand, Begy distinguishes between two kinds of *metaphorical projection* the *experiential metaphorical projection* (Begy derives the experiential metaphor from Rusch 2009) and the *structural metaphorical projection*.

The *experiential metaphorical projection* focuses on the affective level of a gaming experience. In this case a player recognizes a similarity in his gameplay experience with another experience. With the affective level Begy draws on what he calls the "feeling" of a gameplay experience. He regards Janet Murray's interpretation of TETRIS as such. A surprisingly similar interpretation Chris Crawford projected on PAC MAN (1980) (Crawford 2003:31). Both interpretations are viable as they map on formal properties of the games.

In the case of THE MARRIAGE Doris Rusch observed that it did *not* "evoke the experience of being in a relationship" (2009) as opposed to TETRIS which evoked a metaphorically projected "feeling." On the other hand she can connect to the game's meaning on a cognitive level. She realizes that the game did actually not model the experience of being in a relationship but "depicts [...] the reflection process about its mechanisms" (ibid.). Her solution is that the reflection process about the mechanisms of a marriage is not only depicted on the visual level but modelled in the system itself. Instead, of saying the game "depicts" the reflection process (ibid.), one could say that it "depicts" an abstract, general concept of love which reduces it to some structural elements such as lovers, closeness, events, size etc. Thus, if THE MARRIAGE should be related to metaphor then it might be rather regarded as a structural metaphor.

The second kind of *structural metaphorical projection* focuses on a structural similarity between a games' structure and the structure of an associated activity or concept. As opposed to the experiential metaphor it does not focus on how the playing of a game feels but it focuses especially on a games' formal elements like rules and mechanics which can be interpreted as rules and mechanics of something else (Begy 2010:73), perhaps a love relationship.

Although Begy accepts that abstract simulations as well as non-abstract simulations can be interpreted metaphorically, he misses, like Rusch, to analyze one of his main examples THE MARRIAGE in its relation to metaphor since he has classified it as a simulation. As such it does not qualify for a metaphorical interpretation of the same domain.

Begy draws on the description of the game by the designer Rod Humble but does not take into consideration that also a cultural understanding of love or a marriage will most likely be metaphorically structured. Although, this would have been a logical consequence because Begy draws on the framework of metaphor by Lakoff and Johnson, who, again, assume that most of our experience, understanding and action is structured by metaphorical concepts. Thus, Begy would have had to assume that also Rod Humble's reflection process does not alone rely on his subjective experience with his own marriage or love relationship. Therfor the interpretable concept of love or a marriage in his game is too general. Instead, Begy would have had to acknowledge that the designer's concept of love and marriage might be largely metaphorically structured, too.

Thus, I would argue to understand the game as a simulation affords to interpret it on a metaphorical level, as well. Because THE MARRIAGE is not only a simulation of an individual experience of love but it is simulation of a metaphorically structured concept of love, too. Thus, the metaphorical interpretation of the simulation is possible because the designer and the player/interpreter draw on the same kind of metaphorically structured concepts.

Metaphorical structuring of love in everyday language

Zoltán Kövecses, a Hungarian cognitive linguist "working on the language and conceptualization of emotion," observes that "emotion concepts such as anger, fear, love, happiness, sadness, shame, pride, and so on are primarily understood by means of conceptual metaphors" (Kövecses 2010:23). Thus, there should be plenty of examples to look up. Furthermore, human relationships such as friendship, love, and marriage are another target domain commonly metaphorically structured by different source domains. From everyday language use one can derive

a huge number of conceptual metaphors which have LOVE as a target domain; among those are LOVE IS A UNITY OF PARTS, LOVE IS CLOSENESS, LOVE IS A BOND, LOVE IS A FLUID IN A CONTAINER, LOVE IS PHYSICAL FORCE, LOVE IS WAR and many others (Kövecses 2003:26). According to the cognitive linguistic view of metaphor these structural metaphors are a convincing indication that our general understanding of love is structured by these metaphors. The necessary evidence is provided by common linguistic expressions like "we are as *one*", "they are very *close*", "I was *magnetically drawn* to her" and so forth (ibid.). Kövecses identified LOVE IS A UNITY as the central metaphor in the systematic framework of metaphors of love. Kövecses is here in line with those philosophies of love which focus on an understanding of love as a union (c.f. Helm 2009). In the following I will show that some of the given conceptual metaphors are exemplified by game elements, game states (Juul 2005), and game mechanics (Sicart 2008) of THE MARRIAGE.

Analysis of THE MARRIAGE according to conceptual metaphors of love

Taking the first conceptual metaphor LOVE IS A UNITY OF PARTS we can see that this metaphor is exemplified by the two main game objects. The pink and the blue square symbolize the two partners of a marriage or the PARTS of the conceptual metaphor. The game space which contains all game elements and in which the game action takes place symbolizes the UNITY. One can differentiate between the initial game state when the squares are still relatively small and the game space leaves a lot space to move around and a later game state as a result of successful play when the squares have become so big that they almost fill out the whole game space. Although the unity is already initially established a convincing unity seems only to be the case and the result of successful play: When both squares fill the whole game space, even the negative events, symbolized by black circles, do not significantly shrink the squares anymore as they immediately grow again as soon as they collide with each other in the case of the pink square or with a positive event, symbolized by a green circle in the case of the blue square.

The last described game state exemplifies the conceptual metaphor LOVE IS CLOSENESS. Being big enough the squares are automatically close to each other as they fill almost the whole game space. This is contrasted by the initial game state. The squares are so small that they easily can be quite distanced from each other in the game space. CLOSENESS plays an important part as a rule of the game. The game can only be played successfully if the squares interact with each other every now and then. This is the condition that the pink square becomes more opaque. If the squares do not interact from time to time the pink square gets more and more transparent and the game or the marriage, respectively, risk ending. Given that the player wants to play successful he has to take care that he produces the closeness and in fact an interaction between the two squares. Consequently, closeness is the most important rule in the game.

The free movement of the game objects in the game space which is only controlled by the physical laws of the game and their dynamically varying size according to the game state and the player input exemplify the conceptual metaphor LOVE IS A FLUID IN A CONTAINER.

One of the two game mechanics is based on the conceptual metaphor LOVE IS PHYSICAL FORCE which Kövecses derives from linguistic expressions such as "I was *magnetically drawn* to her" (ibid.). This is exactly realized by one of the few game mechanics. When executing a mouse-over over one of the squares they move towards each other. Thus, a mouse-over always causes a magnetic attraction between the two squares. In addition this is the first game action to happen when the game is started: the two squares move from opposite halves of the game space towards each other.

Interestingly, most of these concepts UNITY, CLOSENESS, FLUID IN CONTAINER, PHYSICAL FORCE do all imply a spatial structuring of LOVE. The game THE MARRIAGE can be considered as a dynamic spatial configuration of objects and thus it is predestined to exemplify a concept of love in terms of space. Thus, in common language one speaks for example of a *"big* love" which is exemplified as soon as the squares fill a reasonable amount of the game space.

Conclusion

Thus, one can conclude that THE MARRIAGE is not only to be seen as a simulation from the subjective experience of a marriage or a love relationship by its designer, Rod Humble. Instead THE MARRIAGE is – if not already on the basis of the underlying model of the game's simulation – at least on the level of its visual representation based on conceptual metaphors which structure our basic understanding of love according to the cognitive linguistic metaphor theory. Thus, THE MARRIAGE is partly a simulation of a concept of love which is metaphorically structured.

The interpretation of the simulation by connecting the designed system to one's own subjective idea of the source system must hence be possible not only because one can relate moving squares and circles to one's own experiences of the same domain but because the designer and the player have most likely to some degree the same metaphorical structuring and understanding of the topic available. Nevertheless, they can still disagree on details.

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