# A phenomenological account of the playingbody in avatar-based action games

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# **Introduction**

As many writers have acknowledged, all videogame play is an embodied experience (Giddings & Kennedy 2008; Swallwell 2008). This paper takes a phenomenological approach to the question of embodiment in avatar-based action videogame play. Specifically, it draws upon Merleau-Ponty's distinction in *The Phenomenology of Perception* (2002[1945]) between the objective and the phenomenal body and Martin Heidegger's sections on tool-use in *Being and Time* (1962). The paper argues that while the manual controller can be thought of as a tool that broadly fits into Heidegger's description, the avatar presents itself in a strange double-mode which acts to embody the player in a specific way.

The starting point of this paper is to refocus the notion of presence away from the game environment and toward the play space. Here, the game environment is defined as the environment that is simulated by the game engine, presented in an audio-visual display, and navigated by the player through the avatar. The play space is drawn from Michael Nitsche (2008: 15-16). It is the total space that comes into being in the moment of play and is inhabited by both player and game.

The virtual environment has been a focus of virtual reality (VR) research and, while some research on games has adopted a similar approach (Persky & Blascovich 2008; Lee, Jin, Park, & Kang 2005), it is not at all apparent that such a crossover is valuable. In VR research there is an implicit suggestion that presence is in some sense better when it approximates to presence as it would be experienced were there no technological mediation. This is seen in the various definitions of presence in the VR literature: Sheridan's 'being there' (1992) where

'there' is the virtual or distal environment, or Lombard and Ditton's 'the illusion of non-mediation' (1997). But presence in games can be pleasurable and interesting without approximating imagined presence in the game environment to presence in the world. Indeed, any sense of presence in the game environment is weak and fleeting at best.

It may be useful, therefore, to look not at a player's sense of presence in the game environment but rather presence in the play space. This is a shift from a question of *where* I am present to one of *how* I am present; a question of transformation rather than transportation. This paper employs a phenomenological perspective to understand how this transformation occurs. Embodiment is defined here as the means by which the linked-up game/player organises the playing-body in play space. The playing-body, then, is the Merleau-Pontean phenomenal body as it exists and changes during play. The emergence of a play space and corresponding playing-body in the moment of play is what is meant by the idea of a game embodying the player. That is, in order to inhabit the play space the player must organise his or her body appropriately; must take on a playing-body that is inferred by the game. Just as play space does not precede the relation between player and game but is rather a product of it, the playing-body arises through the player-game interaction and comes into existence in the moment of play.

This idea of the playing-body is coupled with a conception of the avatar and the controller through the distinction made by Heidegger between the ready-to-hand and the present-at-hand tool. As has been contended elsewhere (Sommerseth 2007), the controller is a tool that is ready-to-hand as long as it is functioning correctly. But the avatar is more unusual. It is a tool through which the player perceives, manipulates and navigates through the game environment, but it is also an object of perception – often a particularly spectacular object of perception. It has a double existence, something that has been pointed out by Burn & Schott (2004) using different terminology. Embodiment in games is determined in large part by this double relationshiTo understand embodiment as it pertains to the avatar as ready-to-hand tool we can think about tool-use and prosthetics (Murray & Sixsmith 1999; De Preester & Tsakiris 2009). To understand embodiment as it pertains to the avatar as present-at-hand image we can think about research on empathy (Martin 1939; Leigh Foster 2011).

This gives a fuller sense of the embodiments that games entail, taking account not of the extent to which the player is, or feels, 'in' the game environment, but on the way in which the player inhabits the play space.

## Heidegger

As a means of performing actions the avatar can be considered equipment as theorised by Martin Heidegger (1962) in *Being and Time* and defined as 'those entities which we encounter in concern' (97). To encounter entities 'in concern' means to use or produce these entities as part of some kind of project. Heidegger gives a number of examples: 'having to do with something, producing something, attending to something and looking after it, making use of something, giving something up and letting it go, undertaking, accomplishing, evincing, interrogating, considering, discussing determining ...' (Heidegger 1962: 83). Equipment is 'something in-order-to' (Heidegger 1962: 97). A piece of equipment does not exist independently but rather as part of an arrangement of equipment. In using equipment we encounter it in a specific way:

In dealings such as this, where something is put to use, our concern subordinates itself to the "in-order-to" which is constitutive for the equipment we are employing at the time; the less we just stare at the hammer-Thing, and the more we seize hold of it and use it, the more primordial does our relationship to it become, and the more unveiledly is it encountered as that which it is – as equipment. (Heidegger 1962: 98)

Here, Heidegger distinguishes two ways of encountering the hammer. In the first case we 'just stare at' it. This is to look 'theoretically'; a kind of looking in which the hammer is 'present-at-hand.' In the second case we put the hammer to its use – hammering. This is to look 'in-order-to'; a kind of looking that Heidegger calls circumspection (*umsicht*) and in which the hammer is 'ready-to-hand.' In the above quote, however, these two ways of encountering equipment are not entirely separated. Equipment is not *either* present-at-hand *or* ready-to-hand but some mixture of the two depending on how much we 'just stare' and how much we 'seize hold.'

The avatar proves an interesting element of game equipment in this respect. There are several characteristics of the game avatar that encourage the player to 'seize hold.' It is one of the

chief means by which the player can access and perceive different areas of the game environment and accomplish game tasks through the controller/keyboard. But as well as being the *means* of perception it is also a main *object* of perception, encouraging the player to 'just stare.' Unlike hammers, pens, or other kinds of equipment, the avatar is represented to a greater or lesser extent as a sentient being with its own character, awareness and intelligence and this encourages, or at least provides the possibility of, an empathic as well as a practical relationship for the player.

The avatar's relationship to the player, then, can be considered in two ways. Firstly, it is an instrument of perception and action. It is, in Heidegger's sense, ready-to-hand. But unlike other instruments of perception (spectacles, microscopes, hearing aids) or other instruments of action (hammers, canes, weapons) it is also one of the objects of perception. As an object of perception it is an image of some kind. This image may entail or point to human characteristics, identities, personality traits, and personal history or may be an object with few or none of these features. Here, the avatar-tool is present-at-hand. However, contrary to Heidegger's position that suggests the tool only becomes present-at-hand when it is no longer effective, here the avatar's status as both instrument of action and perception and object of perception means that it does not have to 'break down' in order for it to become present-athand. In fact, we often think of breakdown occurring with respect to the avatar just when the avatar can no longer occupy its double role effectively. In these situations the particular characteristics of the avatar as ready-to-hand equipment prevent it from being perceived as an object. This happens in some mini-games where the player must press button combinations as they appear on screen. For example, as this mechanism is employed in combat scenes in Fahrenheit/Indigo Prophecy (Quantic Dream 2005), the player's attention is taken away from the avatar and its actions to the button press commands. The elaborate combat animations are beyond the player whose eyes must remain firmly focussed on the quickly changing commands overlaid on the screen. Here, the avatar is ready-to-hand but not present-at-hand. That is, it functions as a tool – accomplishing actions in the game world – but not as a tool of perception of itself. Therefore it does not sustain the doubleness we see in other avatar types.

# The playing-body as a Merleau-Pontean phenomenal body

How does this doubleness of the avatar affect the player's embodied presence during play? One way of thinking about this is through a phenomenological account of presence and the body. In describing his learning and mastery of *Breakout* (Atari 1976) David Sudnow (2000[1983]) sees the appeal of the game in how it transforms the body:

Maybe it all has to do with the fact that when interfaced on the TV screen, the human body is an altogether unaccustomed setting, as holistic three-dimensional movements are graphed onto a two-dimensional plane. (48)

Here Sudnow is making a strong claim: the human body is conceived not as an identity but as a setting and this setting transforms in the moment of play. Sudnow's description of play is grounded in a phenomenological approach, and it is through a phenomenological lens that this idea of the body as capable of being transformed through interaction with technology can be best understood.

Phenomenology gives us a framework within which to think about the diffuse nature of the contemporary body and therefore is a useful starting point in thinking about the body in games. What version of the body, then, is put forward by phenomenology? In *The Primacy of* Perception, an essay summarising and defending his most influential book, The Phenomenology of Perception, Merleau-Ponty defines the body as 'the system of all my holds on the world' (2002: 440). This definition suggests that the body is constantly extending itself beyond the borders of the flesh and into the wide world and all its nooks and crannies that are accessible to perception and reflection. If it were possible to perceive this body as a coherent object it would have a constantly shifting shape; the 'system of holds' changing as the subject moves about in and considers the world. Every posture, every gesture, every attitude and every pattern of thought, alters the shape or organisation of this body in some way. Through perception the body reaches out of the physical or 'objective' body. This more ephemeral, protean entity Merleau-Ponty calls the phenomenal body (2002[1945]: 121). The body does not only rely on its own apparatus to reach into the world, but can also make use of tools. Merleau-Ponty gives the example of the blind person's cane which in its role as a means of perceiving the world becomes a part of the user's body. While the cane allows the phenomenal body to reach out into the immediate vicinity of the objective body, other tools can be used for more ambitious re-organisations. The body has gained significant reach with the development of telecommunication technology over the course of the last 150 years. The telephone, while obviously not transporting the objective body to the site of the interlocutor,

gives the phenomenal body a significant presence there in a way that fundamentally changes the body's relation to the site both of the objective body and of that of the interlocutor. Merleau-Ponty demonstrates the difference between the objective and phenomenal body through analyses of various psychopathologies of the body in which the patient suffers a dissociation between the two. For example, such a patient has trouble locating and touching a point on his arm when asked to do so, but can immediately and smoothly find a part of his arm in order to scratch a mosquito sting. Both actions – the voluntary and the reflexive – are made up of the same potential sequence of movements as seen 'from the outside,' but the patient is clearly making use of different movement repertories in each case. In the first, in which the patient attempts to consciously find a point on his body, he is treating his body as an object and so is attempting to locate a point in objective space; a task he finds difficult. In the second case, in which the patient responds to a sting, he is not operating on objective space but is rather 'in the domain of the phenomenal' (Merleau-Ponty 2002[1945]: 121). The relationship between the hand and the spot to be scratched is not understood in terms of distance and angle. The hand becomes 'a scratching potentiality,' with the place stung a 'spot to be scratched' (Merleau-Ponty 2002[1945]: 121). The spot to be scratched 'calls out' to the potentiality, which in turn leans towards the spot to be scratched.

One of the ways in which actions are transferred between these domains – the objective and the phenomenal – is through habit. The same patient who finds pointing out objects difficult has little trouble in his job sewing wallets. He does not approach his tools and materials as objects in space but incorporates them into his phenomenal body. Habit, therefore, is not understood simply as the acceleration of objective calculations necessary to complete a task but as a transformation of the task due to a change in the body's attitude to the task, passing from the objective to the phenomenal domain.

All activities are embodied in the sense that they all require some re-organisation of the phenomenal body. There is no reason to suggest, however, that there is some natural resting position of the phenomenal body. As Heidegger would say, we are thrown into the world; we do not approach the world from elsewhere and adapt some natural body to it. The way that the body organises itself on the telephone is as natural or unnatural as the way it organises itself in face-to-face conversation, in sports, in novel-reading or any other activity. While telephone technology causes users to re-organise their body in such a way as to occupy different real places, videogames cause users to re-organise their body to occupy a game-space that is

composed of the different modalities outlined by Stockburger. Similarly, playing *Dance Dance Revolution* (Konami 1998) in an arcade, *Motion Sports* (Ubisoft Milan 2010) on the Kinect, and *Counter Strike* (Valve Corporation 1999) on the PC are equally embodied experiences, though the pattern of shapes the body takes differs for each game.

How might we think about the range of shapes that the body takes in relation to games? Melanie Swallwell (2008) comments on the embodied nature of videogame play when she asserts that gamers 'play not just with their hands but with their whole body' (90). With respect to the objective body, this is patently false. Of course, my whole body is present when I play, but there are a number of organs that are actively involved in the playing of the game, with others less active or not concerned at all with the game. However, with respect to the phenomenal body, the claim is justifiable. Merleau-Ponty (2002[1945])describes the way in which the body can arrange itself in consciousness based on action, saying that the 'body image' integrates the parts of the body 'only in proportion to their value to the organism's projects' (114):

If I stand in front of my desk and lean on it with both hands, only my hands are stressed and the whole of my body trails behind them like the tail of a comet. It is not that I am unaware of my shoulders or back, but these are simply swallowed up in the position of my hands, and my whole posture can be read, so to speak, in the pressure they exert on the table. (115)

In games we get the same kind of stressing on certain parts of the body. Sudnow (2000[1983]) remarks his neighbours' failed efforts to learn *Breakout*, and puts it down to an inability 'to effect that transformation of sense needed to engage himself with big looking movements through little feeling ones' (28). This 'transformation of sense' is happening at the level of the phenomenal body and is facilitated or determined by the tools available to the player. We must therefore think about these tools in order to understand the playing-body for particular games. Focussing just on games that use a keyboard or manual controller and putting aside the various forms of gestural control, these parts are the brain, the eyes, the ears, and the hands. Other parts of the body are involved at a less intense level – at exciting points the heart rate may increase, breathing may be affected, skin conductance may increase, and so on. But much of the body 'trails behind' like Merleau-Ponty's comet tail, as the phenomenal body organises itself in relation to the tools, the demands and the intensities of the game.

## The double avatar in game studies

Calvillo-Gamez and Cairns (2008) draw on Heidegger to demonstrate this doubleness not with respect to the avatar but with respect to the game itself (310-11). They compare the gaming experience to puppetry, suggesting that the player is both puppeteer who controls and manipulates the game and audience who experience the game as real. Citing Steve Tillis's (1992) work on puppetry they contend that the latter role of audience involves a 'double vision' where the player as audience is able to see the game both as game and as real. The present approach might be considered a special case of Calvillo-Gamez and Cairns' thesis, taking the avatar rather than the game itself (or the sum total of the player's agency) to be the puppet. But if we focus just on the avatar then the player-audience's 'double-vision' is more like that of the puppet show audience where the doubleness comes from an oscillation between a human-shaped object and a human character. This oscillation is not that between the avatar as tool and as spectacle. Rather, it is between the avatar as two different kinds of spectacle. The use of the term 'spectacle' here and throughout the thesis is used to emphasise the way in which the avatar as image actively displays itself to the player and commands attention. With respect to the avatar, then, there is a double-doubleness; on the one hand between the avatar as image and as tool and on the other as human (or at least sentient) and as object.

The doubleness of the avatar specifically is considered by several writers (Barr, Biddle, & Brown 2006; Burn & Schott 2004; Linderoth 2002; Taylor 2003). This often comes down to the rules/fiction duality developed most fully by Juul (2005). Barr et al. (2006), for example, distinguish the avatar as 'fictional character' on the one hand and 'interface to gameplay' on the other (2). Discussing the role playing game *Final Fantasy VII* (Square 1997; hereafter *FFVII*) Burn and Schott (2004) see the avatar as 'a two-part structure, partly designed in conventional narrative terms as a protagonist of popular narrative, and partly as a vehicle for interactive game-play' (2). The former they call the 'heavy hero' and characterise as an 'offer act,' where the game offers an image or character type to the player. The latter they call the 'digital dummy' and characterise as a 'demand act,' where the game requires particular actions on the part of the player. We 'read' the 'heavy hero' but we 'play' the 'digital dummy' (Burn and Schott 2004: 11). These two acts become integrated through gameplay.

Burn and Schott draw on Linderoth's (2002) distinction between the 'system' and the 'guise' of the game. Due to the importance of the fictional element in *FFVII*, the guise is almost synonymous with 'fiction,' with its overtones of character and narrative. However, Burn and Schott do define guise as 'the visible game-world, narrative and characters' (215), allowing for a broader sense than just narrative and characters would. They analyse a player's description of *FFVII* and identify the slippage between second and third-person descriptions of the avatar in the moment when respondents move from discussing the game's protagonist Cloud in the guise of the game – *his* character, *his* backstory, how *he* looks etc. – to discussing Cloud in the system of the game – what *you* have to do to get through the game. They see this as indicative of a constant movement for the player between different modes of engaging with the game. It is possible that different games, and different kinds of games, have different rhythms of oscillation between presenting the game primarily as guise and system (Burn and Schott 2004: 17).

Some writers see the avatar as disrupting a smooth or immediate form of telepresence that is otherwise possible by introducing a confusing middle term between the player and the virtual environment. Denise Doyle (2009), for example, distinguishes between virtual reality as practiced by Char Davies, in which there is no avatar representation, with virtual worlds such as *Second Life*. In *Second Life*, due in large part to the avatar, there is for the user a mix of 'objective "looking" and a subjective sense of "being" (Doyle 2009: 138). This leads to a bifurcation of the body into, drawing on the work of Don Ihde, a 'here-body' which is multi-dimensional, and an 'image-body,' which is a less rich form of presence through the body of the avatar.

Laurie Taylor (2003) makes a similar point in differentiating first-person from third-person videogames, with the former, by removing the avatar, circumventing the ambiguities involved with 'the paradox of the subject's own perception of self' (para. 19). In the same article, Taylor identifies this doubleness of the avatar in suggesting two kinds of identification in videogames. The first is 'the extension of ability to access objects within the screen' (2003: para. 14). This is the avatar as instrument. The second is 'identification with the role and position within the other space' (2003: para. 14). This is the avatar as character or spectacle. However, the term 'identification' is used by Taylor in a stronger sense than the sympathy that a character in a film may precipitate when we say 'I identified with that character.' Taylor sees videogame identification as 'narcissistic projection,' without which 'the player remains

outside the screen and can operate on the screen, but not from within the screen.' (2003: para. 16).

In his PhD thesis, Rune Klevjer rejects the characterisation of the avatar as a tool in the Heideggerian sense, arguing that that avatar 'does not expose our actual bodies to the environment' (2006: 98). This is in contrast to tools which 'extend[] the functioning of the body directly and set[] up a new bodily space which could potentially hurt it' (98). The important distinction here is between the game environment – the environment presented on screen in which the avatar is imagined to reside – and the play space – the total space which includes both player and game. This play space can be thought of as 'a new bodily space which could potentially hurt' the body. While the player's body is not directly exposed to the dangers of Tamriel or the Mushroom Kingdom when playing *Elder Scrolls* (Bethesda Game Studios 1994-2011) or *Super Mario World*., it is being manipulated indirectly through the effect that actions in these realms have upon the playing-body. This range of physical, emotional, and intellectual effects are not identical with those which the avatar is supposed to be experiencing, but they are an essential part of the embodied experience of playing the game and are determined in large part by the avatar's characteristics. The extension here is not into the game environment but across the play space.

James Newman (2002a; 2002b) employs a multi-modal approach in describing games as containing sequences of greater or lesser player control and as encountered by people who exercise different levels of control, from primary controlling players to onlookers. Newman argues that for the primary controlling player at times of high control the avatar is a means toward 'vehicular embodiment' (2002a: para. 3). In these conditions it is constituted as 'a set of potentials, available techniques, opportunities and capabilities which can be embodied, expanding the abilities of the player and equipping them for the task at hand' (Newman 2002b: 418). But the character is also partly a character as we conventionally think of this in terms of stories in other media. This is particularly true for people with less direct control and during sections such as cut-scenes when control is reduced.

While Newman denies or plays down the role of empathy for the primary player, Diane Carr (2003) draws on the work of Lesley Stern on corporeal empathy in film to describe corporeal empathy in games. However, she acknowledges the differences between cinema and games, making a direct mapping of cinematic identification into what she calls 'ergodic identification'

problematic. Specifically, the necessity for players to 'take action' during games contrasts with the different demands placed on the cinema audience. Carr also suggests that the multiple modes through which the player and avatar are linked – different 'perspectives, modes, channels, menus, inputs and outputs' – require several different models to account for player-avatar relations (Carr 2003: 68).

Focusing on *Lego Star Wars* (Traveller's Tales 2005), Giddings and Kennedy (2008) see the avatar as both character, where the player delights in playing as Chewbacca or Yoda from the Star Wars films but also, and primarily, as 'the affordances of the chosen characters, that is what can be done with that character within the demands of the game world' (23). These two senses of the avatar – as vehicle and as character – are 'articulated' (Giddings and Kennedy 2008: 24). That is, we cannot associate kinaesthetic pleasures or corporeal empathy solely with the avatar as vehicle nor can we associate visual pleasures and psychological empathy solely with the avatar as character.

Gregersen and Grodal (2009) suggest two separate systems for how the player's body and the game world inter-relate. Empathy caused by the response of mirror neurons to the game's audio-visual information activates the player's motor systems, re-creating the conditions of the virtual world in the body. At the same time, tool use activates the somatosensory and proprioceptive systems, extending the player's body into the virtual world (69). Here, empathy for the avatar is associated with the avatar as image, while placement of the player in the game environment is associated with the avatar as tool.

# Reading the avatar as double

With this concept of the playing-body established let us return to the distinction between the avatar as on the one hand a means of perception and action (ready-to-hand) and on the other as an object of perception (present-at-hand). The avatar's peculiar double status does not mean that the avatar is encountered by the player as two separate things. However, for the purposes of explanation it is useful to treat separately the aspects of the avatar that fall under each category.

#### Means of perception and action

The most obvious example of the avatar as a means of perception is in games that have a first person viewpoint, where the player sees as if through the eyes of the character. Similarly, in games where the viewpoint is from behind and slightly above the avatar, there is an overlap between what the character 'sees' and what the player sees. In this case there is often a virtual camera that the player manipulates in concert with the avatar to perceive the game environment. Alternatively, the player may be only in control of the avatar, with the virtual camera following the avatar's actions. The avatar is still a means of perception in games where this direct overlap between what the player sees and what the character sees is absent. In side-scroller platform games, for example, the character 'sees' off screen while the player can see behind the character's back. The avatar is still a means of perception in these games since it is by manoeuvring the avatar that the player determines the areas of the play space that can be perceived. These platform games may contain sections where the function of avatar as means of perception is taken away, for example in the penultimate section of Iggy's Castle in Super Mario World (Nintendo 1990), where the screen view moves automatically and at a constant pace from left to right regardless of the speed at which the player moves Mario, or the prologue to the final level in *Sonic 2* (Sonic Team 1992), where the scrolling follows the speed of the plane and not the movements of Sonic. Most team sports games function in a different way. In the normal mode for soccer games like the more recent games in the FIFA (EA Sports 1993-2011) or Pro Evolution Soccer (Konami 2001-2011) series, for example, the camera responds to the movements of the avatars only indirectly in that it follows the ball. The position of the ball, however, is determined in part by the actions of the avatars. Sports games sometimes provide the option of sticking with particular players, for example in the Superstar mode in the last few *Madden NFL* games (EA Tiburon 2005-2011), but this is an alternative to the main ball-following method.

As well as being a means of perception, the avatar can be a means of completing game tasks. That is, it is a means of action. In many games it is through the avatar that the player collects items, destroys enemies, solves puzzles, talks to non-player characters and so on. Writing about his game *Adventure* for the Atari 2600, Warren Robinett (2006) comments on the relationship between player and avatar: 'When [players] say, "I ran into a wall" they mean the shape they moved ran into a wall; they *are* that shape' (697). This is a slight misstatement. Rather, that shape is a tool that the player has incorporated into their body. It is similar to a person saying 'I cut the cake,' when they really mean 'My knife cut the cake.' This statement does not strictly speaking mean that the person *is* their knife, but that the knife has

temporarily been incorporated into the person's body. If we use Merleau-Ponty's understanding of the tool as a means of perception, a blind person may say that they noticed a corner when they should say 'my stick noticed a corner.' To incorporate the tool into the body is more than a trick of speech; it demonstrates a real incorporation of the instrument into the phenomenal body of the subject through what Drew Leder (1990) calls 'phenomenological osmosis' (34). This is what is meant by Matthew Lombard and Theresa Ditton (1997) when they define presence as 'the illusion of non-mediation' ('Presence Explicated' section, para. 1). The mediation of the knife or the cane is temporarily forgotten in the way that the mediation of the screen or interface is temporarily forgotten in the moment of virtual presence. However, this incorporation of the tool into the body is not guaranteed, and may take place to a different degree in different situations. Certainly the relationship between the blind man and his cane is more likely to be thought of as an instance of incorporation than is the example of the person using a knife to cut a cake. In the former case the tool is used for a central act of perception and orientation and may be used for long periods of time over many years. In the latter case the tool is used for a less central task and for a shorter period, and in this case may be simply a linguistic contraction. However, even in cases in which we might expect incorporation it does not always occur. Craig Murray and Judith Sixsmith (1999), for example, found that while many users of prosthetic limbs come to consider the prosthesis as a part of their body, this is by no means universal, and when it does happen it is usually after many years of use (331-2). The tool is not, then, necessarily, incorporated into the body, but it can be. I would argue that the avatar as means of perception and action in the game environment often works towards the achievement of this kind of incorporation.

# Object of perception

But the avatar is also an object of perception; often, but not always, the main focus of the player's gaze. Generally speaking, the avatar is most spectacular at the moments when the player's game-playing skills are least in demand. This may happen on the one hand if there is little manipulation of controls or strategic thinking required on the part of the player and on the other if the player has become proficient enough with these tasks as to be able to do them while also encountering the avatar as image or character. In the midst of the action the player is not focussed on the avatar as spectacle but on how the avatar can impact the environment. When the avatar is offered as a spectacle this image is often shaped by cinematic conventions. Cut-scenes are the most obvious example of this. However, during gameplay cinematic

conventions may also be employed to frame the avatar as object of perception. In *GTA IV* (Rockstar North 2008), for example, when the avatar, Niko, is killed the game slows down like an over-cranked film sequence. Also, as in many 3-D type games, the player can change the position of the virtual camera. This option is usually included to accommodate players who are not happy with the way the camera operates at the default angle or distance. In *GTA: IV*, apart from the conventional game camera positions, a set of cinematic views is provided as an option, which makes playing the game very difficult, but reframes the avatar as a cinematic spectacle.

In order to examine the player's relationship to the avatar as spectacle it is useful to draw upon work on the body as spectacle from other disciplines. Antonin Artaud (1958) wrote the following on seeing a troupe of Balinese dancers perform:

through the labyrinth of their gestures [...] the sense of a new physical language, based upon signs and no longer upon words, is liberated. These actors, with their geometric robes seem to be animated hieroglyphs. (54)

The idea of movement as a form of non-linguistic communication has troubled many dance and theatre critics, and much work over the last century has involved an effort to find a system of interpreting Artaud's 'hieroglyphs.' The difficulty of this is acknowledged by Patrice Pavis (1981), who claims:

nothing is easier for the critic or for the spectator than to refer to the text; nothing is more difficult, on the other hand, than to capture the slightest gesture of the actor ... Once gesture becomes the object of a descriptive discourse, it loses all specificity; reduced to the level of a text, it does not give any account of its volume, of its signifying force, of its place in the global stage message. (65)

Gesture – and movement more generally – is both unparaphrasable and ephemeral, escaping a semiotic method that works with text and static images. However, adaptations of semiotics have been invoked in dance criticism. Jane Desmond (1998), for example, approaches dance criticism as a 'kinesthetic semiotics' (154). Avoiding the approach to the body as a representation she analyses the body's actions and movements as texts in themselves. She cites Laban's Effort/Shape methodology as providing a vocabulary with which to discuss the

body as text in this sense. This is a step toward interpreting or at least discussing the 'hieroglyphs' that Artaud describes. However, it does not explain the way in which these bodily phenomena as felt by the performer come to affect the audience.

Much performance theory that has focussed on this relationship between performer and audience has centred on the question: What is it about watching a performer that gives pleasure to an audience? Theories that seek to answer this question often call upon the concept of empathy. Susan Leigh Foster (2011) has provided a genealogy of the term which ties empathy to physical movement. The term was first used by the late 19<sup>th</sup> century German aesthetician Robert Vischer in order to understand not fellow-feeling, which came to be the main use of the word in the 20<sup>th</sup> century, but the effect of sculpture and painting on the viewer. For Vischer, the viewer merged with the work of art, but this was not a merging of identity with some character represented in the painting or sculpture but rather with the physical form of the work itself. This was achieved due to the fact that both work and audience possessed a physical form and so the audience was capable of imagining the work's form as belonging to them.

In the 1930s the dance critic John Martin (1939) introduced the term 'metakinesis' into dance criticism in order to explain the way in which a dancer's body conveys emotion and transfers it to the active audience. This is accomplished through the viewer internally mimicking the movements of the dancer:

Not only does the dancer employ movement to express his ideas, but, strange as it may seem, the spectator must also employ movement in order to respond to the dancer's intention and understand what he is trying to convey. (Martin 1939: 31)

Here, the imaginary movement performed by the audience is a 'means of perception' (32); that is, watching the dancer moving is not in itself the important perceptual act but only a first step in the excitement of 'muscular sympathy' that is the central perceptual act in dance appreciation. Anyone can *see* movement, but it is only the audience member who engages in inner mimicry that *perceives* movement through muscular sympathy.

Melanie Swallwell (2008) indirectly connects Martin's work on empathy to the player-avatar relationship in her use of Anne Rutherford's work on 'the cinema of embodied effects' and

Aaron Anderson's work on 'a kinaesthetic cinema of attractions' in martial arts films to describe this relationship. Each of these theories is an adaptation of Martin's work to account for empathy in film. For each, the important kinaesthetic principle is sympathy between the action on screen and the viewer's knowledge of what that action would feel like to perform. Swallwell's contribution allows us to embrace James Newman's idea of 'vehicular embodiment' without rejecting (as he does) the notion of empathy. This is through the separation of empathy from questions of character identification and returning it to the realm of kinaesthesis and proprioception – systems that provide information about the state of the body such as its position, balance and movement.

The concept of empathy can easily lead us into an a-historical conception of the body. In the realm of theatre Josephine Machon (2009) uses empathy to describe the effect of what she terms 'visceral theatre.' Seeing action on stage can become translated into an empathetic feeling of how it would be to perform that action. Machon sites this feeling in the body, terming it 'corporeal memory' and seeing it as the cornerstone of this kind of theatre (6). Machon's approach moves between the somatic, sensual response to visceral theatre – that response that is felt immediately in the body – and the semantic, intellectual response – that response that is a conscious processing of signs.

This distinction between a cerebral and corporeal response to a work posits the body as a universal category existing, unlike the mind, outside of history and culture. For Leigh Foster, this is a move that is consistently made by writers and critics that draw on the concept of empathy. However, the development of this concept – its political and critical value and the processes by which it functions – is due precisely to changes in how the body has been conceptualised at particular points in history. 'The cerebral response' and 'the corporeal response' are both culturally constituted.

For Leigh Foster, choreography entails a kinaesthesis, which she defines as 'a designated way of experiencing physicality and movement that, in turn, summons other bodies into a specific way of feeling towards it' (2). The sense of empathy between dancer and audience is carefully constructed and culturally specific and not an immediate union. What is being rejected is a false correspondence between the body and immediacy. Empathy is historically specific, dependent on how the body is conceptualised at a particular time in a particular society. Her genealogy of the concept takes us through a body of the humours (Galenic), through the body

as machine, to a post-modern body constructed through mobile telecommunication and telepresence. This last version of the body is of most relevance to videogames. The version of empathy we need to think about is one that allows for a body that can be effectual in more than one location at a given time and that can switch its attention between local, distal and virtual locations through technologies. For Axel Stockburger (2006), videogame space is fundamentally heterotopic, involving multiple simultaneous 'emplacements' for the player. To inhabit this heterotopic space requires a diffuse body. This is not, of course, to argue that the contemporary body is physically different to the body as it has existed throughout history. The body in question here is Merleau-Ponty's phenomenal body, a body that adapts itself to its tasks. Viewed in this way action videogames might be seen as a means through which the contemporary body is represented.

#### Games

BREAKOUT. Atari, Atari 2600, 1976.

COUNTER STRIKE. Valve Corporation, PC, 1999.

DANCE DANCE REVOLUTION. Konami, Arcade, 1998.

FARENHEIT/INDIGO PROPHECY. Quantic Dream, Atari, Xbox, PS2, PC, 2005.

FIFA. EA Sports, multiple platforms, 1993-2011.

GRAND THEFT AUTO IV. Rockstar North, Xbox 360, PS3, PC, 2008.

LEGO STAR WARS. Traveller's Tales, Eidos Interactive, multiple platforms, 2005.

MADDEN NFL. EA Tiburon, EA Sports, multiple platforms, 2005-2011.

MOTION SPORTS. Ubisoft Milan, Xbox 360, 2010.

PRO EVOLUTION SOCCER. Konami, multiple platforms, 2001-2011.

SONIC THE HEDGEHOG 2. Sonic Team, SEGA, Sega Megadrive, 1992.

SUPER MARIO WORLD. Nintendo, SuperNES, 1990.

THE ELDER SCROLLS. Bethesda Game Studios, multiple platforms, 1994-2011.

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