### Jan-Noël Thon: Toward a Model of Perspective in Contemporary Computer Games

## Computer Games as Fictional Worlds#

The present paper proposes a multidimensional model of perspective in computer games.<sup>1</sup> While this relatively new medium<sup>2</sup> has elicited an increasing amount of academic attention from a variety of disciplines in the last few years<sup>3</sup>, research on perspective and point of view in computer games generally focuses on questions regarding the presentation of space, i.e. on perspective as being determined by a point of view in the purely spatial sense. Within narratology, on the other hand, it is quite common to conceptualise point of view and perspective as multidimensional phenomena, both with regard to literary texts<sup>5</sup> and, albeit to a lesser extent, narrative films<sup>6</sup>. It therefore seems as if our understanding of perspective in computer games could benefit from the complex models of perspective that narratology has developed. Computer games, however, are neither literary narratives nor narrative films, and although the results of narratological research on perspective are interesting, most of the models developed for the description of literary texts (or narrative films, for that matter) cannot be applied to computer games without either missing some of their most central characteristics or significantly changing the models, probably beyond recognition. One of the problems that every attempt to apply narratological theory to computer games has to face is the fact, that the issue of narrativity in computer games is still not resolved.<sup>7</sup>

There is, however, general agreement in computer game studies that most contemporary computer games are set in complex fictional worlds. But while most if not all fictional narrative texts can be said to present fictional worlds and the central works of the influential theory of fictional worlds are indeed narratological works, a fictional world does not necessarily have to be presented narratively. Then again, there have been attempts within transmedial narratology to analyse still pictures or even music from a narratological point of view. The same is true for computer games, the most prominent approach probably being that of Marie-Laure Ryan, who does so within the framework of the theory of fictional worlds. If one accepts Ryan's proposal to speak of a narrative text when the text in question creates a world which is "populated with

<sup>&</sup>lt;sup>#</sup> This is the draft version of a paper that will be included in the proceedings of the International and Interdisciplinary Symposium "Point of View, Perspective, and Focalization: Modeling Mediacy", although it will not be presented as part of the regular program.

<sup>&</sup>lt;sup>1</sup> The terms 'point of view' and 'perspective' often seem to be used interchangeably in narratology and film theory (cf. e.g. the various contributions in van Peer / Chatman 2001). We will use the term 'point of view' to refer to the (spatial) position from which something is presented. This position determines the perspective of the presentation, the way in which the presentation is perspectivated. Hence, spatial perspective refers more to the question of 'how' rather than 'from what position' space is presented.

<sup>&</sup>lt;sup>2</sup> For an account of the history of computer games cf. e.g. Herz 1997; Mertens / Meißner 2002; Poole 2004.

<sup>&</sup>lt;sup>3</sup> Cf. e.g. Neitzel / Bopp / Nohr 2004; Raessens / Goldstein 2005; Wardrip-Fruin / Harrigan 2005; Wolf / Perron 2003

<sup>&</sup>lt;sup>4</sup> Cf. e.g. Poole 2004; Rumbke 2005; Taylor 2002; Wolf 2001

<sup>&</sup>lt;sup>5</sup> Cf. e.g. Chatman 1978; Schmid 2005; Surkamp 2003; Uspenskij 1973

<sup>&</sup>lt;sup>6</sup> Cf. e.g. Branigan 1984; Mitry 1998; Smith 1995; Thompson 1988

<sup>&</sup>lt;sup>7</sup> Cf. e.g. Eskelinen 2005; Jenkins 2004; Juul 2005; Neitzel 2005; Thon 2005a

<sup>&</sup>lt;sup>8</sup> Cf. e.g. Juul 2005

<sup>&</sup>lt;sup>9</sup> Cf. e.g. Doležel 1998; Ryan 1991

<sup>&</sup>lt;sup>10</sup> Cf. Ryan 2004

<sup>&</sup>lt;sup>11</sup> Cf. e.g. Steiner 2004

<sup>&</sup>lt;sup>12</sup> Cf. e.g. Tarasti 2004

<sup>&</sup>lt;sup>13</sup> Cf. e.g. Ryan 2001, pp. 307ff

characters and objects"<sup>14</sup>, "undergo[es] changes" <sup>15</sup> and "allow[s] the reconstruction of an interpretative network of goals, plans, causal relations, and psychological motivations around the narrated events"<sup>16</sup>, one could indeed speak of narrative texts not only in the case of certain kinds of still pictures (or even music), but also in the case of computer games. In the latter case, however, such a general description of computer games as narratives leads to a rather imprecise conception of the nature of said events as well as their presentation. One of the ways in which computer games differ from traditional narrative media is that they use two distinct modes for the presentation of two different kinds of events. It seems necessary at least briefly to address this problem, before we can return to the question of perspective and point of view.

# **Computer Games as Narratives?**

According to classical narratology, a text can be described as narrative if it is the presentation of at least two events. <sup>17</sup> The temporal as well as causal succession of events constitutes the story that is presented by a narrative text. As has already been mentioned, transmedial narratology describes not only textual but also audiovisual presentations of events as narrative discourse. As different as these events and their presentation may be, they still share one basic characteristic, regardless of whether they are presented textually by a literary text or audiovisually by a narrative film. The events presented are determined before they are presented. When we start reading a book or seeing a film we know that the story, in a way, has already been told, no matter how simultaneous the narration pretends to be. In the case of computer games, however, a large part of the events in every game is determined in the moment of playing, through the player's interaction with the game. Although Eskelinen rightly observes that "the equipment (the 'what' of gaming) and manipulation (the 'how') of this ludology-in-progress resemble the story and discourse of narratology" it seems somewhat problematic generally to speak of a narrative presentation of events in computer games. Instead, one should distinguish between narrative events and ludic events, the former being predetermined the latter not.

Narrative events are presentations of events that are already determined before the game is played. Contemporary computer games use a variety of narrative techniques such as cut-scenes or scripted sequences to present narrative events.<sup>19</sup> Ludic events are presentations of events that are determined at the moment of playing. The mode in which these events are presented is that of simulation, not that of narration. The movements of the players and the ball in a football game (e.g. *Pro Evolution Soccer* (2001)) are not determined in the program code but occur as a result of the player interaction with the game space (including the football, the football field and the football players) which is determined by the game rules (including the ways in which the football and the football players can be moved within the football field). Although it is not the aim of this paper to discuss the relation between narrative and ludic events in any detail, such a relationship obviously exists. Narrative events doubtlessly influence the way in which we perceive ludic events and *vice versa*.<sup>20</sup>

\_

<sup>14</sup> Ryan 2004a, p. 8

<sup>15</sup> Ryan 2004a, p. 8

<sup>16</sup> Ryan 2004a, p. 9

<sup>&</sup>lt;sup>17</sup> Cf. e.g. Prince 2003, p. 58

<sup>&</sup>lt;sup>18</sup> Eskelinen 2001, n.p.

<sup>&</sup>lt;sup>19</sup> For a more detailed discussion of narrative techniques cf. Thon 2005a.

<sup>&</sup>lt;sup>20</sup> This does, however, not mean that ludic events are narrative events. On the other hand, it is quite possible that players perceive the succession of narrative and ludic events as a narrative sequence of events. One can use the distinction between "player story" and "designer story" that has been proposed by Rouse 2005, p. 203ff.

While playing a computer game, the player will generally experience far more ludic than narrative events. Although the importance of narrative events in computer games should not be underestimated, the main emphasis of our model of perspective will be on the perspectivation of ludic events. This seems justifiable, since the techniques as well as the perspectives used to present narrative events in computer games are often very similar to the techniques and perspectives used in Hollywood films<sup>21</sup> and can therefore principally be described using models of perspective and point of view developed in film studies. But even a model of perspective in computer games that is mainly interested in ludic events has to acknowledge the influence that narrative events have on ludic events. This influence becomes clear when one examines the functions that narrative events fulfil in a computer game. While they sure enough constitute a story and contribute significantly to the construction of the fictional world, one of their less obvious but still quite central functions is to convey information about the ludic structure of the game, about what the player is supposed to do.<sup>22</sup> Most computer games operate with clear-cut polarities of good and evil. Characters and events in the game are presented in a way that allows the player to decide who the "bad guys" are and to act accordingly.

# **Toward a Model of Perspective in Computer Games**

What is proposed here is a model that distinguishes between three dimensions of perspective in computer games. The first dimension is that of spatial perspective, which is determined by the point of view, i.e. the spatial position from which the game space is presented audiovisually (this does, of course, include the presentation of sound which is often presented from the same position that the space is presented from). Since the presentation of space in computer games is audiovisual instead of linguistic and therefore closer to the movies than to literary narrative texts, we will draw on film theory and works on perspective from computer game studies, rather than try to adopt models developed in literary narrative theory. The second dimension is that of actional perspective, which is determined by the point of action, i.e. the position from which the player can interact with the game space. Here, we will mainly refer to Neitzel's work on the point of action in computer games.<sup>23</sup> The third and most complex dimension is that of the ideological perspective structure, which is determined by the various positions from which the events in the game are evaluated. Although we will focus mainly on the question of how characters in computer games evaluate events and situations, this dimension refers to other instances within the game, namely that of the player and the implied game designer. With reference to the spatial perspective determined by the point of view and the actional perspective determined by the point of action, we will speak of an ideological perspective that is determined by the point of evaluation here.

Before we come to discuss these types of perspective in more detail, it again has to be stressed that the three dimensions of perspective distinguished here are not all that could be considered. Although the spatial, actional and ideological dimensions of perspective seem to be most central, the analysis of particular games might well make it necessary to examine dimensions of perspective not treated in this paper.<sup>24</sup> Especially the analysis of the ideological

<sup>&</sup>lt;sup>21</sup> Cf. Barwood 2000

<sup>&</sup>lt;sup>22</sup> Cf. Thon 2005a

<sup>&</sup>lt;sup>23</sup> Cf. Neitzel 2001

<sup>&</sup>lt;sup>24</sup> With regard to additional dimensions that could be considered in the analysis of computer games, one can, once more, examine the narratological models of perspective already mentioned. Schmid (2005), for example, distinguishes between five dimensions of perspective in literary narrative texts, namely spatial, ideological, temporal, linguistic and perceptual perspective. Although not treated in this paper, both the linguistic and temporal perspective

perspective structure of a game may make it necessary to describe the various forms of perspective used in the presentation of narrative events in more detail. Our main aim, however, lies in the introduction of the idea that perspective in computer games consists of more than just spatial perspective, and the distinction of three dimensions of perspective seems to be enough for this purpose.

### **Point of View and Spatial Perspective**

There is a wide variety of ways in which computer games can construct the space in which they take place, from "all text-based" over various forms of two-dimensional spaces to "[i]nteractive three-dimensional environments". However, since most contemporary computer games present a three-dimensional space on a two-dimensional screen, it is this form of computer game space that the present paper is interested in. Before we can examine more closely the various forms of spatial perspective that can be found in such games, it has to be made clear to which parts of these games we refer to. Since many computer games are set in complex fictional worlds, one has to distinguish between the space of the fictional world as a whole and the spaces that the player can interact with through the interface. Jesper Juul draws a similar distinction between "world space" and "game space". Since most of the events in computer games take place in the game space, it seems to be mainly this part of the space of the fictional world that is of interest with regard to the question of spatial perspective in computer games.

Such game spaces are three-dimensional environments in which the player can more or less freely move his or her avatar (i.e. representative in the game space) as well as the point from which the space is presented and which is often in some way connected to the position of the avatar (thereby moving automatically when the avatar is moved). When referring to the point of view in computer games, one of the more commonly used terms is that of camera position. This is not too surprising since, according to Wolf, many contemporary computer games "follow, to some degree, the precedent set by the space represented in classical Hollywood film" and accordingly the presentation of the game space in computer games may at first glance seem quite similar to the presentation of space in film. But while terminology originating from film theory is doubtlessly useful for describing spatial perspective in audiovisual media, it has to be emphasized that all talk of a camera or a camera position becomes metaphoric when referring to computer games since game spaces are generally not created using actual film cameras. Hence, it seems sensible to speak of a point of view as the spatial position from which the game space is presented aurally as well as visually and that determines the spatial perspective of a computer game.

One of the most common distinctions of different types of spatial perspective in computer games is that of first person perspective, where the game space is presented from the spatial (and sometimes even perceptual<sup>33</sup>) position of the player's avatar, and that of third person perspective,

may occasionally be worth analysing, especially with regard to the narrative elements of contemporary computer games.

<sup>&</sup>lt;sup>25</sup> Wolf 2001, p. 53

<sup>&</sup>lt;sup>26</sup> Cf. Wolf 2001, pp. 55ff

<sup>&</sup>lt;sup>27</sup> Wolf 2001, p. 65

<sup>&</sup>lt;sup>28</sup> Cf. Thon 2005a

<sup>&</sup>lt;sup>29</sup> Juul 2005, p.164-167

<sup>&</sup>lt;sup>30</sup> Cf. Thon 2005a, 2006

<sup>&</sup>lt;sup>31</sup> Cf. Rumbke 2005, p. 244f

<sup>&</sup>lt;sup>32</sup> Wolf 2001, p. 66

<sup>&</sup>lt;sup>33</sup> Cf. the distinction between spatial and perceptual perspective in Schmid 2005, p. 127ff

where it is not. Aside from the fact that the category of 'third person perspective' is very broad<sup>34</sup>, this distinction is also inappropriate in its reference to grammatical categories that cannot be applied to audiovisual presentations of space in such a straightforward manner. A more appropriate and differentiated categorization of audiovisual point of view in computer games has been proposed by Neitzel. Referring to Mitry's work on perspective in the cinema<sup>35</sup>, she distinguishes between subjective, semi-subjective and objective points of view.<sup>36</sup> Although this distinction is relatively broad, it provides a good starting point for a description of the spatial perspective(s) used in actual games.

### Subjective, Semi-Subjective and Objective Points of View

Computer games using a subjective point of view let the position from which the game space is presented coincide with the position of the player's avatar. This perspective is, most prominently, used in so-called first person shooter games such as *Doom* (1993), *Halo* (2001), or *SWAT 4* (2005). One can, in fact, observe an increasing sophistication in the way first person shooter games realize their respective subjective points of view. While early games such as *Doom* use nothing more than a hand holding a weapon protruding into the presented space to indicate the existence of the player's avatar (cf. figure 1), more recent games such as *Halo* show its avatar on various occasions. Nevertheless, the hand holding a weapon is still seen most of the time (cf. figure 2). There is, however, a tendency towards an implementation of not only the spatial but also the perceptual perspective spray and flash packs not only effect the avatar, but also have an effect on the audiovisual presentation of the game space. Another instance of a game that uses the perceptual perspective of its avatar is *World of Warcraft* (2004), where the avatars drunkenness affects the presentation of the game space.

It has to be emphasized that the occurrence of a subjective point of view does not mean that the spatial perspective of the player and that of the player's avatar are identical, since the perspective of the player who is positioned before the screen naturally differs from the perspective that the game uses to present its space. Similarly, some of the stronger claims regarding the connection between a subjective point of view and the player's spatial immersion, i.e. the amount to which the player's attention shifts from his or her real surroundings into the game space<sup>39</sup>, seem to be too strong. While the game designer Richard Rouse III. is not alone in claiming that a subjective point of view leads to the player being "drawn into the game" games not using a subjective point of view can, of course, still succeed in creating a feeling of spatial immersion in their players. Laurie Taylor even claims that a subjective point of view "impoverishes spatial representation within the game" and is less effective in evoking spatial

<sup>&</sup>lt;sup>34</sup> Cf. Rumbke 2005, p. 246ff

<sup>&</sup>lt;sup>35</sup> Cf. Mitry 1998, p. 218f

<sup>&</sup>lt;sup>36</sup> Cf. Neitzel 2001

<sup>&</sup>lt;sup>37</sup> It has to be emphasized that the use of the term 'subjective' is not meant to refer to anything else than the fact that the game space is presented from the spatial position of the avatar, i.e. that the point of view, when realized in the form of a subjective point of view, coincides with the spatial position of the avatar (who is the 'subject' in question). Cf. Mitry (1998, p. 218) who describes "the *subjective* (or analytic) *image*" in the cinema as an image in which "[t]he camera takes the place of one of the characters".

<sup>&</sup>lt;sup>38</sup> Even in contemporary computer games, the perceptual perspective of the avatar is only occasionally included in the presentation of the game space. Nevertheless, Schmid's distinction between spatial and perceptual perspective is useful for the analysis of computer games, as well. (Cf. Schmid 2005, p. 127ff.)

<sup>&</sup>lt;sup>39</sup> Cf. Thon 2006a

<sup>&</sup>lt;sup>40</sup> Rouse 1999, n.p.

<sup>&</sup>lt;sup>41</sup> Taylor 2002, p. 29

immersion than other forms of spatial perspective. It may, however, be noted that *Halo*, which uses a subjective point of view in most parts of the game, switches to a semi-subjective point of view when the player's avatar is controlling vehicles without thereby preventing the player from experiencing spatial immersion in one way or another.

According to Neitzel, one can speak of a semi-subjective point of view when the "point of view is connected to the movements of the avatar; it is not a substitute for the viewpoint as in case of the subjective POV, but rather a *viewing-with*" the player's avatar. The camera follows the avatar at some distance, allowing for a better sense of its precise position in the game space than is the case in games with a subjective point of view. This form of spatial perspective is typically used in action adventures from *Tomb Raider* (1996) to *Grand Theft Auto: San Andreas* (2005) as well as in more recent role playing games such as *Fable* (2004), *Jade Empire* (2005) or *World of Warcraft*. A closer examination of these games reveals that although the category of semi-subjective point of view allows for some variation as to the distance between the position of the camera and the avatar or the angle from which the avatar is shown, many games using a semi-subjective point of view use it in quite a similar manner. Most of the time, the camera floats slightly above and some way behind the avatar, showing it in relation to its surroundings (cf. figures 3 and 4). Although the spatial position of the avatar is not the same as that of the camera, the camera's position is always linked to the avatar.

When the game space is presented from a position that is not connected to an avatar, one can speak of an objective point of view. This "oldest and most diversified" perspective is used in a wide variety of games, but probably most obviously in strategy games such as Z(1996), Warcraft III (2002) or Warhammer 40,000: Dawn of War (2004). The main aim of these games is to build large armies and take control of the game space, which normally consists of a more or less extensive landscape. Hence, the objective point of view in these strategy games offers the possibility to observe a large game space without being constrained by the spatial perspective of an avatar or comparable entity. The objective point of view shows a game space from a position that is not part of this game space (as is the case with a subjective point of view) and is not connected to an entity in the game space (as is the case with a semi-subjective point of view). Most strategy games do not show the whole game space at once, but present only a small part of it at a time, allowing the player to determine which part is shown (cf. figures 5 and 6).

# Point of View and the Player

<sup>&</sup>lt;sup>42</sup> Neitzel 2001, n.p.

<sup>&</sup>lt;sup>43</sup> Here, again, it has to be emphasized that the use of the term 'semi-subjective' is not meant to refer to anything else than the fact that the game space is presented from a spatial position that is connected to the avatar, i.e. that the point of view, when realized in the form of a semi-subjective point of view, is consistently connected to the spatial position of the avatar (who is the 'subject' in question). Cf. Mitry (1998, p. 218) who describes the "semisubjective (or 'associated') *image*" in the cinema as an image that "adopts the viewpoint of a particular character [...]. The camera follow him wherever he goes, acts like him, sees with him and at the same time."

<sup>&</sup>lt;sup>44</sup> Once more, it has to be emphasized that the use of the term 'objective' is not meant to refer to anything else than the fact that the game space is presented from a spatial position that is not connected to an avatar or another 'subject' in the fictional world of the game, i.e. that the point of view, when realized in the form of an objective point of view, is not connected to the spatial position of an avatar or another character in the fictional world of the game. Cf. Mitry (1998, p. 218) who describes the "descriptive (or 'objective') image" in the cinema as an image in which "the camera records the drama, movement, or action from an angle capable of giving the best possible description of events being filmed. The point of view is quite simply the one best suited for an accurate rendering of the action, and the camera remains as impersonal as possible."

<sup>&</sup>lt;sup>45</sup> Neitzel 2001, n.p.

Although one could further distinguish between various forms of objective point of view (especially when attempting to describe not only computer games presenting a three-dimensional space on a two-dimensional screen but also those games using two-dimensional game spaces), Neitzel's "general distinctions that can be mixed and altered in the games" seem to be appropriate for a categorization of spatial perspective in computer games. It should be, however, emphasized that most contemporary games not only combine various forms of spatial perspective but also allow their players to control camera movements (which, as has already been mentioned, is an essential part of the gameplay in most strategy games) and switch between different perspectives themselves. While such a player-controlled change in perspective is naturally rare in first person shooter games that derive their name from a constant use of the subjective point of view (although it has already been mentioned that *Halo* switches to a semi-subjective point of view when the avatar is controlling vehicles), it has become common in games using a semi-subjective point of view to allow the player some degree of control over the camera position. There are even games such as *World of Warcraft* that — while using a semi-subjective point of view by default — allow their players to switch to a subjective point of view if they so desire.

In *Tomb Raider*, which has founded the action-adventure genre, the player cannot change the semi-subjective point of view the game uses to present its game space. It is, however, possible to influence the position from which the game space is presented by way of making Lara Croft, the avatar of the game, look in various directions. Without switching to a subjective point of view, the camera will then change its position, allowing the player to see what Lara saw – or would see if she was not an avatar in a computer game but a real person capable of seeing (cf. figure 7). Obviously, the ways in which the player can influence the camera position have evolved since 1996, the year in which *Tomb Raider* was published. Hence, *World of Warcraft* allows its players not only to change the camera position in order to look at the avatar from virtually all angles but also to change the distance between the camera and the avatar, which can be adjusted on a scale of 15 steps. While the largest distance allows the player to see the most of the surroundings of his or her avatar, the smallest distance makes the position of the camera coincide with the spatial position of the avatar, thereby allowing the player to switch from the semi-subjective point of view (which is the standard mode of the game) to a subjective point-of-view (cf. figure 8).

It can be concluded that many contemporary computer games allow their players an ever greater amount of control over the spatial perspective(s) used in the presentation of the game space. While this is especially the case with action-adventure and role-playing games, it is also true for most other games with the previously mentioned exception of first person shooters. Since strategy games do not present the player with a single avatar, the occurrence of a genuine semi-subjective or even subjective point of view seems unlikely here. Nevertheless, all of the more recent strategy games, e.g. Warcraft III and Warhammer 40,000: Dawn of War, allow the player not only to change the part of the game space that is presented on the screen, but also to change the camera angle from which it is presented. Finally, it may be noted that while players generally like the opportunity to take control of the camera, they rarely use the possibility to change the default point of view. This has to do with the fact that the default point of view is often best suited to the interaction with the game space required by the game. And although the appreciation of beautifully designed game spaces is surely a part of the pleasure in playing a computer game, the interaction with the game space will, of course, be more important to most players than the game space itself.

<sup>46</sup> Neitzel 2001, n.p.

### Point of Action and Actional perspective

As opposed to the spaces that are presented in Hollywood film, computer game spaces allow players to interact with them through the interface<sup>47</sup>. The importance of this interactive nature of computer games is generally acknowledged in computer game studies, regardless of whether the scholar in question believes that computer games should be studied as narratives or not.<sup>48</sup> Recent research has shown that the interaction of the player with the game is rule-governed<sup>49</sup>, how the player experiences the interaction with the game<sup>50</sup>, or constructed typologies of the various interaction forms that can be found in computer games<sup>51</sup>. The present paper, however, is mainly interested in the question of how the interaction between player and game can be described in terms of perspective.

For this purpose, we will build on Neitzel's notion of a point of action<sup>52</sup>, by which she refers to "the position from which action can be taken, and the way it will be taken in"<sup>53</sup>, determining the actional perspective of the computer game. So what exactly is meant by 'actional perspective' with regard to computer games? Neitzel describes the relationship between the seeing and acting of the computer game player as follows: "The computer takes the effects of the actions out of the spatial-material reality of the player and distributes them in the space of the monitor. This space, including the effects of the actions, is observed and interpreted [by the player, JNT], which then influences the subsequent actions."<sup>54</sup> It is, however, not the case that a player can choose freely what he sees or does when playing a computer game. As we have seen, computer games present their game spaces using different points of view that result in different spatial perspectives and thereby determine to a great extent which part of the game space can be seen by the player and how he or she sees it.

In much the same way, computer games use different points of action that result in different actional perspectives and thereby determine what the player can do in the game and how he or she can do it. Neitzel argues that the point of action in computer games can be described using three basic distinctions. Firstly, the point of action "can reside either within or outside the diegesis, so that one can speak of an intradiegetic and an extradiegetic point of action" Secondly, Neitzel distinguishes between a concentric and an ex-centric and, thirdly, between a direct or an indirect point of action. Since an intradiegetic point of action means that the actions of the player result in actions that can be ascribed to some character or object within the game world, every game that uses an avatar automatically uses an intradiegetic point of action. An extradiegetic point of action means that the actions of the player result in actions that cannot be ascribed to some character or object within the game world. This is typically the case in strategy games that do not cast the player in the role of some "ruler character, who then guides the fortunes of his subjects" has a property of action and the player in the role of some "ruler character, who then guides the fortunes of his subjects" has a property of action and how the player in the role of some "ruler character, who then guides the fortunes of his subjects" has a property of action and how the player in the role of some "ruler character, who then guides the fortunes of his subjects."

The distinction between intradietic and extradiegetic points of action is often not very clear cut, since games such as *Warcraft III* or *Warhammer 40.000: Dawn of War* do not in any

<sup>&</sup>lt;sup>47</sup> For our purpose, interface can be loosely defined as what enables the player to interact with the game. Hence, the interface obviously includes both hardware (e.g. keyboard, mouse, screen) and software (e.g. mapping of pressed buttons to avatar actions, presentation of the game space) elements.

<sup>&</sup>lt;sup>48</sup> Cf. Ryan 2001; Murray 1997; Neitzel 2005

<sup>&</sup>lt;sup>49</sup> Cf. e.g. Juul 2005

<sup>&</sup>lt;sup>50</sup> Cf. e.g. Ermi / Mäyrä 2005; Thon 2006a

<sup>&</sup>lt;sup>51</sup> Cf. Manninnen 2004; Thon 2006

<sup>&</sup>lt;sup>52</sup> Cf. Neitzel 2001; Cf. also the "point of interaction" in Rumbke 2005, p. 245

<sup>53</sup> Neitzel 2001

<sup>&</sup>lt;sup>54</sup> Neitzel 2001, n.p.

<sup>&</sup>lt;sup>55</sup> Neitzel 2001, n.p.

<sup>&</sup>lt;sup>56</sup> Neitzel 2001, n.p.

explicit way construct a ruler character to whom the results of the player actions could be ascribed, but still let the player-controlled troops react to the players' commands with small expressions of obedience such as "Yes Sir!", thereby implying that the result of the player's actions can actually be ascribed to some entity within the game world (the same entity that is addressed as "Sir" in our example). Although there seem to be considerable differences between the ways in which the points of action in these strategy games and those in games such as *Grand Theft Auto: San Andreas* that let the player control the same avatar through the whole game are related to the entities in the fictional worlds of these games, one would have to describe both points of actions as intradiegetic. The usefulness of that first distinction may be doubted.

Neitzel's second distinction is much clearer. She proposes to distinguish between a concentric point of action, meaning that the player's actions are executed at only one location in the game space and an ex-centric point of action, meaning that the player's actions can be executed at multiple locations in the game space. Hence, games such as *Grand Theft Auto: San Andreas* which let the player control a single avatar to which the result of the player's actions can be ascribed would be categorized as using a concentric point of action while games such as *Warhammer 40,000: Dawn of War*, where the player uses the keyboard and mouse to control huge armies, taking control of single troops or buildings as he or she pleases would be categorized as using an ex-centric point of action. While this distinction does helps to describe which objects in the game space are controlled by the player, it does not answer the question of how they are controlled, i.e. how the actions of the player influences objects in the game space.

It is this question to which Neitzel's third distinction refers. Many games using an avatar allow the player to control the avatar directly. This means that every press of a button or movement of the mouse results in an instant action of the avatar. Among many other games, first person shooters generally use such a direct point of action. On the other hand, there are many games where the relation between player actions and avatar actions is not as direct. Strategy games such as Command and Conquer, Warcraft III, or Warhammer 40,000: Dawn of War often allow the player to take control of many different objects in the game world. In these games, a click with the mouse is enough to make a large number of troops move over a large distance, and another click will make them attack the enemy. It is not necessary (or even possible) for the player to control directly every movement of his or her troops. This also includes that there is no constant association of the pressing of a certain button with a resultant movement of the avatar. Hence, one can say that these games use an indirect point of action. Neitzel also notes that some games combine a direct and indirect point of action. For example, this is the case in World of Warcraft where the player controls the basic movements of the avatar directly, but also has to use the mouse to make the avatar use its abilities or interact with other characters by clicking on a variety of icons or on the character he or she wants to interact with.

### Subjective, Semi-Subjective and Objective Points of Action

Although especially the latter two of Neitzel's distinctions are quite useful for describing the point of action in computer games, it is questionable if a typology as complex as the one proposed by Neitzel is necessary. Alternatively, we propose to distinguish between only three different kinds of point of action, applying the distinction between the subjective, semi-subjective and objective point of view to the point of action. In games that use a subjective point of action, the action position of the player coincides with that of the player's avatar. Here, the player has direct control over the movements of his or her avatar, "every press of a button instantly results in

\_

<sup>&</sup>lt;sup>57</sup> Cf. Neitzel 2001

an action"<sup>58</sup>. This also means that the player can control his or her avatar and nothing else. The player cannot interact directly with the game space, but has to use the avatar as a prothesis.<sup>59</sup>

In games that use the semi-subjective point of action, the interaction with the game world is connected to an avatar, but the player also has to interact with the game space. Interaction does not exclusively happen through the avatar, as is the case in games using a subjective point of action. In games such as *World of Warcraft*, the player controls the basic movements of the avatar in the same way as in games using a subjective point of action. He or she does, however, also have to use the mouse to make the avatar use some of its various abilities or interact with other characters. In games using an objective point of action, the interaction with the game world is not connected to a single avatar. This is, for example, the case in strategy games such as *Warhammer 40,000: Dawn of War* where the player uses the keyboard and mouse to control huge armies, taking control of single troops or buildings as he or she pleases.

Although there may be a certain tendency for the three types of point of action to converge with the respective forms of point of view, this is by no means generally true. *Tomb Raider* combines a semi-subjective point of view with a subjective point of action, *Baldurs Gate* (1999) combines a semi-subjective point of view with an objective point of action and *Myst* (1993) combines a subjective point of view with an objective point of action. Furthermore, although of central importance for the gaming experience, the spatial perspective as determined by the point of view and the actional perspective as determined by the point of action are not the only ways in which the presentation of events in a computer game is perspectivated.

### Point of Evaluation and Ideological Perspective

Although Chatman does not go into too much detail in his treatment of different dimensions of point of view, he rightly emphasises that the term 'point of view' can refer not only to the position from which events are perceived (which he calls the perceptual point of view), but also to the position, from which events are evaluated (which he calls the conceptual point of view). The idea that a character's "world view (ideology, conceptual system, Weltanschauung, etc.)" should be conceptualised as a dimension of point of view can also be found in Uspensky's seminal work A Poetics of Composition. Uspensky claims that one of the most basic aspects of point of view is "manifested on the level we may designate as ideological or evaluative (understanding by 'evaluation' a general system of viewing the world conceptually) this paper cannot hope exhaustively to discuss the question of how the events and situations in a computer game are evaluated by the avatar and the other characters in the game (or even the game as a system of rules), these questions are nevertheless of central importance for the analysis of perspective in computer games. In order to distinguish these

<sup>&</sup>lt;sup>58</sup> Neitzel 2001, n.p.

<sup>&</sup>lt;sup>59</sup> On the notion of the avatar as prothesis cf. e.g. Bartels 2005.

<sup>&</sup>lt;sup>60</sup> Cf. Chatman 1978, p. 151ff. Chatman mentions a third way, in which the term can be understood. Although it is true that "point of view " can in some contexts also refer to "someone's interest-vantage" (Chatman 1978, p. 152), we will not discuss this notion in the present paper. Cf. also Chatman 1990, p. 139ff.

<sup>&</sup>lt;sup>61</sup> Chatman 1978, p. 151

<sup>&</sup>lt;sup>62</sup> The notion that there is not only a spatial but also an evaluative or ideological dimension to point of view and perspective is actually quite common in literary as well as film narratology. Cf. point of view as "perception" and as "attitude" in Branigan 1984, p. 5ff; point of view referring to "perception" and "ideology" in Chatman 1978, p. 151ff and Chatman 1990, p. 139ff; "spatial perspective" and "ideological perspective" in Schmid 2005, p. 127ff; "allignment" and "allegiance" in Smith 1995; the conceptualisation of character perspective in Surkamp 2003; "spatial level" and "ideological level" of point of view in Thompson 1988, p. 168ff; "point of view on the ideological plane" and "point of view on the spatial and temporal plane" in Uspensky 1973.

<sup>63</sup> Uspenky 1978, p. 8

evaluative positions from the notions of point of view and point of action already discussed, we will refer to them as points of evaluation. Ideological perspective as determined by a point of evaluation is not as easily determined in the analysis of computer games as is the case with the dimensions of perspective in computer games already discussed.

The observation that events in fictional worlds are connected to certain goals, plans and psychological motivations, which can be ascribed to the characters populating such worlds also applies to computer games. The fact that the player can ascribe a specific "world view" to the characters in a computer game does not necessarily lead to a more compelling story, but does function as a means of orientation for the player. The different points of evaluation and ideological perspectives of the characters in a computer game result in a certain system of norms and values by which the player has to position him- or herself. Smith notes that, for an understanding of films, it is important "to consider, first, how such 'systems of value' are constructed; secondly, the range of possible types of moral structure; and thirdly, the different ways in which a narration may unfurl these moral structures over time. This is also true for computer games. However, due to the limited scope of this paper and the fact that most systems of norms and values in computer games tend to be rather simple, we will mainly discuss the first question, which is how these systems are constructed with regard to the points of evaluation that can be ascribed to the various characters. For this purpose, it is useful to return to the notion that most contemporary computer games are set in complex fictional worlds.

Ansgar Nünning has treated the notion of perspective within the framework of possible worlds theory, emphasizing that it is applicable "not only to the rhetorical structure of narrative transmission", but also to "the world-models of the fictional individuals that populate the represented universe projected in narrative texts. Nünning explicitly refers to narrative texts. But as has already been mentioned, the narrative mode is not a necessary prerequisite for the presentation of fictional worlds. We can describe the point of evaluation of a character in a computer game as being determined by the character's model of the fictional world. But how can a player ascribe a certain "world view" to the characters in a game? Nünning emphasizes that in narrative texts, "each verbal utterance and each physical or mental act of a character provides insights into his or her perspective". Once again this is true for computer games. A computer game's fictional world and its characters are conveyed not only through the presentation of the actual game spaces (to which the previously discussed dimensions of perspective in computer games mainly refer), but also through a variety of narrative techniques that computer games use to present what we have called narrative events. While most of the information about mental acts of characters in a computer game will be conveyed through cut-scenes and other forms of narrative events, the main part of physical acts will be presented in the form of ludic instead of narrative events. Therefore, in order to determine the point of evaluation of a computer game character, one has to examine the narrative as well as the ludic parts of the game. Furthermore, it should be re-emphasized that these different parts strongly influence each other.

\_

<sup>&</sup>lt;sup>64</sup> Cf. Ryan 2001a

<sup>&</sup>lt;sup>65</sup> Smith 1995, p. 189

<sup>&</sup>lt;sup>66</sup> The question of evaluation is, of course, not restricted to characters. We will, however, only be able to hint at other possible entities evaluating events in computer games.

<sup>&</sup>lt;sup>67</sup> Nünning 2001, p. 207

<sup>&</sup>lt;sup>68</sup> Nünning 2001, p. 207

<sup>&</sup>lt;sup>69</sup> Nünning 2001, p. 210

<sup>&</sup>lt;sup>70</sup> For a sophisticated account of how information on characters is conveyed as well as a discussion of the role that the reader's knowledge plays in the construction of mental models as representations of the characters in literary narrative texts cf. Jannidis 2004.

While we cannot discuss point of view and spatial perspective with regard to the presentation of these narrative events in any detail, we will nevertheless give a short overview of the narrative techniques used in contemporary computer games.<sup>71</sup> The typical way of presenting narrative events is the use of cut-scenes, which Hugh Hancock defines as "any non-interactive" storytelling or scene-setting element of a game"<sup>72</sup>. Cut-scenes are short movie sequences that interrupt the interaction of the player with the game space in order to present a narrative event.<sup>73</sup> This form of narration is used in most contemporary computer games, from *Tomb Raider* to Warhammer 40,000: Dawn of War. Another technique that has become increasingly prominent in the last few years is the use of scripted sequences of events within the game spaces. Here, the game flow is not interrupted by a cut-scene and the player can continue his or her interaction with the game space while the scripted (and therefore predetermined) event happens. While scripted events are often less obvious than cut-scenes, most contemporary games combine both techniques to present their narrative events. Regardless of whether they are presented in the form of scripted events or cut-scenes, narrative events may include character actions, character speech and character thoughts. Some games even use a kind of narrative instance that uses language to present narrative events stretching over larger periods of time.<sup>74</sup>

For the purpose of the present paper, however, the actual form of these narrative events is less important than the function that they have for the rest of the game, i.e. the game space and the ludic events. As has already been mentioned, narrative events in computer games not only constitute a story and contribute to the construction of the fictional world, but they also convey information about the ludic structure of the game. Rune Klevjer even claims that "giving meaning and sensation to the actions when they are performed by the computer and the player, is the main function of narrative elements in computer games. He distinguishes between three levels on which this 'signification' of ludic events takes place. Firstly, on the most important level, narrative (as well as ludic) events introduce a certain evaluation of possible actions. In every shooter-themed game, be it *Tomb Raider* or *Halo*, "it is important for me [the player, JNT] that the objects I [the player's avatar, JNT] 'shoot', are 'bad guys' with 'guns' who 'fight' back, and who can be 'killed'". This is not a question of ethics, but of effective action. The player of *Halo* has to be able to distinguish between his opponents (the 'bad guys') and his allies. In order to be successful he should refrain from shooting the latter. Secondly, most games will use narrative events to give the player "some kind of motivation for performing the specific actions that the game requires"<sup>77</sup>. In *Halo*, the avatar is a (super-)soldier named Master Chief who, together with his human allies, tries to save the universe from various aliens. Here, we have a more specific level of meaning than is constituted by the mere distinction between opponents and allies. Thirdly, many games use a chronologically and causally ordered chain of narrative events (which is, of course, continuously interrupted by ludic events) to present a (possibly non-linear but nevertheless consistent) story. This is, of course, relevant with regard to Smith's question of how "a narration may unfurl these moral structures over time". One example for a story that forces us to change our initial conception of the ideological structure is *Halo 2* (2004), where it becomes

<sup>&</sup>lt;sup>71</sup> For a detailed discussion of narrative techniques in contemporary computer games cf. Thon 2005a.

<sup>&</sup>lt;sup>72</sup> Hancock 2002, n.p.

<sup>&</sup>lt;sup>73</sup> Cf. Klevjer 2002

<sup>&</sup>lt;sup>74</sup> For a more detailed discussion of various forms of narrative techniques cf. Thon 2005a.

<sup>&</sup>lt;sup>75</sup> Klevjer 2001, n.p.

<sup>&</sup>lt;sup>76</sup> Klevjer 2001, n.p.

<sup>&</sup>lt;sup>77</sup> Klevjer 2001, n.p.

<sup>&</sup>lt;sup>78</sup> Smith 1995, p. 189

clear during the course of the story that certain aliens are actually allies instead of opponents in that they help the Master Chief to save the universe.

# **Ideological Perspective Structure and the Player**

As opposed to the point of view and the point of action, which can generally be determined without too much of a problem, one has to consider the various points of evaluation of the different characters to arrive at an appropriate description of this most complex level of perspective in computer games. 79 According to Nünning, "[t]he term perspective structure can be defined as the general system formed by all the character-perspectives and narrator-perspectives as well as by the patterns of relationships between them." While the present paper can only sketchily show how a computer game's ideological perspective structure with its various points of evaluation is constructed and can be analysed, this structure does indeed play a central part in the presentation of ludic as well as narrative events in most contemporary computer games. As we have seen, the first step in the analysis of the ideological perspective structure of a game aims to reconstruct the points of evaluation of the characters in the fictional world of the game. Furthermore, the characters are generally connected to each other, either in a relation of opposition or similarity of the respective points of evaluation. But as the above quote of Nünning suggests it is not enough to analyse the constellation of the various characters in a computer game. Although one would have difficulties finding a narrator perspective in most games<sup>81</sup>, it is nevertheless the case that an analysis of the ideological perspective structure of a game should also consider the choices that the player is allowed to make with regard to his or her actions and the norms and values that are implied by the game itself.

There is obviously a certain relationship between how the avatar evaluates the various events and situations in a game and how the player evaluates them. However, this does not mean that the player uncritically assumes the avatar's position towards these situations and events. Rather, the player will use the ideological perspective structure of a game to orient him- or herself within the ludic (as well as the narrative) structure of the game. This also explains why the player of *Halo* will normally act according to the avatar's point of evaluation does and not try to be friend the aliens (which is, as was previously mentioned, different in Halo 2). The player acts according to the avatar's point of evaluation since such action is in compliance with the aims of the game. The game itself does not allow the player to choose freely his allies or to decide that shooting aliens is not an action to be evaluated positively. While the player may decide not to let his or her avatar shoot aliens, this will most likely result in the death of said avatar and the player loosing the game. We have already mentioned that events and situation in computer games are not only evaluated on the level of character. In many contemporary computer games, one can distinguish between the points of evaluation of the various characters in the game, the point of evaluation that the game constructs for the player and the point of evaluation that can be inferred from the overall design of the game.<sup>82</sup>

<sup>&</sup>lt;sup>79</sup> To my knowledge, there exists no developed theory or typology of characters in computer games yet, but such a theory and/or typology would probably be necessary to further develop the notion of ideological perspective structure with regard to computer games. Such a theory of characters in computer games would also have to describe in more detail the relation between the player, the avatar and the other characters in a game.

<sup>80</sup> Nünning 2001, p. 214

<sup>&</sup>lt;sup>81</sup> As has already been mentioned, there are certain games that use narrative instances for their (at least partly linguistic) narration. Here, the notion of 'narrator's perspective' may be useful. It has, however, to be emphasized that neither the player nor the avatar in a computer game should in any way be treated as if they were narrators.
<sup>82</sup> So far, we have used Neitzel's distinction between a subjective, a semi-subjective and an objective point of view and have proposed to use the same distinction with regard to the point of action. Since this would stretch the

The relevance of a characters point of evaluation for the whole game becomes most obvious in games with a single avatar. The avatar's model of the fictional world determines to a great extend the ways in which the player can interact with the game world. Lara Croft, the Avatar in *Tomb Raider*, seems to have no doubt about the appropriateness of shooting the various animals, humans and demons that act as her opponents throughout the game. The game would be entirely different if Lara was a female Hamlet, considering and re-considering the commands given by the player before finally deciding to act. It is clear that the player of *Tomb Raider* is not entirely free in his or her decisions. Lara cannot be made to join the bad guys (the bad guy being a woman in *Tomb Raider*) in her attempt at world domination. Another example previously mentioned would be the avatar in the science fiction themed first person shooter *Halo*, who is presented as a soldier loyal to the human army. Here, the player is not free to choose the alien alliance as an ally (at least not in the first part of the game). It is true for most contemporary computer games that many of the norms and values attributable to the avatar are not decided upon by the player. Although the player has not much choice but to follow the avatar's evaluation as far as his (inter-)actions are concerned (since these evaluations generally define the goals of the game), this does not necessarily mean that the player is embracing these evaluation in any other way than with regard to the ludic structure. 83 The fact that a player of *Tomb Raider* makes the avatar of the game shoot wolves does not imply that this player generally believes shooting wolves to be a good thing. In fact, it does not even necessarily imply that the player believes that the fact that Lara Craft is shooting wolves in the fictional world of *Tomb Raider* is a good thing. It is simply a part of the game rules that Lara has to shoot wolves in order to survive.

While most computer games operate with clear-cut polarities of good and evil<sup>84</sup>, this does not mean that the player never has a choice between the two. In games such as *Fable* or *Jade Empire*, the player can choose which course of action to evaluate as the "right" one. Even in these games, the possibilities for choice are strictly limited by the program, but the player at least partly decides on the avatar's norms and values. Another example where the player can influence the avatar's point of evaluation is *World of Warcraft*, where the player gets to choose whether his avatar is a member of the Alliance or the Horde. The player's choice will strongly influence the point of evaluation of his or her avatar, since the two parties are constantly at war with one another. In these cases, the point of evaluation of the player influences how the avatar evaluates the events in the game and what course of actions it then holds to be the "right" one. However, it has to be emphasized that what we propose to call the point of evaluation of the player does not refer to the player's model of the actual world. Instead, it refers to the player's model of the fictional world and his or her evaluation of the events and situation that occur in the game.

terminology to some extent, we will not attempt to once more use this distinction to describe the levels on which events and situations are evaluated in contemporary computer games, although we again propose to distinguish between three different kinds of point of evaluation. To begin with, there is an essential difference between this and the previous distinctions of three kinds of point of view and three kinds of point of action. Computer games generally use only one of the different kinds of point of view and point of action at a time to present the various ludic events. In the case of the point of evaluation, however, we are talking about different, co-existing levels of the ideological perspective structure of the game. Hence, it seems more sensible to speak of the points of evaluation of characters, players and implied game designers rather than of subjective (player), semi-subjective (avatar) and objective (implied game designer) points of evaluation.

<sup>&</sup>lt;sup>83</sup> Cf. Schirra / Carl-McGrath 2002 for a discussion of how the process of identification with characters in computer games differs from identification with characters in film.

games differs from identification with characters in film.

84 Cf. Smith 1995, p. 197ff for a discussion of the "Manichean moral structure" in certain kinds of films.

85 Cf. Thon 2005

<sup>&</sup>lt;sup>86</sup> Cf. also the discussion of allegiance in Smith 1995, p. 187. Smith assumes that "something like a suspension of values must occur, if we are to explain the spectator aroused by a gangster film, against her 'better' (i.e. everyday)

While some games allow their players to influence the point of evaluation of his or her avatar, one should keep in mind that the choices a player can make in these games are generally choices between narrowly defined alternatives.

We have seen that the player of a game using an avatar usually assumes that avatar's point of evaluation in order to orient him- or herself within the ludic structure of the game. This process of orientation, which is necessary to successfully play a game, is also influenced by those norms and values that are not directly connected to characters (be it the player's avatar or other characters) but can be attributed to the game designer(s). For the purpose of this paper, it is not relevant whether the game designer really subscribed to said norms and values or had any intention to have them ascribed to them. If, for example, no children appear in most parts of the game world in Fable, this is a conscious design decision that was intended to prevent the players from killing children - without obviously restricting their possibilities for interaction with the game world. But, whether there was a conscious design decision behind it or not, the fact that no children can be killed may be read as part of a system of norms and values that includes the norm that it is not acceptable to have children killed, even in the fictional world of a computer game. Another example is that Lara Croft can carry a variety of weapons and kill an impressive number of various beasts in *Tomb Raider* without getting problems with the authorities (or animal rights organisations). The point to be made here is that a particular ideological perspective manifests in the overall design and presentation of a game world as well as in the rules and goals of the game.87

A reconstruction of the system of norms and values inherent in computer games might also contribute to one of the most controverse questions concerning this relatively new form of entertainment, namely how their often violent and politically incorrect entertainment, namely how their often violent and politically incorrect content should be evaluated from an ethical point of view. Buchanan and Ess claim that "this debate threatens to become paralyzed on the one hand by simple-minded [...] characterizations of e-games and their impacts, and, on the other hand, by overly simple ethical analyses that would force us to choose between Manichean polarities of absolute evil vs. absolute good" Without intending to further discuss this question here, it seems likely that an (ethical) evaluation of the events and situations in a computer game should take into consideration how these events are evaluated within the game itself. It may well be the case "that players act as moral beings, that they reflect upon those values that are contained in the system of the game, and that they evaluate them keeping in perspective the values of the game world" but before one can discuss these questions, one should probably examine how exactly "values [...] are contained in the system of the game" of the game" of the game.

### Conclusion

judgement" (Smith 1995, p. 189). Although such a suspension of values in computer games will most likely focus on the necessity to act in compliance with the ludic structure of the game, it nevertheless occurs. Cf. also Schirra / Carl-McGrath 2002.

<sup>&</sup>lt;sup>87</sup> It would even be possible to speak of the point of evaluation of the implied game designer here. The notion of an implied game designer in computer games could be understood in analogy to the concept of the implied author in literary texts. Since the implied author is not an uncontested concept (cf. Kindt / Müller 2006), one could alternatively speak of a composing subject (cf. e.g. Hühn / Schönert 2006). Both terms would refer to a constructed entity to which those norms and values that are not connected to characters in the game world of the computer game could be ascribed.

<sup>88</sup> Cf. Jahn-Sudmann / Stockmann 2006

<sup>&</sup>lt;sup>89</sup> Buchanan / Ess 2005, p. 3

<sup>&</sup>lt;sup>90</sup> Sicart 2005, p. 17

<sup>&</sup>lt;sup>91</sup> Sicart 2005, p. 17

This paper has proposed a model of perspective in contemporary computer games consisting of three dimensions. It has become clear that the presentation of the game space in computer games differs from the presentation of space in narrative films and literary narrative texts. While the perspective of the audiovisual presentation of the game space in a computer game is generally determined by a relatively constant point of view, most games allow the player to control the spatial perspective at least to a certain degree. In fact, the most obvious difference between computer games and narrative films or literary narrative texts is the possibility to interact with the presented space, which makes it necessary to include in a model of perspective in computer games the notion of an actional perspective as determined by the point of action in addition to the spatial perspective as determined by the point of view.

Although we could only sketch the last dimension of our model of perspective in computer games, it has become clear that the ideological perspective structure that is determined by various points of evaluation and conveyed through narrative as well as ludic events plays an important role in the perspectivation of events and situations in contemporary computer games. There is still much conceptual and terminological work left to do especially with regard to the ideological perspective structure. Nevertheless, we believe that the three dimensions of perspective described in this paper allow an analysis of the most central ways in which the events in computer games are perspectivated.

In conclusion, it can be stated that most of the models of perspective developed for literary texts and narrative films cannot be directly applied to computer games. It has, however, also become clear that concepts and terminology developed in literary and film narratology possess considerable heuristic value for the analysis of different media, such as computer games. When attempting to transfer theoretical concepts such as 'perspective' to new domains, awareness of the specific characteristics of the different media doubtlessly is of central importance. Nevertheless, these differences do not necessarily prevent such a transfer from being successful.

#### **Computer Games**

Doom (1993). ID. PC.

Fable (2004). Lionhead / Microsoft. Xbox.

Grand Theft Auto: San Andreas (2005). Rockstar. PC.

Halo (2001). Bungie / Microsoft. Xbox.

Halo 2 (2004). Bungie / Microsoft. Xbox.

Jade Empire (2005). Bioware / Microsoft. Xbox.

Myst (1993). Cyan Worlds / Brøderbund. PC.

Pro Evolution Soccer (2001). Konami. PS2.

SWAT 4 (2005). Irrational / Sierra. PC

Tomb Raider (1996). Core/Eidos. PC.

Warcraft III (2002). Blizzard. PC.

Warhammer 40,000: Dawn of War (2004). Relic / THQ. PC.

World of Warcraft (2004). Blizzard. PC.

Z (1996). Bitmap Brothers / Renegade. PC.

#### References

**Aarseth**, Espen (2004): "Genre Trouble: Narrativism and the Art of Simulation." In: Noah Wardrip-Fruin / Pat Harrigan (eds): *FirstPerson. New Media as Story, Performance, and Game.* Cambridge, Mass. and London: MIT Press. Pp. 45-55.

**Aarseth**, Espen (2001): "Computer Game Studies, Year One." In: *Game Studies* 1(1). Online: <a href="http://www.gamestudies.org/0101/editorial.html">http://www.gamestudies.org/0101/editorial.html</a>>. Retrieved 01.08.2006.

**Bartels**, Klaus (2005): *Cyborgs, Servonen, Avatare. Über semiotische Prothetik.* Köln: Walther König.

**Barwood**, Hal (2000): "Cutting to the Chase: Cinematic Construction for Gamers." In: *Gamasutra*. Online: <a href="http://www.gamasutra.com/features/20000518/barwood\_pfv.htm">http://www.gamasutra.com/features/20000518/barwood\_pfv.htm</a>. Retrieved 01.08.2006.

**Branigan**, Edward (1984): *Point of View in the Cinema. A Theory of Narration and Subjectivity in Classical Film.* Berlin (a.o.): Mouton.

**Buchanan**, Elisabeth A. / Charles Ess (2005): "Introduction: The Ethics of E-Games." In: *International Review of Information Ethics* 4 (2005) pp. 2-7. Online: <a href="http://www.i-r-i-e.net/inhalt/004/004">http://www.i-r-i-e.net/inhalt/004/004</a> full.pdf>. Retrieved 01.08.2006.

**Chatman**, Seymour (1978): *Story and Discourse. Narrative Structure in Fiction and Film.* Ithaca: Cornell University Press.

**Chatman**, Seymour (1990): *Coming to Terms. The Rhetoric of Narrative in Fiction and Film.* Ithaca and London: Cornell University Press.

**Doležel**, Lubomír (1998): *Heterocosmica. Fiction and Possible Worlds*. Baltimore and London: The Johns Hopkins University Press.

**Ermi**, Laura / Frans Mäyrä (2005): "Fundamental Components of the Gameplay Experience: Analysing Immersion." In: *Digra 2005 Proceedings*. Online: <a href="http://www.gamesconference.org/digra2005/viewpaper.php?id=267&print=1">http://www.gamesconference.org/digra2005/viewpaper.php?id=267&print=1</a>. Retrieved 01.08.2006.

**Eskelinen**, Markku (2001): "The Gaming Situation." In: Game Studies 1/1 (2001). Online: <a href="http://www.gamestudies.org/0101/eskelinen">http://www.gamestudies.org/0101/eskelinen</a>>. Retrieved: 01.08.2006.

**Eskelinen**, Markku (2005): "Towards Computer Game Studies." In: Noah Wardrip-Fruin / Pat Harrigan (eds): *FirstPerson. New Media as Story, Performance, and Game.* Cambridge, Mass. and London: MIT Press. Pp. 36-44.

**Frasca**, Gonzales (2003): "Ludologists love stories, too: notes from a debate that never took place." In: *Level Up 2003 Proceedings*. Pp. 92-99. Online:

<a href="http://digra.org/dl/db/05163.01125">http://digra.org/dl/db/05163.01125</a>. Retrieved 01.08.2006.

**Herz**, J.C. (1997): *Joystick Nation. How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds.* Boston (a.o.): Little, Brown and Company.

**Hühn**, Peter / Jörg Schönert (2005): "Introduction: The Theory and Methodology of the Narratological Analysis of Lyric Poetry." In: Peter Hühn / Jens Kiefer (eds): *The Narratological Analysis of Lyric Poetry. Studies in English Poetry from the 16th to the 20th Century*. Berlin and New York: de Gruyter. Pp. 1-13.

**Jahn-Sudmann**, Andreas / Rolf Stockmann (2006): "Anti-PC-Games. Exploring Articulations of the 'Politically Incorrect' in *GTA San Andreas*." To appear in: Andreas Jahn-Sudmann / Rolf Stockmann (eds): *Games withour Frontiers - War without Tears. Computer Games as a Sociocultural Phenomenon*. (In preparation.)

**Jannidis**, Fotis (2004): Figur und Person. Beitrag zu einer historischen Narratologie. Berlin and New York: de Gruyter.

**Jenkins**, Henry (2004): "Game Design as Narrative Architecture." In: Noah Wardrip-Fruin / Pat Harrigan (eds): *FirstPerson. New Media as Story, Performance, and Game.* Cambridge, Mass. and London: MIT Press. Pp. 118-130.

**Juul**, Jesper (2005): *Half-Real: Video games between real rules and fictional worlds*. Cambridge, Mass. and London: MIT Press.

**Klevjer**, Rune (2001): "Computer Game Aesthetics and Media Studies." Paper presented at the 15th Nordic Conference on Media and Communication Research. Reykjavik, Iceland, 11.-13.08.2001. Online: <a href="http://uib.no/people/smkrk/docs/klevjerpaper\_2001.htm">http://uib.no/people/smkrk/docs/klevjerpaper\_2001.htm</a>. Retrieved: 01.08.2006.

**Klevjer**, Rune (2002): "In Defense of Cutscenes." In: Frans Mäyrä (ed.): *Proceedings of Computer Games and Digital Cultures Conference*. Tampere: Tampere University Press. Pp. 191-202. Online: <a href="http://digra.org/dl/db/05164.50328">http://digra.org/dl/db/05164.50328</a>>. Retrieved 01.08.2006.

**Kindt**, Tom / Hans-Harald Müller (2006): *The Implied Author. Concept and Controversy.* Berlin and New York: de Gruyter.

**Manninen**, Tony (2004): *Rich interaction model for game and virtual environment design*. Ph.D. Thesis Oulu University. Oulu: University Press. Online:

<a href="http://herkules.oulu.fi/isbn9514272544/">http://herkules.oulu.fi/isbn9514272544/</a>>. Retrieved: 01.08.2006.

Mertens, Mathias / Tobias O. Meißner (2002): Wir waren Space Invaders. Geschichten vom Computerspielen. Frankfurt a.M.: Eichborn.

**Murray**, Janet H. (1997): *Hamlet on the Holodeck. The Future of Narrative in Cyberspace*. New York: The Free Press.

**Mitry**, Jean (1998): *The Aesthetics and Psychology of the Cinema*. London: Athlone Press. **Neitzel**, Britta (2001): "Point of View and Point of Action. A Perspective on Perspective in Computer Games." Paper presented at the The Challenge of Computer Games Conference. Lodz, Poland, 25.-27.10.2002. (In Preparation. Manuscript kindly forwarded by the author.)

**Neitzel**, Britta / Matthias Bopp / Rolf F. Nohr (eds) (2004): "See? I'm Real.." Multidisziplinäre Zugänge zum Computerspiel am Beispiel von 'Silent Hill'. Münster: LIT.

**Neitzel**, Britta (2005): "Narrativity in Computer Games." In: Jost Raessens / Jeffrey Goldstein (eds): *Handbook of Computer Game Studies*. Cambridge, Mass. and London: MIT Press. Pp. 227-245.

**Nünning**, Ansgar (2001): On the Perspective Structure of Narrative Texts. Steps toward a Constructivist Narratology. In: Willie van Peer / Seymour Chatman (eds): *New Perspectives on Narrative Perspective*. Albany: State University of New York Press. Pp. 207-224.

**Poole**, Steven (2004): *Trigger Happy*. New York: Arcade Publishing.

**Prince**, Gerald (2003): *Dictionary of Narratology*. Revised Edition. Lincoln and London: University of Nebraska Press.

**Raessens**, Jost / Jeffrey Goldstein (eds) (2005): *Handbook of Computer Game Studies*. Cambridge, Mass and London: MIT Press.

**Rollings**, Andrew / Ernest Adams (2003): *Andrew Rollings and Ernest Adams on Game Design*. Berkeley: New Riders.

**Rouse**, Richard III (1999): "What's Your Perspective?" In: *Computer Graphics* 33/3 (1999). Online: <a href="http://www.paranoidproductions.com/gamingandgraphics/fifth.html">http://www.paranoidproductions.com/gamingandgraphics/fifth.html</a>. Retrieved 01.08.2006.

Rouse, Richard (2005): Game Design. Theory & Practice. Plano, Texas: Wordware.

**Rumbke**, Leif (2005): *Pixel³*. *Raumrepräsentation im klassischen Computerspiel*. Hausarbeit Kunsthochschule für Medien, Köln. Online: <a href="http://www.rumbke.de/data/text/pixel3%20-%20leif%20rumbke%202005.pdf">http://www.rumbke.de/data/text/pixel3%20-%20leif%20rumbke%202005.pdf</a>>. Retrieved 01.03.2006.

**Ryan**, Marie-Laure (1991): *Possible Worlds, Artificial Intelligence, and Narrative Theory*. Bloomington and Indianapolis: Indiana University Press.

**Ryan**, Marie-Laure (2001): *Narrative as Virtual Reality. Immersion and Interactivity in Literature and Electronic Media*. Baltimore and London: The Johns Hopkins University Press. **Ryan**, Marie-Laure (2001a): "Narrative Beyond Myth and Metaphor." In: *Game Studies* 1/1 (2001). Online: <a href="http://www.gamestudies.org/0101/ryan/">http://www.gamestudies.org/0101/ryan/</a>. Retrieved: 01.08.2006.

**Ryan**, Marie-Laure (2004) (ed.): *Narrative across Media. The Languages of Storytelling*. Lincoln and London: University of Nebraska Press.

**Ryan**, Marie-Laure (2004a): "Introduction." In: Marie-Laure Ryan (ed.): *Narrative across Media. The Languages of Storytelling.* Lincoln and London: University of Nebraska Press. Pp. 1-40

**Schirra**, Jörg R. J. / Stefan Carl-McGrath (2002): "Identifikationsformen in Computerspiel und Spielfilm." In: Michael Strübel (ed.): *Film und Krieg. Die Inszenierung von Politik zwischen Apologetik und Apokalypse*. Opladen: Leske+Budrich. Pp. 149-163.

**Schmid**, Wolf (2005): *Elemente der Narratologie*. Berlin and New York: de Gruyter.

**Sicart**, Miguel (2005): "Game, Player, Ethics: A Virtue Ethics Approach to Computer Games." In: *International Review of Information Ethics* 4 (2005) pp. 13-18. Online: <a href="http://www.i-r-i-e.net/inhalt/004/004">http://www.i-r-i-e.net/inhalt/004/004</a> full.pdf>. Retrieved 01.08.2006.

Smith, Murray (1995): Engaging Characters. Oxford (a.o.): Oxford University Press.

**Steiner**, Wendy (2004): "Pictorial Narrativity." In: Marie-Laure Ryan (ed.): *Narrative across Media. The Languages of Storytelling*. Lincoln and London: University of Nebraska Press. Pp. 145-177.

**Surkamp**, Carola (2003): *Die Perspektivenstruktur narrativer Texte. Zu ihrer Theorie und Geschichte im englischen Roman zwischen Viktorianismus und Moderne*. Trier: Wissenschaftlicher Verlag.

**Tarasti**, Eero (2004): "Music as Narrative Art." In: Marie-Laure Ryan (ed.): *Narrative across Media. The Languages of Storytelling.* Lincoln and London: University of Nebraska Press. Pp. 283-304.

**Taylor**, Laurie N. (2002): *Video Games: Perspective, Point-of-View, and Immersion*. M.A. Thesis University of Florida. In: Gamasutra. Online:

<a href="http://www.gamasutra.com/education/theses/20030818/taylor\_thesis.pdf">http://www.gamasutra.com/education/theses/20030818/taylor\_thesis.pdf</a>>. Retrieved 01.08.2006.

**Thon**, Jan-Noël (2005): "Das Videospiel als Entwicklungsroman des 21. Jahrhunderts?" In: *Tiefenschärfe* Sommer (2005) pp. 23-27. Online: <a href="http://www.sign-lang.uni-hamburg.de/Medienprojekt/tiefenschaerfe/pdfe/ts">http://www.sign-lang.uni-hamburg.de/Medienprojekt/tiefenschaerfe/pdfe/ts</a> 1-05.pdf</a>>. Retrieved 01.08.2006.

**Thon**, Jan-Noël (2005a): "Schauplätze und Ereignisse. Über Erzähltechniken im Computerspiel des 21. Jahrhunderts." Paper presented at the Jahrestagung der Gesellschaft für Medienwissenschaften, Hamburg, 6.-8. Oktober 2005. To appear in: Corinna Müller (ed.) (in print): *Mediale Ordnungen. Erzählen, Archivieren, Beschreiben*. Marburg.

**Thon**, Jan-Noël (2006): "Communication and Interaction in Multiplayer First-Person-Shooter Games." In: Giuseppe Riva et al. (eds): From Communication to Presence. Cognition, Emotions and Culture towards the Ultimate Communicative Experience. Festschrift in honor of Luigi Anolli. Amsterdam: IOS Press. Pp. 243-265.

**Thon**, Jan-Noël (2006a): "Immersion revisited. Varianten von Immersion im Computerspiel des 21. Jahrhunderts." Paper presented at the 19. Film- und Fernsehwissenschaftliches Kolloquium in Göttingen, Germany. (In preparation.)

**Uspenskij**, Boris (1973): A Poetics of Composition. The Structure of the Poetic Text and Typology of a Compositional Form. Berkeley: University of California Press.

**Wardrip-Fruin**, Noah / Pat Harrigan (eds) (2005): *FirstPerson. New Media as Story, Performance, and Game.* Cambridge, Mass. and London: MIT Press.

**Wolf**, Mark J. P. (2001): "Space in the Video Game." In: Wolf, Mark J. P. (ed.): *The Medium of the Video Game*. Austin, Texas: University of Texas Press. Pp. 51-76.

**Wolf**, Mark J. P. / Bernard Perron (eds) (2003) *The Video Game Theory Reader*. New York: Routledge.



Figure 1: Subjective point of view in *Doom* (1993)



Figure 2: Subjective point of view in *Halo* (2001)

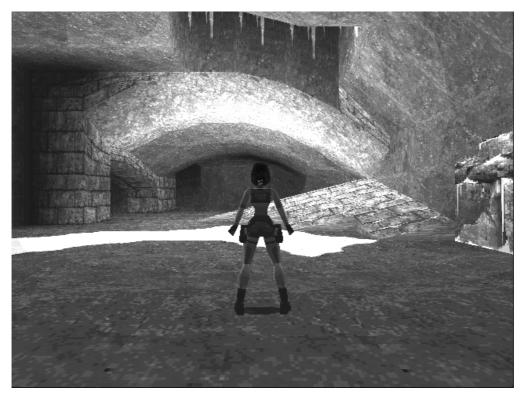


Figure 3: Semi-subjective point of view in *Tomb Raider* (1996)



Figure 4: Semi-subjective point of view in World of Warcraft (2004)

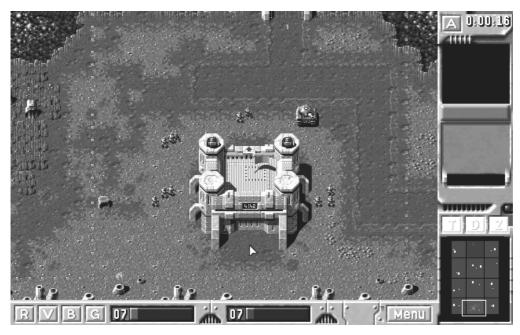


Figure 5: Objective point of view in Z (1996)



Figure 6: Objective point of view in Warhammer 40.000: Dawn of War (2004)



Figure 7: Lara Croft in *Tomb Raider* (1995), looking to her upper-left hand side

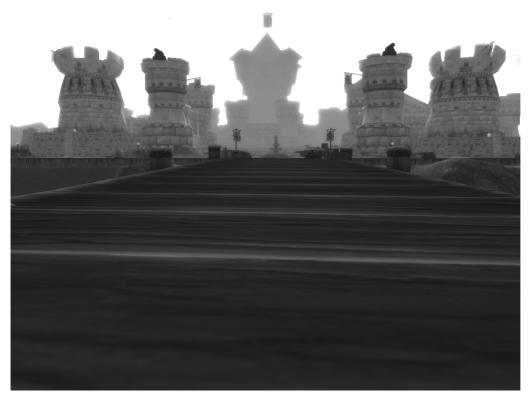


Figure 8: Subjective point of view in World of Warcraft (2004)