There is no Magic Circle

On the Difference between Computer Games and Traditional Games

This text compares the special characteristics of the game space in computer-generated environments with that in non-computerized playing-situations. Herewith, the concept of the *magic circle* as a deliberately delineated playing sphere with specific rules to be upheld by the players, is challenged. Yet, computer games also provide a virtual playing environment containing the rules of the game as well as the various action possibilities. But both the hardware and software facilitate the player's actions rather than constraining them. This makes computer games fundamentally different: in contrast to traditional game spaces or limits, the computer-generated environment does not rely on the awareness of the player in upholding these rules. – Thus, there is no *magic circle*.

In this paper, I compare the special relationship of the game space in computer-generated environments with that in non-computerized playing situations. Herewith, the transference of the so-called *magic circle* of traditional games to computer games is challenged.

The computer game is a very complex phenomenon. Like its neighboring media, such as television and cinema, it is a combination of cultural expression and technological innovation. It not only opens the field to narrative and art, but also includes the vast area of sport. This makes it even more difficult to grasp. Therefore, it is essential to focus on a specific type of game or specific aspects of the computer game in order to provide a valid argument for my premise. As the possibility to play a diverse number of games without depending on a human opponent is a crucial characteristic of computer games, I

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will concentrate mainly on single-player games with the focus of interest on the computerized game space and rules.

I will first portray the concept of the magic circle and then discuss its lack of adaptability to the computer game using the example of KLONDIKE SOLITAIRE (2006). The magic circle is used here to better express the difference between computer games and traditional games.

The Magic Circle

The phrase *magic circle* was coined by the Dutch anthropologist Johan Huizinga in 1938, in his pioneering work, *Homo Ludens*:

All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course [...]. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds; i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart (Huizinga 1955:10).

Here, Huizinga originally lists the "magic circle" as only one of many different playgrounds, but all having "special rules." This concept has been adopted, elaborated upon, and enhanced by successive game scholars. In this sense, the French philosopher Roger Caillois took up Huizinga's notion of the marked-off playground and included it into his 1958 definition of play among six other attributes, such as: "free," "uncertain," "unproductive," "governed by rules," and "make believe." He describes play as an activity which is "separate," i.e. "circumscribed within limits of space and time, defined, and fixed in advance" (Caillois 2001:9). With Caillois's *Man, Play, and Games*, the idea of defining games and play on the base of a bordered environment with its own rules became commonly accepted.

The concept of the *magic circle* became popular in contemporary game studies as did the research on computer games due to the work of the design educator Katie Salen and the game designer Eric Zimmerman, who managed to combine practical design approaches with theoretical reflections on games in their compelling work *Rules of Play* from 2004. They describe "the magic circle" of games as the boundaries established by the act of play and the real life contexts around games. Games in this respect are understood as systems delineated by rules, which create a separate sphere of complex meanings. Thus, the term today is widely used in order to mark the "special place in time and space created by a game" (Salen/Zimmerman 2004:95).

Yet this adoption causes some conceptual problems: Despite the seeming familiarity of the field of research, there is an important difference between the approach to games by Huizinga or Caillois on the one hand and Salen and Zimmerman on the other. The former focus on play as a dominant factor in human history and the cultural development of modern civilizations, whereas the latter concentrate their analysis on aesthetical, design-oriented, or theoretical descriptions of the object game. Before I further discuss the contemporary perspectives, I want to take a closer look at the work of Huizinga as the source of the concept. By doing so, I will be better able to compare and distinguish the attributes of computer games in contrast to the characteristics of traditional games.

In Huizinga's view, play is so important to mankind that he shifts the notion of Homo sapiens – the intelligent being, to Homo ludens – the playful being, as the creator of human culture. Huizinga's *Homo Ludens*, as well as the above cited *Man, Play, and Games* by Caillois, were motivated by the study of culture with the focus on play and games. Both emphasize the process of playing and its importance to human culture rather than concentrating on the formal features of games. Especially Huizinga, in agreement with Friedrich Schiller,

sees play as an end in itself (1955:49). Huizinga accordingly makes this attitude part of his definition of the term "play":

Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding; having its aim in itself and accompanied by a feeling of tension, joy, and the consciousness that it is 'different' from 'ordinary life' (Huizinga 1955:28).

As well as in the quote featuring the term magic circle, the notion of a difference to ordinary life forms a central aspect in this definition of play. It is mainly used as an example to explain why the upholding of this special separateness between play and ordinary life is so important for the gaming situation. Over and above this, the "magic circle" Huizinga refers to is part of religious practices performed with "sacred solemnity." Hence, playing a game becomes similar to performing religious rites – a fact that is not unexpected in this context. While comparing rites with games, Huizinga found that both are performed within an extraordinary frame and are strictly guided by rules that do not directly apply to ordinary life. Upholding these rules is in both cases a matter of agreement between the participants and the players. There is no physical or tangible restraint obliging them to behave according to these rules. The separate space and time continuum is a fragile construction which can easily be interrupted and destroyed by disturbances from outside or misbehavior inside the circle. Additionally, it is important to note that Huizinga repeatedly insists on the awareness of the players of the rules, rites, and appropriate behavior within the game frame. According to his definition, playing a game is a deliberate action: If a player does not want to play, the magic process of creating this separate space will not occur. - So, although Huizinga did not explicitly define the concept of the magic circle, it becomes clear that to him play takes place within boundaries where proprietary rules apply. This separate framework has to be intentionally upheld by the players and participants during the act of play.

Next, I want to describe the concept set up by Salen and Zimmerman for they accord the magic circle to both computerized and traditional game environments. By doing so, they have a similar approach to computer games as other recognized game scholars do, such as Gonzalo Frasca (2003) or Jesper Juul (2005). They generally focus on the formal aspects of games and interpret computer games in line with traditional games. Salen and Zimmerman explicitly apply the notion of the magic circle to rule-based games instead of free forms of play because, in the latter, the borderline between the act of playing and not playing is indistinct – as they state, there are many "ambiguous behaviors, which might or might not be play." Thus the magic circle is only established while playing games with a clearly defined "beginning, (a) middle, and (a) quantifiable outcome" (Salen/ Zimmerman 2004:94). These characteristics are fundamental to their definition of games in general: "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" - a definition which they also apply to computer games (Salen/Zimmerman 2004:80).

The magic circle in Salen and Zimmerman's Rules of Play is a metaphor for describing the artificiality of the gaming situation: the boundary established by playing a game contains its own rules; it creates a distinguishable time and space continuum and separates it from ordinary life. Within this metaphoric space, the meanings of certain objects, happenings, and behaviors change. For example, a white line on the ground becomes the border of a playing field; a ball landing in a net counts as a score, and catching a ball causes a player to be out. Yet this does not happen automatically. The players have to deliberately agree beforehand to uphold the particular borders, rules, and goals in order to play the same game and to know how to win this staged and artificial conflict.

Due to this aspect of the *magic circle*, it is possible to improvise on the playing field or with the material of an individual game. Ac-

tually, with some games it is not even necessary to have obvious or tangible markings or material at all – it is often enough to simply decide to play. This (potential) immateriality of the game setting is the factor which makes the circle *magical*: "to decide to play a game is to create – out of thin air – an arbitrary authority that serves to guide and direct the play of the game" (Salen/Zimmermann 2004:98). The process of beginning or playing a game is at the same time a process of establishing a new, special, and separate space with its own rules for solving and governing an artificial conflict.

The rules of the game, then, not only define limitations on possible actions, but also provide certain actions with a special meaning – a meaning not necessarily in accordance with that of the same action outside the *magic circle*. The abstract idea behind this becomes obvious rather quickly when thinking of NASCAR races or boxing matches: Although a fist-fight (to most people) is already a special situation outside normal life, such a conflict on the street is definitely fought out more liberally than within the boxing-ring; where the participants have to wear gloves and are not allowed to hit certain parts of the body. The conflict in games relies on alternative meanings of actions and objects on which the participants (and spectators!) have to agree. Generally, these agreements include the restriction of possible actions and define the ways in which the conflict can be resolved.

Ironically, it is these restrictive rules which make a game playable. The goal of playing a game is not only to successfully reach its winning condition, but to enjoy the obstacles set up by the rules. Salen and Zimmerman (2004:97) refer to this aspect as the "lusory attitude" of playing. Rules clearly play a very important part in making a game enjoyable or fun for the participants, and at the same time mark its separate place. – In short, the concept of the *magic circle* of a game, as adopted from Huizinga and introduced to game studies by Salen and Zimmerman, describes an agreement among players to follow

the appropriate rules within a bordered environment and to deliberately restrict the range of their possible actions in order to play a game.

The Computer Game

Having portrayed the origins of the concept of the *magic circle* and how it has been adapted to current game studies, I want to discuss the difficulties of its application to computer games: As stated in the introductory chapter, it is always problematic to generalize with such a complex phenomenon. There are only a few things all computer games have in common. Yet these few attributes have the power of explaining some fundamental characteristics of the medium.

Firstly, despite the obvious differences in interfaces – the hardware platforms are all based on computational technology, as the German media philosopher Claus Pias (1999:82) shows in his in depth analysis of the origins of computer games. Secondly, computer games are obviously also games – a fact which provides the medium with another basis to build on: interactivity. Not only Britta Neitzel (2000:43), one of the first beside Pias to seriously reflect on computer games in German academics, makes interactivity a definitive attribute of games. All games rely on interaction – be it with one's partner, one's opponent, or with the game itself.

Both factors complement each other. In line with the game designer and philosopher Ian Bogost (2007:42), the added value of computation technology to computer games is the ability to store and process large amounts of information, allowing meaningful and "sophisticated interaction". This combination also allows the creation and presentation of virtual environments that do not have to have a corresponding model in the real, physical world – a phenomenon which Gonzalo Frasca (2003:231) enhances with his concept of games as "simulations". These game spaces, moreover, are not only presentations of a particular environment, but are also there to be

actively explored. According to game studies pioneer Espen Aarseth (1997:64), exploration is virtually one of the "functions" of the player in a computer game. Without interaction and involvement, the game space remains a hollow collection of signs and rules. Thus, the bottom line is that computation technology and interactivity form the core of all computer games.

These core characteristics are obviously different from those of traditional games where no computer is involved. Nevertheless, as shown above, Salen and Zimmerman do not effectively differentiate between computer games and non-computer games. To them the "computer hardware and software are merely the materials of which the game is composed" (Salen/Zimmerman 2004:86). They take it for granted that the concept of the *magic circle* also applies to computer games – an idea widely accepted in game studies.

In the frequently cited publication, *Half-Real*, Jesper Juul also applies his theories to computer games as well as to the games played in the time of Huizinga, Caillois, and earlier. As with Salen and Zimmerman, to Juul all games are based on common grounds and "video games are the latest development in a history of games that spans millennia" (Juul 2005:54). From this point of view, computer games are simply a re-mediated form of games. There is no fundamental distinction made between games played on a board, on a field, with a deck of cards, or games played on a computer.

Juul also supports this premise when he discusses the *magic circle* and the different borders of a game space within the fictional space of a computer game: using the example of the computerized soccer adaptation, FIFA 2002 (2001), he notes that the game space is "a subset of the larger world" within which the "magic circle delineates the bounds of the game" (Juul 2005:164). The re-mediated game of soccer then has two borders: one between the computer and the outside world; and another within the computer game environment, as the soccer field again is delineated from the rest of the virtual game space: such as the stadium and its surroundings (Juul 2005:165).

However, this transformation of the concept of the magic circle to the computer soccer game stands in conflict with its basic principles. As shown above, the *magic circle* is based on solemnity, on an agreement between all participants to uphold the rules and dedicate their behavior to the possibilities artificially limited through the game setting. But in computer games, the limitation is artificial in a different sense: in a computer game the whole *world* or game environment is synthetically assembled by the computer program – including the soccer field or any other playground. Hence, only those actions may be performed which are included in the game program. Moreover, the virtual game field and the virtual space surrounding the playground are both based on the same code.

But in traditional games the *code* of each space is a different one: The ordinary-life-space has different codes from the game space. To remain with the example of soccer, there is no physical law or *code* that prohibits the players from repeatedly kicking the ball into the audience instead of the opponent's goal. However, in computer games – as Juul actually states in the following passage: "there *is no* 'ball' that can be out of bounds" (2005:165, author's emphasis). Yet, despite this observation, he does not comment on the fundamental consequences of it. Instead, he continues to evaluate the notion of the *magic circle* as a frame for the playground within the virtual space of the digital environment.

The consequences of this are that in a computer game everything is programmed, every possible action, every physical simulation, even the boundaries of the virtual space itself. As a result, there is nothing *magic* about the *circle* delineated by the virtual soccer field. Players do not have to adhere to the code of behavior and the rules, but simply have no other choice than to act within the frame of the possibilities provided by the computer program.

To emphasize this difference, I want to discuss the function and meaning of the rules in a game more profoundly. With their design

guide book, *Patterns in Game Design*, Steffan Björk and Jussi Holopainen provide a useful starting point:

Rules limit the players' range of actions while they are playing, enforce certain actions, and describe the order in which actions should be taken. Rules also describe and lay out the boundaries of the game and govern exactly how all the other components of the framework are instantiated in the game itself (Björk/Holopainen 2005:15).

This definition of rules fits well with the description of the *magic circle*. It is the rules that mark the boundaries of the game space and define which behavior is appropriate and which is not. Moreover, as stated before, it is these limitations that make a game playable. But what has not yet been mentioned is that rules in computer games play a different role from those in traditional games. Although there are a lot more rules in computer games through the complex software and hardware of any modern game, the game experience is far less rule-governed than that in traditional games:

Computer games can paradoxically be perceived as less rule-governed, because players do not need to explicitly be taught rules in computer games, they can try numerous actions and activities and learn by experience how the rules in the game work (Björk/Holopainen 2005:15).

What Björk and Holopainen see as a paradox of computer games – that there are many rules but the player has to learn little explicitly – is actually the fundamental characteristic of the medium.

In her fruitful analysis of the usage of a computer, the German philosopher Sybille Krämer (1995:231) discovers that working or playing on a computer is always like experimenting with a (yet to be discovered) "system of rules". In other words, the rules of the game are part of the system, but the player does not have to learn beforehand

which actions are allowed and which are not: He does not have to artificially limit his action possibilities according to the rules in order to play correctly. Illegal actions cannot be performed or they are automatically penalized. The rule system does not have to be *magically* upheld by aware players. The rules are upheld by the program code.

In order to underline my point, I want to now show the difference between computer games and traditional games using a well-known single-player game. The solitaire game of KLONDIKE provides a good example as it is a single player game in both cases – in the computer version (commonly known because of its shipment with the operation system, Microsoft Windows) as well as in the card version. In this game, all game actions and the game material are well-regulated.

In the case of the physical, non-computer game, one plays with a deck consisting of 52 playing cards; differentiated by the four suits *spades*, *hearts*, *diamonds* and *clubs*, each having 13 cards; i.e. from *ace* to *king*. These cards are laid out on any clear, flat surface, for example, a table – according to strictly defined rules. I am going to provide the rules here in full length, as it is this mechanical, almost code-like, instructional language which is typical for such rule texts. – As taken from the gaming website solitaire-game.com:

Klondike:

This solitaire game uses one deck (52 cards). Twenty-eight cards are dealt from the deck into the 7 tableau piles with the number of cards per pile increasing from one to seven from left to right. The top card is face up, the rest face down. The object of the game is to move four aces to the foundations as they become [sic!], and to build the foundations up in suit from Ace to King.

The rules:

Top cards of tableau piles and waste pile are available to play.

You can build tableau piles down by alternate color. One card or group of cards in the proper sequence can be moved from pile to pile. If during the play any of [the] closed cards become the top card of a stack it turns over. Empty tableaus may be filled with a King or group of cards headed with a King.

When you have made all the available plays on the board, begin turning over cards from stock. 3 cards at a time are turned over from the Stock [sic!]. You can move cards from stock pile to the tableau piles and to the foundations according to the rules mentioned above.

You have two redeals

Clearly, game rules have the function of telling the player how to play the game; i.e. which actions are allowed to be taken, how the game material is placed, defining when the game ends and which winning conditions exist. Hence, it is not surprising that this rule text reads like a program code. The player is conditioned as to how to play the game. This is necessary, as it is the player who has to uphold these rules and, moreover, in this single player game, also functions as his own referee. The player himself decides if he is going to play according to the rules, if the winning conditions are really matched, or if he is going to deal again before the game ends.

Furthermore, none of these rules is actually a must: there is simply no physical law determining how one has to deal out cards or where one can put them. The cited rules are an addition to the naturally existing physical laws like gravity or drag. – This changes fundamentally with the computer (i.e. Windows) version of KLONDIKE SOLITAIRE. Here the software program fulfills the function of the referee, so it is impossible to change the rules or winning conditions spontaneously. But, in MS-SOLITAIRE it is even impossible to make

accidental mistakes. Of course the player can still play badly, but he simply cannot place the cards wrongly. Any attempt to place, for example, a black ace on a red 9 will be restricted by the computer program. An error sound is played and the ace flies automatically back to the place it was taken from. Hence, the computer adaptation of the game transforms the theoretical restrictions into practical ones.



Fig. 1: Adaptation of KLONDIKE SOLITAIRE on MS Windows Vista (Screenshot)

Just as the ball in the previously used example of soccer, the card symbols in the computer game version of KLONDIKE SOLITAIRE are mere simulations of playing cards and do not have *natural* attributes or behaviors: every detail; such as the look and feel, the possible actions, the results of trying to do something else, etc. has to be coded into the game program. Without hacking the code, only those actions may be undertaken which complement the rules of the game. No throwing away of cards in a frustrated outbreak, no peeking or seeking is possible. Not even the surface on which the cards are laid out is a free choice; and as dealing is a matter of an automated deck, the

player cannot even make an accidental error while dealing. The rules are sustained entirely by the game program. Therefore the idea of the *magic circle*, in which the participants deliberately uphold the rules of the game in order to make the game enjoyable and playable, cannot be applied to single-player computer games.

This disparate function of the rules also implies other differences to traditional games: Computer game programs accordingly define what one *can* do, and consequentially do not really *restrict* practical possibilities, but *enable* them to be performed. This explains why computer games can contain many more rules than traditional games without making them too complicated. The player can only act within the boundaries of the programmed possibilities and does not have to remember what is allowed or not allowed, as he simply has no other choice. At the same time, he could not do anything at all if the program code did not provide him with a framework of action possibilities. Rules in computer games are not a negative form of *restriction*, but actually constitute a positive form of *enablement*.

The Difference

Rules in computer games play an alternative role to those in traditional games and actually mark the difference between the two: The concept of the *magic circle* does not apply to computer games in the way it does to traditional games. In the computer game all possible actions are implemented in the (formal) software code. Consequently, the restrictive nature of rules does not apply to computer games in that sense; as action possibilities first have to be provided by the computer game program before they may be performed.

While in traditional games players can spontaneously improvise on the gaming material and potentially do a lot more than the rules of the game would allow, in computer games the player could not do anything at all if the rules and the game space were not defined in the software. Based on their computational technology, computer games provide an artificial environment with proprietary rules and create the possibility for a diverse range of actions. So, instead of restricting potential player behavior, the computer game rules first of all facilitate or *enable* possible player actions.

Hence, the aspect of entering the *magic circle* does not rely on player awareness or an (informal) agreement between the participants. In contrast, in a traditional game, the player remains in the physical environment with its natural laws and proprietary possibilities and can deliberately choose to ignore this equality and stick to systematically outlined rules – or not, as the case may be. In this way, the natural possibilities are artificially restricted by the players themselves who let themselves be guided by the rules of the game.

Consequently, the idea of the *magic circle* is based on factors that are not relevant to computer games. The hard- and software of the computer contribute a lot more than the material to the game – they determine the role and function of the rules, and basically enable the game actions to be performed. Computer games are no mere extensions of traditional games but, with their core consisting of interactivity and computation technology, have to be interpreted as a unique medium. – Computer games are different: *There is no magic circle*.

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