

JUST LIKE DRIVING – Computer Games as Actual Practice and Objects of Presentation

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The Philosophical-Theoretical Standpoint and Method

For philosophical problems arise when language goes on holiday
- Ludwig Wittgenstein

The philosophical and theoretical standpoint, presented in this paper, are comprised of a combination of the analytical philosophical tradition known as ‘external realism’ as laid forward by John Searle, J.L. Austin, and David Favrholt among others and Ludwig Wittgenstein’s theory of use explicated in his *Philosophical Investigations* (1958). This standpoint is used to explore, through the concepts of real instrumental actions and actual practice, the ontological question:”What is the basic nature and functionality of computer games?”

External realism is a ‘neutral’ and general premise about the world and its entities. It is neutral, in that it doesn’t at the outset frame forms or artefacts in a predetermined manner as being e.g. narratives or simulations and hence, doesn’t articulate a preconception regarding the nature and functionality of computer games. On the contrary, computer games are placed as human manufactured artefacts in the actual world in accordance with all other human

artefacts.¹ Through instrumental actions and by means of raw physical materials humans can produce and fabricate forms and artefacts in the actual world. The specific artefacts can be characterised as falling under the superordinate categories of arbitrary representation (e.g. texts and rule systems), representation (e.g. narratives and pictures), simulation, or presentation² (e.g. cars and computer games), depending on which category is defining for the artefact.

When we research computer games and choose a philosophical or theoretical standpoint, it is crucial that the selected standpoint isn't predetermined in such a way, that we end up committing 'theoretical imperialism.'³ It is therefore of pivotal importance that the standpoint frames the object in a neutral manner instead of 'squeezing' it to fit a preselected form (e.g. as a priori being representations or simulations). Based on this premise the paper proposes a new, practice-oriented and neutral approach in accordance with Wittgenstein's maxim: "Let the use *teach* you the meaning" (Wittgenstein 1958: 260). This philosophical-theoretical standpoint isn't tied to specific symbolic/iconic frameworks, and is hence useful for highlighting computer games embeddedness in real instrumental practices.

During the past decades, game research has suggested different tentative frameworks for describing computer games, seeing them alternately as basically *being*: texts/literature, narratives/dramas, movies, rule-systems, simulations, or representations. The result has been ongoing 'position-wars' and 'definition-conflicts' within the area (e.g. the position-wars between narratology and ludology or the conflicts concerning 'character depth' or 'the magic circle'), making researchers highlight isolated constituent parts (e.g. quest structures or role-play). Instead of war and conflict this paper proposes a common ground: *Computer games as presentation and actual practice*.

A possible solution to the conflicts surrounding the ontology of computer games could lie in the careful description and analysis of computer games actual functionality and their ordinary everyday use in the real world in which they are embedded. This is possible through the juxtaposition of the familiar and obvious, but often overlooked: "What we have to mention in order to explain the significance, I mean the importance, of a concept, are often extremely



Fenja at the age of 3 plays Pixeline 2 – Hulen i træet: Her approach to the computer game is sensory (she watches the screen and listens to the instructions and commentaries provided by the game) and kinetic (she moves the mouse around, clicks on its buttons, and uses the keyboard to navigate and interact with the game). Her interaction with the game is an instrumental practice and any contingent language use functions parasitic in relation to the instrumental actions taking place, e.g.: "How do I get to go the other way?" or "Look, I'm making cakes!"

¹ 'Forms' and 'artifacts' are here used broadly as 'objects produced by humans' – i.e. recipes, rugby, radios as well as rowing boats are understood as forms or artifacts.

² A concept I have constructed in order to capture the distinctiveness of forms and artefacts characterised by instrumental practice (see below)

³ See Aarseth (1997), p. 18-19

general facts of nature: such facts are hardly ever mentioned because of their great generality” (Wittgenstein 1958: 56).

Primary and Secondary Approaches to the World

Realism is the view that there is a way things are that is logically independent of all human representations
- John Searle

The paper follows the *weltanschauung* of John R. Searle, explicated in what he terms “The Default Position” which, among other things, states that: 1. There is a real world that exists independently of us, our experiences, thoughts, and language. 2. We have direct perceptual access to that world through our senses, especially touch and vision. 3. Causation is a real relation among objects and events in the world, a relation whereby one phenomenon, the cause, causes another, the effect.⁴ Hence, there are two primary approaches to the world – a sensory and a kinetic approach – which are defined by being pre-symbolic and pre-iconic, entailing that there isn’t a sort of inner language or symbolic or iconic web behind people’s perceptions and actions. On the contrary, language and representation has perception and action as their prerequisite. In addition to the two pre-symbolic and pre-iconic approaches, man has, furthermore, a number of secondary approaches – a linguistic and an iconic approach, among others – which are built on top of the primary approaches, and functions parasitic in relation to these. That the secondary approaches to the world function parasitic on the primary approaches means that the secondary approaches always will have the primary approaches as their prerequisite, never the other way around.⁵

In this way, actual practice in computer games in the form of instrumental (physical and virtual) actions and sensory perception is autonomous in relation to any form of arbitrary representation (text, literature, rule-systems), representation (narratives, drama, movies, pictures), or simulation: Any contingent elements of e.g. rule-systems or narration will function parasitic in relation to the direct instrumental perception and action with/within the game. The computer player is assigned his own player-personal point of view by means of which he can sense directly within the game sphere at first hand and his own player-personal avatar(s) by means of which he can act directly within the game sphere at first hand. These two circumstances cause computer games to be very different from texts, narratives, movies, or simulations given that the recipient of these forms and artefacts doesn’t have the opportunity to carry out first-person perceptions and actions within them.



Fenja playing Eye-Toy. Forms of presentation, like computer games, don't generally point to something beyond themselves, instead they point to a space of possibilities inside which the user's actual practice in the form of instrumental actions is necessary in order for the game to obtain and make sense. Hence, the game is grounded in the two primary approaches to the world, while the representational and simulational aspects of the game function as parasitic elements assisting the sensory and instrumental sphere of the game.

⁴ See Searle (1999), p. 9-10

⁵ See e.g. Searle (1996; 1. ed. 1979), p 67ff

Computer games inherent functionality as artefacts centred on instrumental play with and within them implying that any fruitful and valid scholarly approach to computer games must be anchored to a theory which is capable of capturing their instrumental nature. Since computer games can be completely void of symbolic (e.g. *Tetris* or many games in the *Eye-Toy*-series) or iconic (e.g. *Zork I* or *Federation II*) elements but always will embody actual practice, it is of pivotal importance that the chosen theoretical and analytical method is grounded in the primary (sensory and kinetic) and not the secondary (symbolic and iconic) approaches. All in all this means, that if one chooses to approach computer games as a form of arbitrary representation, representation, or simulation the primary dimension of instrumental action will be impossible to capture and hence, the core functionality of computer games – instrumental play – will be lost. Research which has ‘static’ forms with traditional ‘passive’ recipient-positions (such as texts, rule-systems, narratives, movies or simulation) as their underlying basis, cut themselves off from being able to capture the actual practice with and within the form and the instrumental dimensions of the form which are at the heart of computer games.

The selected theoretical and analytical approach must be able to distinguish between objects of *interpretation* (e.g. texts and rule-systems), objects of *perception* (e.g. movies and simulations), and objects of *action* (e.g. cars and computer games), as well as being able to distinguish between interpreting and/or observing *recipients* and instrumentally acting *users*. It is therefore thought-provoking that the approaches stereotypical humanistic research has had a preference for applying don’t allow for these distinctions. Instead computer games have traditionally been viewed as; text, literature, and rule systems (arbitrary representations), narration, drama, and movies (representation), and simulation. But none of the above mentioned framings are able to capture the practice and core areas of computer games nature and functionality: physical processes, a space for instrumental play, and actual practice in the form of instrumental physical and virtual action and communication with and through input-devices.

The problems arise from the circumstance that traditionally, humanistic research has regarded the relationship between form and man as a relationship comprised of a form exerting causal influence on a perceiving and interpreting recipient: It is solely the form that is influencing the recipient through the emission of output which the recipient on his side perceives and interprets. However, it is necessary to formulate a new realm of understanding when it comes to forms and objects of presentation. This is due to the fact that you simply are not able to be a recipient when it comes to presentations like computer games: Forms of presentation are constituted by the fact that you can’t lean back and be a ‘passively’ receiving recipient; you must instead lean forward and be an actively acting user. In computer games it is not exclusively the form that is exerting causal influence on the computer player; the computer player must also continuously exert causal influence on the form through actual instrumental practice.

Presentation and the Space of Possibilities

How do mobs path through a zone and what is the most efficient route to take when fighting them? What are the rates of respawn on a particularly rare monster and what triggers that process? How do different spell combinations work in breaking up a tough group of monsters? What happens when I do this?

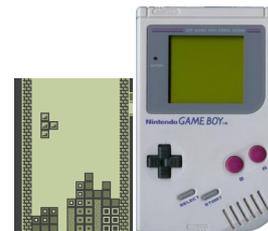
- T.L. Taylor

To capture the distinctiveness of forms and artefacts defined by actual practice, i.e. by users performing actual, instrumental action within and/or with them, the concepts of *presentation* and *space of possibilities* are constructed. These core concepts enable the understanding and characterisation of computer games as artefacts which bear greater resemblance to cars and hammers than they do to books, movies, or rule-systems.

Objects of presentation contain 3 spaces of possibilities: 1) a *constant space of possibilities* comprised of the fixed structure embedded in the system; e.g. the totality of physical and logical processes/structures in computer games or cars, 2) a *mutable space of possibilities* comprised of physical input/output-devices and a (virtual) universe in which a panoply of possible options and actions is given to the user by the system; e.g. the totality of possible sequences of actions provided by the interface at any given point during gameplay or car driving, and 3) an *effectuated space of possibilities* manifested by the users' actual chosen sequence of actions, thus realising the mutable space of possibilities; e.g. the actual actions with input-devices by the gamer or driver. I therefore define presentation as:

a form where a constant space of possibilities (e.g. Tetris) points to the carrying out of actual actions with input-devices, thus creating an effectuated space of possibilities through the manifestation of a mutable space of possibilities.

This stand in contrast to other forms such as arbitrary representations; where something (e.g. the letters 'c-l-o-u-d-s') refers to something ('clouds') through the use of arbitrary conventional rules (it is an arbitrary rule that it is precisely the letters 'c-l-o-u-d-s' that refers to 'clouds'); representations where something (e.g. the picture of a car) refers to something ('car') through the use of surface resemblance (the picture resembles in some way or another the appearance of cars); or simulations where something (e.g. wind-simulation in a wind-simulator) refers to something ('wind') through the use of behavioural resemblance (the simulation resembles in some way or another the behavioural characteristics of wind). Thus, the bottom line is that you can't take away the iconic elements from representations or simulations without them ceasing to be



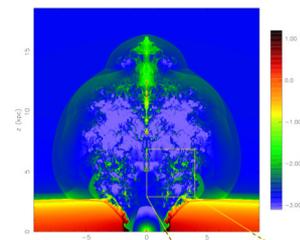
[Presentation]

C-L-O-U-D-S

[Arbitrary representation]



[Representation]



[Simulation]

representations or simulations. Likewise, you can't take away the symbolic elements from arbitrary representations without them ceasing to be arbitrary representations. However, the same is not true for presentations like computer games: Here you can take away all iconic or symbolic elements, without them ceasing to be presentations. For objects of presentation it is instead the case, that you can't take the elements of instrumental actions away without them ceasing to be presentations, which means that instrumental actions is an incontestable and defining trait for presentations. Nevertheless, this defining core trait of computer games is hardly ever treated or mentioned in game research. For instance in the recently published *Digital Culture, Play, and Identity – A World of Warcraft Reader* (2008) which features 13 articles solely concerned with the MMOG *World of Warcraft*, exploring *World of Warcraft* in relation to; corporate thinking, feminism, colonialism, theme parks, mythic forms, death, rhetorical figures, surveillance, deviance, role-play, identification and names – but none of the articles relate *World of Warcraft* to the actual everyday instrumental practice of playing and communicating or the game's form as a real action-oriented game-sphere.

Naturally, I am not saying that computer games never incorporates symbolic or iconic elements, stereotypically they do, but this doesn't entail that computer games *become* or *have to* incorporate these elements, or that they therefore belong to the concept of simulation, representation, or arbitrary representation. Overall, symbolic or iconic elements can never be self-contained or self-sustaining elements in computer games. It is only when the elements enter into action that their purpose is achieved (as subordinate elements supporting instrumental action). Nevertheless, it is a prevalent move among humanistic game researchers to elevate these subordinate elements so they become defining superordinate traits for computer games. To give a few prominent examples:

- Brenda Laurel: "Remember, representation is all there is" (Laurel 1991: 144)
- Espen Aarseth: "*The computer game is the art of simulation*" (Aarseth 2003: 52)
- Janet Murray: "It is a simulation, a story world" (Murray 2004: 5)
- Barry Atkins: "The text I construct as I read *Tomb Raider* or *Half-Life* belongs only to me, and to me alone. In effect 'I wrought the urn'. No other player or reader reads or write the same text" (Atkins 2003: 153)
- Markku Eskelinen & Ragnhild Tronstad: "...it is clear that the game is its rules" (Eskelinen & Tronstad 2003: 214)

But computer games as a form of presentation differs from the other forms in that the user actively must access presentations through the exertion of causal influence on the form itself. This means, that computer games are bodily anchored through their dual emission of output and demand for input because of which computer games connect their interface to the users' senses *as well as* their bodies. Regarding forms of presentation there is an abysmal difference to whether you are an actant or you are an observer/interpreter: It is e.g. not enough to merely sense or interpret a car for it to fulfil its intended purpose and for the use of the car to be deemed successful – since it is an object of action (not of perception or interpretation), the intended purpose of the car is the carrying out of instrumental actions with and within it. The same is applicable to computer games, and the elements of instrumental action cannot be

removed (or scholarly ignored) from either computer games or cars without entailing a crucial altering of the object as well as its approach: If a person was to merely perceive the car's iconic manifestation (its surface and behaviour) or interpret its linguistic and symbolic inscriptions, the car as object wouldn't have fulfilled its intended purpose. Likewise, the user could be accused of not having understood what the purpose with a car is. Furthermore, in accordance with the driver's actions, the computer player's actions can't be regarded as a kind of symbolic or iconic actions, but must be understood as real instrumental actions with (physical actions) and within (virtual actions) the space of possibilities. These actions are just as real and instrumental as e.g. hammering or driving – they are merely mediated: Just as the driver's propulsion is real, but mediated by the car, so the computer player's actions are real, but mediated by computer technology.

The Core Facts and Stereotypical Traits of Computer Games

The application is still a criterion for understanding.

- Ludwig Wittgenstein

The conceptual awareness I am advocating, delves deeper than positions-wars and definition-conflicts: It strikes at the fundamental functionality of computer games and bypass earlier wars and conflicts by concretising the concept of presentation through extrapolating the core facts of computer games.

Core facts are universal traits which are present in the first paradigmatic exemplar⁶ as well as all subsequent games (i.e. core facts must cover the concept's introduction, causality, as well as its history). While core facts are universal traits, stereotypical traits are only common occurrences in *most* computer games or in all exemplars within *groups* of computer games.⁷ Therefore any valid definition or understanding of



The nature of computer games like Guitar Hero are simply to incorporate the players and place them as instrumentally acting users in the games space of possibilities by establishing an interactional circulation in which game and player stands in a reciprocal connection because of the games continuous demand for input and emission of output and the players continuous demand for output and emission of input. Computer games are a kind of instrumental dia-practice; i.e. they set up a framework for action thus creating a joint arena inside which game and players inter-act.



The nature of artifacts of arbitrary representation, representation, or simulation are basically to cut off the recipients from interacting within the form and instead placing them as perceiving receivers of the artifact's surface (and behavior) by maintaining an unilateral connection through which it continuously emits output which the recipients receives. These artifacts are a kind of mono-practice; i.e. they set up a framework for reception creating a soliloquy which never leads back to the artifact.

⁶ There are differing views on exactly which computer game is to be counted as the first, but there is general consensus on it being either *Tennis for Two* (1958) or *Spacewar!* (1962). But as both exemplars contains all core facts and substantiate the papers claims, it has no bearing here.

⁷ Group-defining stereotypical traits separate computer games into distinct groups according to the dominating form (i.e. arbitrary representation, representation, and simulation), which on their part can be further divided according to the way in which the form manifest itself (e.g. as text or rule-system). Genre-defining stereotypical traits, on the other hand, separate computer games into distinct genres according to their source area, e.g. golf-games or card-games. This facilitates the classification of computer games that belongs to the same group, but to different genres (e.g. textual games), or computer games that belongs to different groups, but the same genres (e.g. textual and representational golf-games).

computer games must be based on core facts, and not on stereotypical traits: "...one cannot convey the approximate use *unless* one gets the core facts across" (Putnam 1970: 184). If we briefly and densely are to get the core facts across for the concept of computer games, it could look as follows:

- Computer games are composed of physical circuits and logical structures (and code) below the user interface level (the constant space of possibilities), a user interface comprised of physical input/output-devices and a panoply of presented possible actions within a virtual universe (the mutable space of possibilities), and the player's tangible playing out of these actions (the effectuated space of possibilities).
- All computer games presents a computer regulated universe on interface level. The computer game automatically regulates the player's actions, so they are in accordance with the rules in force. Hence, the rules are not arbitrary constitutive or regulative rules which the player must bring their actions in accordance with, but applied 'laws of nature'. The laws comprise a 'framework for action' which the player infers from the game through 'learning by doing'. In this manner, playing a computer game has more affinity with learning to swim, rope skip, or drive than learning to play chess, croquet, or Monopoly.
- Computer games are a form of presentation which achieves meaning through actual practice in the form of instrumental actions. Computer games only qualify as computer games given that there are instrumental actions carried out with and within them.
- Computer games require actions from the player on two levels; with and within the interface – i.e. real physical actions with input-devices and real virtual actions with avatars. Thus, the avatar's actions within the user interface stands in direct relation to the player's physical actions with the interface: Virtual actions are not reproductions or simulations of actions, but real instrumental actions in direct connection with the player's own body.

Computer games decisive differences from other forms are all in all trivial and obvious when explicated. These descriptions aren't revolutionary or shocking; they leave everything just the way it is. The hardest part is then to adhere to these banal, defining traits when investigating the area of computer games. Nevertheless, it is crucial that one's descriptions, definitions, theorizing, and analyzing comply with these banal traits since they constitute the core structure and functionality of any computer game. In accordance with the recent 'trend' in game research stating that: "informed game scholarship must involve play" (Aarseth 2003: 3) in order to perform good valid research, the instrumentality of computer games must also be inscribed in the very understanding of the artefact and the theoretical and analytical approach to it as well as in the core of the concepts' definition. This entails a number of consequences and possibilities for game research; e.g. ensuring that no stereotypical traits (be it rule-systems, text, or simulation) are elevated to core facts, thus entering into the definition of computer games. Instead, it is vital that the scholarly approach to computer games stays grounded in computer games mediation of the two primary approaches to the world; first-person perception and instrumental action. This consequence is simultaneously the possibility to establish a common ground where the stereotypical traits of arbitrary representation,

representation, and simulation peacefully can co-exist; as elements of text, narration, drama, rule-systems, simulation etc. which in different ways support, nuance, and differentiate the instrumentality in computer games.

Thus, the aspects of arbitrary representation, representation, and simulation which has lead to wars and conflicts can now unproblematic be integrated into the concept of computer games in the form of stereotypical traits – elements characterising different groups and genres of computer games.

Games

- The EYE-TOY-series. Sony Computer Entertainment Studios London/Sony Computer Entertainment, Playstation 2, 2003ff.
- FEDERATION II. Alan Lenton/IBGames, PC, 2003.
- GUITAR HERO III - LEGENDS OF ROCK. Budcat Creations/Activision, PlayStation 2, 2007.
- PIXELINE 2 - PIXELINE OG HULEN I TRÆET. Studio 1-2/Casper Bach Andersen, PC, 1996.
- SPACEWAR!. Steve Russell, Martin Graetz, and Wayne Wiitanen, PDP-1 Computer, 1961.
- TENNIS FOR TWO. William Higinbotham, Analog Computer, 1958.
- TETRIS. Alexey Pazhitnov/Nintendo, GameBoy, 1989.
- WORLD OF WARCRAFT. Blizzard/Vivendi, PC, 2004.
- ZORK I - THE GREAT UNDERGROUND EMPIRE. Infocom/Personal Software-Infocom, PC, 1980.

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