Henrik Smed Nielsen

PLAYING COMPUTER GAMES:

Somatic Experience and Experience of the Somatic

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Preface

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Introduction

ADDRESSING LIVED EXPERIENCE

When I have told someone outside the academic community that my work and research, the last years, has involved playing computer games, the usual response is that people laugh, smile and enthusiastically comment, 'Wow… that must be fun!' Similarly, in the academic surroundings where my work developed, computer games were also associated with fun and pleasure, for example, returning from the university library, with a stack of games under my arm, I occasionally got a wink 'Ohh, you are off to do some research, eh?' or 'Working hard, I see!?' And, I definitely agree, computer games are pleasurable and fun, and it is precisely this experienced fun or pleasure of computer games that has been the topic of my research. However, as computer games do not necessarily *please* or immediately *gratify*, but often are experienced as frustrating, challenging or provocative, the experience they facilitate is by no means trivial. Furthermore, the notions of *pleasure* and *fun* are not intended to associate the activity of playing computer games with a *purposeless* or *neutral* passing of time. Instead, my thesis is that, it is the immediate and concrete, yet fleeting, 'now' in the playing activity that founds our urge to, and manifests as the pleasure of, playing computer games. To be more specific, I argue that playing computer games is a bodily *founded* and bodily *savoured* activity – i.e. the alluring 'now' of playing computer games is a bodily 'now'.

In my initial academic encounter with the field of game research, as a student, being introduced to the two classical approaches to computer games, narratology and ludology, I was somewhat puzzled and felt that something very basic, and to some extent also very trivial was

missing in their characterisations of computer games. Being a fan of action games (first- and third-person-shooters, racing games and the like), as I grasp the controller to play one of these games, I would not describe my experience as particularly narrative or revolving around identification or role-play, at least, after I have put down the controller, the narrative elements of the game (story-line, character etc.) are quickly forgotten, and never 'present' with the same clarity as what I experience after having seen a film or read a novel. Instead, when I leave the computer game, I rub my eyes, stretch my back, loosen up my shoulders and, what I am able to recall with experiential clarity, are the actions I performed in the game, the visceral 'feel' of the game, its speed, materiality, the sounds, the colours, the lights – the perceptual spectacle of the game. Similarly, in the immediate game-play experience, I rarely think of the computer game as a *game* in the classical sense (a formal system or rule structure). When I play chess or another board game, I have an experience of making an effort to think as far ahead as I can, to anticipate what happens next. Meanwhile, positioned at the computer, playing a first-person-shooter or a racing game there is a sense in which I, during game-play, do not have time for such 'thinking ahead', I most often just *do* things, correct mistakes and fine-tune my moves in the *flux*[1] of game-play. All in all, the computer game unfolds or develops much more explicitly as an integral part of my bodily doings.

The above characterisation of game-play experience, and my overall thesis, also reveals the theoretical and methodological presuppositions that I will develop in the following chapters: That the body in-the-

[1] Although the possible physiological meaning of the word – 'flux, n. A flowing, flow. 1. a. An abnormally copious flowing of blood, excrement, etc. from the bowels or other organs; a morbid or excessive discharge.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011) – underlines the *bodily*, *material* and *visceral* characteristics that I find essential to the experience of playing computer games, it is also a misdescription/overstatement of these characteristics. Consequently, I am referring to *flux* as 'A continuous succession of changes of condition, composition or substance.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

world is the immediate vehicle for, and object of, the production and evaluation of meaning. In other words, that the world and objects in it (including computer games), make sense and are appreciated through bodily perception and expression, and that this incarnated and enworlded sense-making is best approached from a phenomenological first-person perspective. Moreover, the description also reveals my fondness for action games, and although all computer games have a bodily dimension (at least in the sense that they require a human body to be played), the bodily 'now' that I am tentatively approaching is perhaps more pronounced within some games than others. Nevertheless, this does not mean that these game experiences do not deserve to be explored. Surely, I cannot be the only one who plays computer games for the sake of bodily and perceptual fun and pleasure?

It may seem peculiar to insist on a bodily value in the activity of playing computer games, as grasping the controller is often conceived as positioning players inactive in front of the screen (see for example Vandewater 2004). This was also the prejudice I encountered when introducing people to the idea that computer games are bodily founded and savoured. The immediate response to my statement was often, 'Oh, then you are working with *Wii* games, right!?',[2] implicitly associating the notion of *body* with physical movement and hence, conceiving 'traditional' computer games, that do not require explicit physical movement, as 'non-bodily'. My usual answer was, 'well… yes and no!', and instead, I suggested that anyone who had played computer games (whether using a *Wii-remote* or not) ought to question the assumption that playing computer games is a bodily passive activity, because, even a superficial recollection of computer

[2] *Wii* refers to the Nintendo *Wii* console (2006), often considered to have popularised 'motion based' consoles/game interfaces. The wireless controller, the *Wii-remote*, allows, via accelerometers and infrared tracking, the player's movement in front of the TV to be mapped into the game in an approximate one-to-one relationship. That is, to hit a baseball, for example, the player no longer merely pushes a button, but, in full body motion, swings his arms.

game experiences indicate that when playing computer games, the body of the player is given a central position. Such a bodily potential is felt as: sweaty palms when roaming the alien infested hallways of an abandoned space station, the involuntary gestures of an intense situation, the adrenaline rush of racing head to head with a friend in a top tuned race car, or the motion-sickness or visceral unease that prevent some people from playing first-person perspective games. All in all, it is fair to argue that computer games have a way of making the body experienced. Nevertheless, the assumption, that 'traditional' computer games are bodily passive, testifies to our tendency to forget, or take our bodily sensations for granted. Hence, the first analytical distinction I wish to make in order to approach the bodily value of computer games should be one between the *bodily* and the *physical*. Subsequently, I will argue that playing computer games rightfully, in some cases, is less *physical* than other activities, but, it is by no means less *bodily*. To insist, that running, for example, is more bodily than playing computer games reduces the body to its physical movement. What I consider *bodily*, is the constantly lived and felt experience of being an existential subject in-the-world. So, in order to distance myself from the mind/body dualism that seems to found the confusion between the bodily and the physical, and our forgetfulness of the body, I adopt Shusterman's terms of the *soma* and *somatic* experience, to clearly define that 'my concern is with the living, feeling, sentient, purposive body [the soma] rather than a mere physical corpus of flesh and bones' (*Body Consciousness* xii).[3] Subsequently, my research questions revolve around how computer games affect or shape the somatic flux of experience. In the following sections, a distinction between *the physical corpus* and *the living, feeling, sentient, purposive body* may serve to roughly outline the existing research that attend the somatic experience of playing computer

[3] Throughout the rest of the dissertation, I will use the terms *soma* and *somatic* when speaking from my own perspective, discussing the living, feeling, sentient, purposive body. When discussing existing research that deals with either the somatic or the body as an object, I will use their respective terms.

games, but first, I will address the overall status of the soma (or the lack of such) in game research.

FORGETTING THE SOMA

Despite the interdisciplinary nature of game research, the player as a perceiving soma has been absent in the majority of years that computer games have been on the academic agenda, for example, as argued by Lahti (2003), Behrenshausen (2007), Westecott (2008) and Nørgaard (2010, 2011). This forgetfulness of the body is in part caused by 'the body's natural propensity for withdrawal and submersion when we (skilfully) act (with tools) in the world' (Nørgaard, *The Body Under the Mask* 7), however, as the body also constantly comes to the fore in experience, as the tool breaks, or we start to consciously attend (both negatively and positively) a state, feeling or disposition, we must also acknowledge that the sensing body has been subjected to a certain discrimination at a cultural level. The perceiving body has, since Plato's mind/body dualism, which considered the body to be the decaying material prison for the pure mind, often been subjected to a certain level of mistrust, and even regarded as something *different* from the self (Shusterman, *Body Consciousness* 4-5). In consequence, this underlying mistrust may also have had an impact on how computer games have been (and are) studied, and how the relation between the player and the game has been conceived.

A Disembodied Discipline?

Although Sudnow, as early as 1983, emphasised the body's particular role in computer game-play, from his third-person observations in the arcade: 'Each body rivals the other as perfect specimens of the strangest human conduct I've witnessed in a public place. I see right hands putting epileptic seizures to shame, while the rest of them just stares and cares, standing up, watching TV' (*Pilgrim in the Microworld* 10), to his own first-person experience 'here I am with my first

authentic video experience, going for the last brick like any kid in an arcade, palms wet, pulse racing, mouth dry, nerve endings interfaced in nanoseconds, the knob itself throbbing, electronic reflections going straight for my spinal cord' (*Pilgrim in the Microworld* 43), it has taken a fair amount of years for other game researchers to acknowledge the player as a perceiving body. If we turn our attention to computer game design, Griffin argues how Crawford's seminal *The Art of Computer Game Design* (1982), and his emphasis on *software solutions* to develop 'rich interaction' has founded a 'cognitive-centred approach to game design' (Griffin, *Push.Play* n. pag.). With a similar cognitive bias, effect studies (e.g. founded on psychology, behaviourism, media theory) centred on computer games, especially violent ones, have conceived the body as an uncritical receptor that inscribes what happens on screen into the mental maps of the player. Moving beyond production and consumption, putting computer games on the academic agenda in its own right, foregrounding the more edifying potential of the computer game as cultural phenomena, game research started out in the already acknowledged theoretical bastions, literary or film studies, relating computer games to text/narratives and images/representation, which made it easy not to address the body. For example, Aarseth's concepts of 'cybertext' and 'ergodic literature' (1997) were (and are) by no means trivial, and played an essential role in justifying computer games as a serious research area. However, as the majority of computer games were (and still are) played on *the* representational medium in Western culture, *the screen*, it has been easy to 'reduce the video game player to a mere set of eyeballs' (Behrenshausen 336), and loose sight of the physical relation between player and game, especially if *medium* is considered, as Hansen and Wamberg suggest, 'en kulturskabt passage for tegn, på en grundlæggende afstand af virkeligheden, idet det nemlig kun gengiver denne i form af et imaginært nærvær, der erstatter et faktisk fravær af ting' (84).[4] Either

[4] 'a cultural passage for signs, at a fundamental distance to reality, as it only represents this reality in the shape of an imaginary presence, which substitutes an absence of things' – Own translation of the quote from Hansen and Wamberg.

through a focus on the formal features or internal structures of the computer game as an *object*, or third-person methodologies,[5] the beginning years of game research was founded on the representational epistemology of older media, carrying with it, 'Cartesian notions of a fundamental body/mind split' (Westecott 381).

Thinking Too Much About Rules ...

As the rule structures of computer games started to gain attention, and ludology emerged, as a 'pure' computer game discipline, the perceiving body was, intentionally or not, still out of focus: 'As a formalist discipline, it [ludology] should focus on the understanding of its structure and elements – particularly its rules – as well as creating typologies and models for explaining the mechanics of games' (Frasca, *Simulation versus Narrative* 222). Juul's idea of computer games as *half-real*, consisting of real rules and fictional worlds has to some extent bridged the differences between the representational surface and rule structures of computer games. In his discussion of 'player effort' (*Half-Real* 36), Juul furthermore acknowledges the relation between player and game as essential in our understanding of computer games, loosening up a tight formalistic focus, but his notion of *effort* still seems biased towards the player as a cogito. Computer games as requiring *player effort*, means that they are challenging, and that the player, by investing an effort in the challenge, is able to influence the game's state and outcome (Juul, *Half-Real* 40). The player feels attached to the outcome, owing to the effort invested in the game's challenge, which Juul emphasises as mainly being a mental effort, concerning the processing of rules and puzzles (Juul, *Half-Real* ch. 3). That is, the player uses mental skills to figure out the challenges of the game, and becomes attached to them through this process.

[5] Juul also notes a tendency towards third-person rather than first-person methodologies in the study of computer games: 'while much space has been devoted to the study of people (other than the researcher) playing games, very little has been said about the first-person experience of playing a game' (*Half-Real* 10).

In contrast to this account of the relation between player and game, Behrenshausen's performance study based analysis, devoted to *Dance Dance Revolution* (1998), a game that require the physical input of a dancing player, concludes: 'Video games are not something players look at; video games are something players do' (353). As a passing remark, Juul also acknowledges that rhythm-games such as *Dance Dance Revolution* involve physical action and effort (*Half-Real* 51, 54), but does not attend these 'types' of games further. From my somatic perspective, the question of bodily effort amounts to more than the 'type' of interface a particular game relies on, as argued above, the bodily is not a matter of physical movement or no physical movement. Although helpful (and in its own right informative), Behrenshausen's exclusive focus on *Dance Dance Revolution* is not required in order to arrive at the general conclusion, that computer games are something players *do*. Whether a computer game is rhythm based or not, requires explicit physical movement or involves explicit 'performance', the relation between player and game and the consequent experience of playing always goes beyond mere mental effort. Although the player's body, from a third-person perspective, may seem to be 'off-line' in its immobilized state, as the eyes fix on the screen and the hands grasp the controller, the living, feeling, sentient and purposive soma, in its integrity of being a body-mind, is always present and active as the presupposition for the experience (and the interaction with rule structures and mental challenges).[6]

An Aesthetics of Mind

To return to Juul's discussion of *effort*, I am not denying that computer games confront the player with mental challenges. For example, in *Echochrome* (2008), *Sim City* (1989) or *Portal* (2007),

[6] In a discussion of experienced realism in computer games (gamic realism), Sommerseth posses a similar critique of Juul's emphasis on rules, 'Video games, then, are half real, not only because we play by real rules, as Juul argues, but because we play in real bodies' (767).

reasoning and insight thinking are highly valued as the challenges of these games create dilemmas that require logical thinking – i.e. a reflective process that make up what Juul would call an *aesthetics of mind* (*Half-Real* 92-94). Juul does point out, that trivial routines, such as games of chance or uninteresting choices are part of computer games and in fact may be enjoyable (*Half-Real* 112-115). In other words, game-play that does not require explicit mental effort may be experienced as valuable. Continuing this line of mind/body thinking, one might just as easily argue that puzzles and interesting choices are minimally present in the majority of commercial games, while action, audio-visual spectacle and a more pronounced approach towards the player's body and its dispositions is emphasised. Put differently, the 'bodily challenges' of blockbuster games such as the *Call of Duty* (2003 –), *Guitar Hero* (2005 –) or *Metal Gear* (1987 –) series, are as least as important as the mental, similar to what the game-guide for *Metal Gear Solid 4*: *Guns of the Patriots* suggests: 'Forget PMC troops, and other battlefield hazards: your first conflict in *Metal Gear Solid 4* will be between you and your fingers' (Price and Sutton 12). Even the *aesthetics of mind* games mentioned above rely, not only, on the player being able to logically apprehend the solutions to its challenges, *Echochrome* and *Portal* in particular require an understanding of 3D space and perspective that is grounded in, and plays with, the player's bodily knowledge of enworlded space and perspective. So, in many cases, discussing the characteristics of computer game experiences, it seems that it would be just as interesting to foreground an *aesthetics of body*. However, from my somatic perspective, to insist on an *aesthetics of body* would be counter productive as it, apart from directing needed attention towards the body, supports a mind/body dualism. Hence, I will argue that just as there is no pure *aesthetics of mind*, a pure *aesthetics of body* is also problematic (I will later introduce the concept of *somaesthetics*, which prevents me from getting caught up in neither an aesthetics of mind nor an aesthetics of body).

In the following two sections, I will turn towards research that has taken the bodily and somatic issues more serious. A distinction

between a *functional* and an *experiencing* body roughly outlines how bodily experience within the existing research may be seen as falling into two categories. Under the headline, *The Physical Corpus*, the first section briefly attends approaches that strive to objectively access, describe and explain bodily experience. The second section, *The Living, Feeling, Sentient, Purposive Body*, outlines approaches devoted to revealing the *experiencing* and qualitative aspects of somatic experience. The categories do not work in simple opposition, as the overview also will demonstrate, instead, in the interdisciplinary tradition of game research, the theoretical and methodological foundations, and research results, interweave and amount to a complexity that cannot be grasped through the distinction between the functional and experiencing body. The current simplification of matters is however helpful as an introduction to the complex issues of somatic experience, which will be developed as the dissertation progresses.

THE PHYSICAL CORPUS

Addressing the somatic relation between player and game have in some cases lead to a focus on the body, exclusively as a physical structure or system. For example, in the previous mentioned 'effect' studies or in a HCI / Human Factors perspective on computer game experience, measuring and documenting physical responses in the form of: heart-beat, respiration, perspiration, blood circulation, eye movement and so forth, turns the physical corpus into the object of study. Such approaches, often founded on closed experimental setups, questionnaires and interviews, favour the player as a psychoPHYSICAL object that relies on stimuli and response, at the expense of being a soma shaped in a socio-cultural network. As such, I have no objections against these studies, and they may inform our understanding of the physical corpus as a structure – but they are *not* studies of somatic experience. Nevertheless, the raw data collected, is by some, still considered to provide 'a rich, continuous, and objective source of information about user experience' (Mandryk 1030).

Although I share the attention towards the player, as an essential part in our understanding of the computer game experience, I find measurement of physical response marginally helpful when discussing the *lived* relationship to the game as it deduces player experience (an existential psychophysical state) from physical data – for example, I do not experience an intense game-play situation in terms of heartbeat per minute, nor find it useful to discuss my experience via such terms. In addition, the mechanic perspective on experience is a counter intuitive starting point, when addressing the experience of computer games. That is, the abovementioned study claims to be moving away form the *usability* maxim inherent in HCI and Human Factors traditions (Mandryk 1027), a necessary aim, if one wishes to address the experience of the computer game, as the practice of playing clearly exceeds a functional purpose and may be exercised with many different intentions. Nevertheless, remnants of *productivity* and *optimised performance* are lurking in the background as further work with the results of the study 'can be used to dynamically adapt play environments to keep users engaged. When the software determined that players were getting bored, the challenge of the task could increase, or the challenge of the task could decrease if players were becoming overly frustrated' (Mandryk 1035). In other words, the unspoken usability agenda seems to be total and continuous player engagement, an engagement that may be customised if only we have enough data on how to 'satisfy' and stimulate the physical corpus of the player. From my perspective, such 'system-discourse' – should it become the standard way to approach experience – threatens to reduce somatic experience and its variety of pleasures to a binary, where 'users' are either engaged or not-engaged in the game-system – a mechanic perspective on somatic experience, and also, a frightening outlook on future games, were it ever to be realised, where players mechanically hook up to the game for a new fix.

From my somatic perspective, experience is not a closed feedback loop between a non-hermeneutic player corpus and a game, best examined from a third-person perspective through different

measuring instruments. Moreover, I do not consider the soma to be a machine, not even a sophisticated machine; the soma is fundamentally different from any machine, I have ever encountered. So, I concur to Harvey's argument, found in her discussion of *cybernetics*[7] as an epistemological foundation for addressing the 'bodily pleasures' of computer games, that it is problematic in its reduction of the body to a structural system (*Seeking the Embodied Mind in Video Game Theory*). At the same time, I would also like to point out that this does not compromise the use of cybernetics altogether, nor does it render the computer, as a structural system or machine, unimportant in the experience of the computer game (as I will argue later). Similarly, the history and persistence of the HCI tradition testifies to its merits, and recently, Meldgaard (2011) has more convincingly demonstrated its potential in relation to computer games, by combining it with an ecological theory of perception.[8] In my scepticism towards these approaches, I am not claiming that my soma does not have a functional purpose, I am merely arguing that as my aim is to explore the *lived experience* of the computer game, and its qualitative characteristics, (and not explain the perceptual mechanics, or mental/cognitive flow or structure, of somatic experience), a focus on 'the functional aspects of on-screen content manipulation as seen in HCI' and 'an approach to perception that regards perception as being

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[7] Weiner, Norbert. *Cybernetics: Or the Control and Communication in the Animal and the Machine.* Cambridge: MIT Press, 1948.

[8] For other HCI approaches see for example: Jørgensen, A.H. "Marrying HCI/Usability and Computer Games: A Preliminary Look." *NordiHCI'04* 2004, or Barr, P. et al., "Playing the Interface: A case study of Grand Theft Auto: San Andreas." Proceedings, *OZHCI*, 2006.

An ecological approach to perception in computer games (particularly in relation to learning) has been used by Jonas Linderoth on several occasions, see for example: "It is not hard, it just requires having no life – Computer games and the illusion of learning." *Nordic Journal of Digital Literacy*. 1.4 (2009): 4-19, "This is not a Door: An Ecological Approach to Computer Games." *DiGRA Situated Play* (2007): 600-609, or "Why Gamers don't learn more: An ecological approach to games as learning environments." *DiGRA 2010* (2010): 1-8.

a functional mode of awareness' (Meldgaard 14), is not the right place to begin. There are already a variety of approaches that strive to move beyond the 'working' corpus and the game/technology as merely 'functional' systems. It is among these approaches, focussing on *the living, feeling, sentient, purposive body*, that I position my own perspective on the somatic experience of computer games.

THE LIVING, FEELING, SENTIENT, PURPOSIVE BODY

In contrast to the physical corpus, as a functional structure or system, what concerns other researchers, is explicitly the experiencing and qualitative soma. For example, Westecott offers 'an introductory look at the ways in which games confuse and delight our flesh' (379), Behrenshausen argues for the 'embodied, carnal, sensuous, and powerful (kin)aesthetic of video gaming' (353), Nørgaard strives to reveal 'how the qualitative nature of corporeality and movement can be framed as meaningful dimensions of gaming' (*The Body under the Mask* 9), Klevjer addresses 'how players engage with singleplayer game-worlds through fictional and vicarious embodiment' (*What is the Avatar?* 9), while Lahti conceives 'video games as a *paradigmatic* site for producing, imagining, and testing different kinds of relations between the body and technology in contemporary culture' (158). As these quotes indicate, although the different approaches might agree that the human body (as a perceiving and living body, a soma) is essential to the computer game and the experiential quality of playing it, they all have varying perspectives on the *nature* of these qualities and *how* they emerge. To somehow come to grips with this complex field, I propose a tentative distinction between *the moving body*, *the technological body* and *the fictional body*, which frames common assumptions concerning the 'components' of the experience. Subsequently, the qualities of the moving, technological and fictional body may be seen as manifesting with a bias towards either *somatic experience* or *experience of the somatic*, that is, either an experience where the pre-reflective soma works its magic in the unconscious, or

an experience where the soma is entangled in reflective perceptions that outlines its limits and cultural 'situatedness'. Following up on this overview, in the section, *Between Somatic Experience and Experience of the Somatic*, I argue that an important aspect of understanding the experience of the computer game is to assume a position somewhere in-between the pre-reflective and the reflective.

The Moving Body

Common to Behrenshausen and Nørgaard is that they favour the *moving, acting* and *doing* body as what founds the experience of playing computer games, however, they diverge in their respective descriptions of how this moving body is savoured. Behrenshausen, through a performance studies discourse, considers 'the practice of playing video games as a powerfully performative one with both intersubjective and interobjective dimensions' (336), while Nørgaard states that the corporeal and locomotive qualities of the computer game experience '*is something* in and of itself' (*The Body under the Mask* 8), and later, describing the essential difficulty in the pursuit of bodily movement, argues that 'it is pre-cognitive, pre-perceptual, pre-linguistic, pre-cultural and pre-personal as well as self-effacing' (*The Body under the Mask* 9). That is, Behrenshausen favours the quality of bodily movement as mainly a social, cultural performance (an experience of the somatic), while Nørgaard identifies the quality of computer games in the subjective and pre-reflective sensation of self-movement (a somatic experience).

The Technological Body

Under the notion of *technological body*, I have positioned two approaches towards computer games that emphasise the human–technology relationship as experientially and qualitatively valuable, and not primarily of a functional nature, as it is pursued within HCI. Lahti as well as Giddings frame the computer game experience as a cybernetic relationship between human and machine, but emphasise

different aspects of this relationship as what makes the experience 'pleasurable'. Lahti argues that computer games couple 'the game world's cyborg bodies and subjectivities (reassuringly) with our own bodies, making the virtual and the physical complementary rather than mutually exclusive' (168), implicitly stating that it is the magic of the un-reflective or unconscious body that extends and incorporates technology as 'we remain flesh as we become machines' (169). Giddings moves beyond subjective human agency as cybernetic extension, and through a notion of 'cybernetic circuit' of which the initiation 'cannot be identified in either the player or the machine' (n. pag.), emphasises that part of playing computer games revolve around handling machine agency, 'distributions and delegations of agency between technologies and players in the act of playing' (n. pag.), that is, an experience of the bodily (somatic) as positioned in a network of agents, humans and non-humans.

The Fictional Body

Klevjer as well as Grodal are occupied with what we might call a *fictional or storytelling body*. Aiming for a new concept of fiction in our understanding of computer games, Klevjer states 'This re-orientation needs to question the assumption that "fiction" is synonymous with recounted (or diegetic) fiction, and it needs to be able to address the different mechanisms of embodied interaction and corporealized pleasure that are involved in computer game play' (*What is the Avatar?* 9), consequently the player gives *form* to the avatar through 'fictional and vicarious embodiment', which manifests as the particular corporeal quality that fiction has in computer game-play (an experience of the somatic in fiction). Grodal, stating that 'Stories are based on innate mental functions that match the ecological niche of humans, they are not just social constructions or media constructions' (130), favours media representations (literature, film, computer games etc.) as phenomena that stimulate the bio-evolutionary storytelling structures in our mind. In particular, computer games are considered 'the supreme media for the full simulation of our basic first-person

"story" experience because they allow "the full experiential flow" by linking perceptions, cognitions, and emotions with first-person actions' (132). Hence, with Grodal, the body is implicitly favoured as the perceiving and moving entity that silently activates the basic, pre-linguistic (Grodal 152), narrative structure in the brain, the pecma-flow (Grodal 131). In other words, fiction is a bodily (somatic) pre-reflective experience.

BETWEEN SOMATIC EXPERIENCE AND EXPERIENCE OF THE SOMATIC

The above overview of how the experiencing and qualitative body (the soma) has been addressed is not a complete account of game research that in one way or the other deals with the somatic.[9] First, the overview serves to emphasise that as neither the soma nor somatic experience exist as static objects, but instead continuously change and manifest in a variety of pleasures, an exploration of the experience of computer games necessarily consists of multiple, intertwining perspectives – i.e. there is no single approach able to address all the pleasures of the soma. Therefore, the somatic qualities of the computer game experience may include not only, a *moving*, *technological* and *fictional body*, other aspects of the living, feeling, sentient and purposive body, for example, a *listening body*, *gendered body* or *spatial body* may also deserve attention. Second, the distinction, between the computer game experience being savoured as either a *somatic experience* or an *experience of the somatic*, is not a distinction of mutual exclusivity. Necessarily, somatic experience turns into an experience of the somatic, and vice versa, in the sense that immediate, subjective and pre-cultural experience may become the object of cultural hermeneutic attention, while conventionalised and culturally acquired somatic practices may become immediate and subjective. In other words, although the experience is easily objectified into a

[9] I will return to and discuss some of these somatic approaches as the dissertation develops.

pre-reflective state or a reflective state, this should not entail that the experience is reducible to either one or the other. However, I find it helpful to introduce the continuum between somatic experience (the pre-reflective) and experience of the somatic (the reflective), as it guides my perspective and points out where I am positioned within the existing body of research that deals with the living, feeling, sentient and purposive soma.

Recalling my initial focus on, and characterisation of, computer game experience (see the section Adressing Lived Experience) as a bodily 'now' and as something that develops as an explicit part of my bodily doings, the reversibility of somatic experience and experience of the somatic emphasises how this bodily 'now' is both pre-reflective and reflective. In other words, my experience of computer games is neither purely pre-reflective (somatic experience) or purely reflective (experience of the somatic), instead, I find it to be characterised by a continuous flux, a transformation[10] of immediate experience and awareness of my experience. The visceral experience of speed in a racing game is not a simple matter of sensorial stimulation of a pre-reflective body – I simultaneously know and feel that I am driving as well as not-driving the race car. Put differently, there is one sense in which the audiovisual stimulations of my eyes and ears and my grasp on the controller come before the experience of driving a race car, but then again, I never experience any *pure* sensations of light, sound and touch, I cannot help but take the car, the road, the screen, the controller, the context of playing and my previous game-play experiences into the somatic 'now' of the racing game. At the same time, this reflective awareness (or consciousness of playing the game) does not hinder that I have the immediate sensorial experience of speed. Hence, we might say that the 'now' of the somatic experience that I am exploring is a certain kind of somatic 'computer game

[10] 'transformation, n. 1. a. The action of changing in form, shape, or appearance; metamorphosis.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

consciousness'. Because, if we turn the question of the experience of the computer game into a matter of identifying or describing it either as a somatic experience (pre-reflective) or an experience of the somatic (reflective), then there is a sense in which we are already looking beyond the actual experience, where the pre-reflective and the reflective are always insolubly tied together. I am not out to solve or explain this intertwinedness (although I will return to it in chapter 1 on phenomenology and chapter 2 on somaesthetics), I am merely emphasising that when concerning oneself with the somatic issues of playing computer games, an important task is to address and discuss the interdependence, the similarities or continuities of the pre-reflective and reflective, and not regard them as separate.

Swalwell's discussion of the pleasures of movement in computer games, 'from the initially disorienting perspective of the mobile camera, and the skill required to maneuver an avatar well within a game to the more puzzling moments of kinaesthetic responsiveness when players report themselves *moving* with an avatar' (74), is one of the existing approaches towards somatic experience that demonstrates an awareness of the mutual interdependence of the pre-reflective and the reflective. That is, discussing the historicity of our perceptual capabilities, emphasising that these are 'learnt, enculturated, and affected by shifts in technology' (76), Swalwell moves away from an ideal notion of somatic experience as pre-reflective and pre-cultural. Simultaneously, Swalwell does not conceive the pleasures of playing computer games to be an experience of the somatic, as culturally constructed or technologically determined, as she draws on Benjamin's idea of 'the mimetic faculty' and 'innervation' (83-87) to acknowledge the physiological side of the body, in its potential for subjective improvisation. In a similar manner, Gregersen and Grodal, highlight the reversibility of the pre-reflective and the reflective, by stating that they, in their exploration of how game-worlds shape players' embodied experiences, refer to embodiment in two interrelated ways, 'One entails conceptualizing the human body as a physically-existing, biologically-evolved entity. The other entails *our*

experience of ourselves as embodied beings and our mindful experiences of the world due to our embodiment' (65). Despite their sensitivity to the complexity of the somatic, for the purpose of my research, I find it necessary to move beyond Swalwell as well as Gregersen and Grodal, for two reasons. First, owing to the article form of their approaches, they amount to little more than raising awareness of the issues at hand, as Gregersen and Grodal conclude, 'The existing interfaces primarily support agency, and thus possible feelings of active ownership and efficacy in relation to avatars and tools' (81). In other words, they outline the pre-reflective/reflective structure of the experience, but do not address its qualitative characteristics in detail. Second, although informative, in each their respect, I will also distance myself from the theoretical foundation of Swalwell as well as Gregersen and Grodal. Swalwell's use of film theory, with a particular attention to audience responsiveness, is productive, but I would like to emphasise the link between the computer game and technology in a more general sense, and not relate it specifically to the cinema. I share Gregersen and Grodal's phenomenological outset, but whereas they choose to couple it with cognitive-science and neuro-science, to attend to how body actions are 'mapped onto or into' game spaces (66-71) 'to activate the basic experiences of agency, efficacy, and ownership leading to immersion' (81), I direct my attention towards an existential and experientially based phenomenology, as I find this direction to be more sensitive to the living, feeling, sentient, purposive body, which is a key element in my research. I will return to phenomenology in chapter 1, and now, in an effort to start afresh, I first wish to suggest a definition of computer games that supports my focus on *the experience* of the computer game and furthermore, testifies to the soma's importance in this experience.

DEFINING COMPUTER GAMES: A HUMAN–MACHINE RELATIONSHIP

What does the term *computer games* delimit? Computer games may be conceived as phenomena that have been part of Western popular

culture, roughly since the 1970's. Furthermore, we may define the computer game as having fused traditional games (board games, card games and so forth) dating some 4000 years back, and, the storage, computational and representational possibilities of the computer (Juul, *Half-Real* 4). However, to maintain focus on the somatic experience of computer games, I am not interested in a definition based on formal aspects (giving computer games status as objects in themselves). As discussed previously, in the section *Forgetting the Soma*, such formal definitions, focussing on rule structures and representations, tend to leave either the soma unnoticed, or favour its reflective capabilities. Instead, I view computer games as a particular instance of a *relationship* between subject and object, human and technology and specifically human and computer in order to not loose sight of somatic experience and the experience of the somatic.[11] Moreover, such a definition of computer games, acknowledges the machine/technology as an aesthetic and cultural artefact, and not merely a functional tool.

In a historical perspective, the relationship between player and game has been played out on different machines and material platforms. From the early experiments on oscilloscopes and university mainframes in the late 1950's and start 1960's, arcade games and consoles in front of the television introduced in the 1970's, over personal computers and handheld units of the 1980's, to the screens of today's mobile and smart phones.[12] Going even further back, we may, as media-archaeologist Erkki Huhtamo suggests, see modern electronic games as a continuation of an older tradition of what he calls human–machine relationship (3-4). Although the human–

[11] In his classification of games, Caillois' term *paida*, 'the spontaneous manifestation of the play instinct' (27-28), is also discussed as a relationship between subject and object, for example, with young children the play instinct shows itself as 'an impulse to touch, grasp, taste, smell, and then drop any accessible object' (28).

[12] For a more extensive account of the history of computer games see, for example, Malliet & de Meyer (2005).

machine relationship may undoubtedly be traced further back, Huhtamo views the industrial revolution as the advent of *amusement machines*. This is an instance of the human–machine relationship that is vital to my focus on the pleasures of somatic experience, as this relationship is pursued as '*experience* for the sake of *experience*' – i.e. a human–machine relationship with its own inherent quality. In the industrial revolution the human association with machines took on a shape that is explicitly recognizable in today's 'amusement machines'. As steam-powered engines and assembly lines changed the workplace and routines in it, the commonness of machines also became an issue for human culture and social relationships in a more general sense (Huhtamo, 5-7). One of the ways in which this human–machine relationship was explored at an experiential level, was through slot-machines. Being situated at street corners, in bars, hotel lobbies, amusement parks, trade fairs and later, penny arcades, people used *slot-machines* as a diversion from everyday life. Amusement was the primary goal of this activity. As I will later argue, the somatic relationship facilitated by contemporary 'amusement machines' (what I refer to as *computer games*),[13] share traits with this much older human–machine relationship.

The Automatic and the Proto-interactive

Huhtamo labels the earliest amusement machines 'automatic' (7). Such human–machine relationship was limited to a simple and non-continuous interaction. Most often, the spectator inserted a coin in the machine's slot (in some cases pushed a button or pulled a lever), and awaited the machine's response. The relationship was, in other words, *passive*, as the spectator could not affect the machine's

[13] Unless otherwise is indicated, I consider PCs, consoles and mobile devices used for entertainment, to fall in under the term *computer games*. Although I have based most of my observations on what is usually referred to as *videogames* (PlayStation3, Xbox360, Wii), I prefer the term *computer game*, because, as Meldgaard points out, the etymology of video, 'I see', is biased towards the visual (54).

state, after starting up its mechanical process. However, the 'distance' between human and machine made these relationships particularly fascinating. Like its predecessor, the *automaton*, the automated slot-machine was captivating, owing to the distanced position it assigned to the spectators.[14] Separating the spectators from any direct contact with the spectacle and its mechanic processes, the machine created a sense of autonomous 'otherness'. Furthermore, the slot-machine sat itself apart from the other machines its spectators encountered in society at the time (mostly industrial machines in factories that produced material things with a purpose in everyday life), by being, in Huhtamo's words, 'emphatically useless' (8). The machines were a part of the public sphere, but their spectacle was contained within the feedback loop between human and machine, and did not produce anything as such. In time, the slot-machines evolved and the spectator's interaction took on a repetitive or continuous character. Huhtamo names this type of human–machine relationship 'proto-interactive' (8-9). The more enveloping interaction was mediated through explicit interfaces, for example, the eyepieces, cranks and levers of viewing machines such as the *Sculptoscope* or the *Mutoscope*, where the spectator/user interacted with the spectacle by deciding the speed, and perhaps even the sequential order of the displayed pictures. Huhtamo quotes an advertising booklet explaining the Mutoscope: 'In the operation of the Mutoscope, the spectator has the performance entirely under his own control by the turning of the crank' (9). The interaction and its outcome were based on mechanics and luck, and not the skills of the spectator, nonetheless, as the above quote suggests, the illusion of controlling the machine, or being able to affect and interact with its spectacle, became an important part of being engaged with them.

[14] The automaton, a self-operating machine, for example, a mechanical animal or anthropomorphic figure, was presented by touring showmen, in museums and fairs. The showman mediated the interaction between the audience and the automaton: showed people to their seats, collected money, introduced and explained what they were about to see and interacted with the automaton (Huhtamo 8).

The Somatic Dimension of Human–Machine Relationship

At first hand, Huhtamo's concept of human–machine relationships does not inform us on how the relation between human and computer game differs from any other interaction between human and machine. Automatic and proto-interactive traits are not restricted to computer games, or other amusement machines for that matter, in fact, most machines, computers and their software being no exception, require interaction from a user, while displaying autonomy, for example by hiding certain processes. However, we might say that computer games in a broad perspective have refined the *proto-interactive* aspect of interacting with a machine by requiring continuous player interaction. Computer games are not something the player sets in motion via one button, to passively sit back and watch, on the contrary, the game demands a player's active engagement in order to unfold. Additionally, it requires practise and skill to access the intended spectacle of the game, for example, manifested in the possibility to choose between different levels of difficulty before beginning a game, and tutorial levels where the player is familiarised with the game's features. Another development of the proto-interactive shows itself, as the player has been given more and decisive influence on the spectacle of the game, for example by letting the player form her/his own way through a scenario with multiple outcomes. One might argue that this interaction is still based on the *illusion* of control and influence, which is true in the sense that the interaction is confined to the game-world, leaving material reality untouched. Nevertheless, through level-building and different customisations, where the player is allowed to alter and save data that can be accessed later and shared with other players and non-players, many contemporary computer games question the traditional 'ephemeral' characteristics of their spectacle. Similarly, online- or cooperative-play also necessitate a re-evaluation of how we should consider interaction with a virtual world as *illusory*. In MMORPGs (massively multiplayer online role-playing game) – *World of Warcraft* (2004) the principal example – the machine's spectacle does not go into a passive state as one player quits the game. As other players may continue to play, the state of the

spectacle has most likely changed the next time the player logs on. In cooperative-play – which may also be combined with online-play – a player influences the experience of other (real) players. Last, but not least, we should not forget that some players actually make a living, playing games, for example through organised competitions (e-sports) or *gold farming*.[15] The strong proto-interactive features described in the above do not exclude the automatic from playing an important role in the computer game experience. Exemplified in the continuous improvement of physic engines, weather simulations, destructible environments and more complex A.I. characters, the fascinating autonomy of the machine and its spectacle, as a self-operating or 'living' entity, has not been lost in the quest for empowering the player with more control.

Huhtamo does not address the qualitative characteristics of the automatic or proto-interactive in depth, however it is evident that the human–machine relationship exceeds the purely functional, and through Huhtamo's brief description, we might even call it an aesthetic of 'anti-functionality'. Puzzled by the slot-machine's ability to fascinate its users, Huhtamo remarks that this human–machine relationship holds a paradox. Throughout the industrial revolution work routines became mechanised and workers were continuously confronted with machines, and forced to adapt to these, increasing productivity through a functional optimisation, conforming somatic work routines to the machines. Nevertheless, interaction with 'new' amusement machines ironically became a way to escape the monotonous routines of the work-related machines – i.e. *automatically* have the machine work for one's own amusement

[15] Heeks defines gold farming as 'the production of virtual goods and services for players of online games' (1), and estimates that around 400,000 people in developing countries earn a wage producing and selling virtual goods in online worlds (10) – owing to the continuous interest in online games (*World of Warcraft* having reached 12 million subscribers, 2010 (Nagata)), the number of people employed as gold farmers is likely to have increased since Heeks' estimate from 2008.

or *proto-interactively* exercise control of the machine. Built for consumption rather than production, the amusement machines were both machines and counter-machines (Huhtamo 10-11). It is possible to conceive contemporary computer games in the same way: as entertainment machines simultaneously used for production and consumption. Furthermore, we could also draw the similar, if not identical conclusion, that we engage with these machines and counter-machines because they, without disturbing the consumptive circuit, inconspicuously fit into the matrix of capitalist society. But, as Huhtamo states, such a perspective is too simple (10). In this perspective the cultural and economic structures of the game shapes my subjective motivation for playing it, which I consider to be a rather mechanic conception of both human nature and society. Instead, I would suggest that we should ask questions regarding the somatic dimension of these encounters between human and machine, subject and object, if we are to learn more about their qualitative characteristics.

From my immediate first-person perspective, I would argue that I am playing computer games not because I have to, because they produce something, or because the activity is convenient and fits the structures in my everyday life. I play computer games because it is something I find enjoyable – it is perceptual and somatic fun. Sometimes, it is not even a particular game title that I enjoy, it may be any game: a racing game, a first-person-shooter, or whatever, as long as it gives me the 'sensation', 'visceral feel' or 'mood' that I am after that particular day. In other words, I play as a living, feeling, sentient, purposive body – a soma. Consequently, it is my thesis that there is a somatic value in the otherness of the automatic, and one's grasp on the proto-interactive, which by no means are simple pleasures. My encounter with the automatic in computer games is not merely a reflection that grounds me as a spectator at a distance, the 'otherness' of the computer game is simultaneously an immediate physical sensation – I feel the 'otherness' as it draws me into the game. Similarly, the proto-interactive is not necessarily the direct way to a pre-reflective doing,

I would rather say that my handling of the controller and actions in the computer game are also characterised by a certain resistance and self-reflection. What I am suggesting is that there is a 'playful' somatic quality in the human–machine relationship – the experience of shaping my living, feeling, sentient and purposive soma through an object (a somatic experience and an experience of the somatic). Think of such basic activities as bouncing a ball against a wall or using a stick to draw figures in the sand. I would say that computer games are contemporary practices of such 'subject–object play', continuously cultivated through human action, the ball and the stick, now in the shape of computer, controller, screen and speakers constantly adapts to and challenges my soma and my somatic conceptions of play and entertainment – a nexus of culturally embodied human–machine relationships that facilitates somatic experiences and experiences of the somatic. And in this sense, computer games are still counter-machines as they 'perceptualise' and make sensible how I somatically interact with technology, as well as allowing me to use technology to experiment with my own somatic self.

AN OVERVIEW OF THE DISSERTATION

Through the previous sections, I have outlined my research area – the experience of computer games and its somatic implications. I began by tentatively suggesting that the computer game experience is *founded* and *savoured* through the body. Discussing computer game research in a broad perspective, I identified how the perceiving and experiencing body to a large degree has been overlooked, owing to the body's tendency to become transparent in action, a certain intellectual mistrust towards the lower faculty of the senses, and traditional media conceptions founded on non-interactive spectatorship. Then, engaging in a discussion with research that has taken the bodily issues of computer games serious, I started to establish my theoretical and methodological foundation. First, I distanced myself to research that deals with the physical corpus, stating that my interest in bodily experience and technology is of an aesthetic and not functional

nature. Second, I suggested using the terms *soma* and *somatic experience* to underline that my concern is with the living, feeling, sentient, purposive body – conceiving the soma as a qualitative site for experience, and that this qualitative soma necessarily offers a variety of experiences. Third, discussing the existing research concerned with the somatic, I identified a tendency to reduce the perceiving soma to facilitating either a somatic experience or an experience of the somatic, favouring pre-reflective or reflective experience. I positioned my self 'in between' – defining the *transformation* of pre-reflective experience and reflective experience, as my specific area of interest within the field the somatic. Lastly, to support my thesis, I suggested a definition of computer games, as a cultural/aesthetic human–machine relationship, which leaves room for both somatic experience (the pre-reflective) and experience of the somatic (reflective), a definition that unlike ones based on the formal aspects of computer games, for example, games as representations or rule structures, is not biased towards only the reflective or an aesthetics of mind.

Given the current attention towards the player as a moving body (from game-industry, consumers and academia), *now*, might be the right time and environment to address the somatic issues more attentively than have been done before. However, in a possible rediscovery of the 'forgotten' soma, I find it essential not to blindly pursue it as the new *object* of game research that holds the key to all our answers with regard to what computer games are, consequently, the rest of the dissertation revolves around two main aspects. First, I will establish an analytical perspective suited for discussing how the experience of the computer game is founded and savoured through the soma, in doing so, I do not adopt any of the abovementioned perspectives on the somatic. The main reason for starting over, once again, is that, I do not find that the above conceptions of the somatic are sufficiently sensitive to handling the flux of experience. The perspective that I will present in the following chapters will not be the 'final' perspective that answers all our questions regarding the somatic – it will hopefully also pose new questions. I firmly believe that the

somatic/bodily paradigm within game research should not become a set of static theories, it should move, adapt and transform just like our somatic experiences and our everyday conceptions of these do. Hence, an important task of a bodily paradigm within game research consists of continuously developing and enriching a vocabulary that is able to discuss the transforming nature of experience – somatic experience should not be explained or reduced, but rather described, discussed and used as an analytical perspective.

Chapter 1 wrestles with the theoretical and methodological issues of addressing lived experience as a simultaneity of pre-reflective and reflective experience that emerges in the encounter between human and technology. I introduce phenomenology, as an anti-dualistic foundation, based on the assumption that any 'twofold division' of experience into 'independent principles',[16] freezes our perception of things and makes a discussion of the *flux* and *transformation*, which I find characteristic to our lived experience, unnecessarily problematic. As a philosophical movement, phenomenology will serve as the epistemological foundation that allows us to address the *continuities* and *similarities* of somatic experience and the experience of the somatic, emphasising how our Being-in-the-world is always already a Being-in-the-game. Introducing post-phenomenology becomes a way to address how this somatic Being-in-the-game is characterised by a transformation or *displacement* where technology naturalises and decouples, amplifies and reduces our experience of the world (game-world) as well as our experience of our somatic selves.

Chapter 2 builds on the phenomenological insights of the first chapter and offers an analytical vocabulary that is later used to address the qualitative dimensions of somatic experience and experience of

[16] 'dualism, n. 1. The condition or state of being dual or consisting of two parts; twofold division; duality. 3. A theory or system of thought which recognizes two independent principles.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

the somatic. First, the concept of *aesthetic experience* is introduced to underline that the technologically mediated experience of playing computer games is not a forgetful letting go of the perceiving body, into purely pre-reflective (technologically supported) stimulation of one's senses. Being-in-the-game is simultaneously something the subject intentionally undergoes and savours for its transformational characteristics. Second, discussing the *somaesthetic* discipline maintains a focus on the soma, the pre-reflective and the reflective and suggests that a further exploration of the somatic flux of computer game experiences may be pursued by addressing the experiential, representational and performative dimensions of experience.

Chapters 3 to **6** form the second part of the dissertation, and revolve around, compared to the two first chapters, a more 'hands-on' approach. That is, here I will return to the experiences, of the reflective and the pre-reflective, that spawned my initial interest in the field of game research and try to grasp and describe the somatic flux of four actual game experiences through the insights gained from the theoretical explorations of previous chapters. Phenomenologically and somaesthetically scrutinising different game experiences will demonstrate that the intertwinedness of somatic experience and experience of the somatic is not a theoretical construct, nor is it merely a trivial condition of experience, rather it is an aesthetic/somaesthetic form that computer games rely on and play with. In other words, the transformation of the reflective and pre-reflective becomes an experienced form as the computer game is played.

I will frame the analytical return to actual games through the conception that computer games cultivate the somatic flux of experience via the screen, the controller, the speakers, and, in some instances, motion sensors (with the implicit thesis that some game experiences are mostly (but not exclusively) savoured for their visual, tactile, auditory or gestural dimensions). This also means that the chapters cover the spectrum (described here in the introduction), from 'traditional' controller-based and sedentary computer game

experiences to ones that require 'full body' movement. To be specific: Exploring how the visual dimension facilitates a somatic experience, Chapter 3 – The Eye addresses the first-person-shooter experience through *Call of Duty 4: Modern Warfare* (2007). Chapter 4 – The Hand revolves around an analysis of the experience of handling the controller in the practice of playing *Guitar Hero: World Tour* (2008). In Chapter 5 – The Ear, *Metal Gear Solid 4: Guns of the Patriots* (2008) serves as the starting point for addressing somatic experience from an auditory perspective. Chapter 6 – The 'Body' revolves around what kind of somatic experience, the moving, gesturing soma in front of the screen facilitates, in *Kinect Adventures* (2010). Last, Chapter 7 – Conclusion will outline research contributions and possibilities.

Chapter 1

A (POST-)PHENOMENOLOGICAL FOUNDATION

In the introduction I established *what* should be the starting point for an examination of computer game experience. First, a distinction between the physical and the bodily, the functional and the experiencing, and a review of existing approaches to computer games as somatic experiences identified this starting point as the living, feeling, sentient, purposive body, *the soma* and its pre-reflective and reflective relationship to the game. Second, in order not to get lost in an exploration of pure *experience* and loose sight of *computer game* experience, yet still maintain a steady focus on the soma, I defined computer games as the experiential relationship between player and game, a relation that from a historical perspective is a particular instance of a more general human–machine relation.

The ambiguous title of this chapter (the coupling of the term *post-*, alluding to post-modern thinking, with a modern strand of philosophy, *phenomenology*, and a notion of *foundation*, which the former is critical of, while the latter, in its most simple conception strives to return to) reflects the tension between the pre-reflective and the reflective I outlined in the introduction – a tension that continues throughout this chapter. That is, in the ambition to address experience, as a pre-reflective and reflective somatic flux, the tension manifests itself in the sense that the tighter the theoretical grip becomes, with its necessary distinctions and reductions, the more 'the experience as experience' seems to slip through one's fingers. So, the direction taken from the starting point of the lived soma, and *how* I further establish an analytical perspective sensitive to the somatic experience of playing

computer games, and the challenge of holding onto it, are equally essential concerns. Consequently, this chapter on phenomenology is devoted to these theoretical and methodological discussions, which, to put it in a more direct manner, revolves around the question: is it possible to grab, hold on to and describe the somatic flux of experience without compromising its delicate nature?

I will propose that phenomenology (as a philosophical movement) may serve as the epistemological foundation that allows us to address the issue of somatic experiences. Simultaneously, phenomenology (as a certain first-person way of *attending* things), may serve as a methodology that ensures an orientation towards the somatic relationship between player and computer game. Specifically, in relation to the starting point defined in the introduction, the soma will be addressed through a discussion of key concepts from 'classical' phenomenology (Merleau-Ponty, Heidegger), while post-phenomenology (Ihde, Verbeek) will ensure that the role of the computer game (machine/technology) is not overlooked. I will start out by briefly examining the phenomenological movement.

THE PHENOMENOLOGICAL MOVEMENT

Phenomenology may be recognised as a movement in twentieth century philosophy. Edmund Husserl is most often seen as its founding farther, although he regarded himself as radicalising something already established by Franz Brentano (Moran 7). With phenomenology, Husserl aimed to establish a new theory of knowledge (Moran 1-2), a theory devoid of analytical abstractions, founded on the world as *lived*, the life-world. This aim may be described as a desire to circumvent misconceptions stemming from science, tradition, metaphysics and so forth – to avoid the ideals of the past. Paradoxically, critics would describe phenomenology as overtly idealistic, but to use Husserl's famous (and ambiguous) words, such a new approach to knowledge should nevertheless result in 'a return to the things themselves' (Moran 9). From Husserl's starting point in

Logical Investigations (1900–1901), phenomenology has branched out as a heterogeneous movement. The history of phenomenology might even be seen as 'the history of Husserlian heresies' (3), as Moran notes, through another phenomenologist, Paul Ricoeur. Husserl also believed that contemporary phenomenology diverged too much from his original stance (Moran 2). But an interest in the *life-world* or the world as *lived* remained central to the philosophies of Husserl's contemporaries, and has not been abandoned by their successors. As Merleau-Ponty notes, at the heart of the phenomenological attitude is a constant *recurrence*, which prevents phenomenology from ever becoming a finished system of thought (*Phenomenology of Perception* xxiii-xxiv). In consequence, its apparent instability, owing to its always *being on the way* should (despite what Husserl might have thought) be seen as a condition and strength (that will also hold any idealism at bay), rather than a shortcoming. In spite of the controversies both in- and out-side the movement, I will make an effort to establish a basic understanding of phenomenology, in order to identify my position within the movement.

Before explicitly turning to the term 'phenomenology', Husserl considered what he was doing as 'descriptive psychology' (Moran 25). Put differently, phenomenology, in the most basic sense, is concerned with the study of phenomena, and, briefly stated; phenomenology practices such a study through a way of *describing* things. In an effort to avoid the previously mentioned misconceptions (and return to the things themselves) the starting point of such a description is the first-person perspective of the one who experiences. With a strong emphasis on intentionality – the conception that consciousness is always consciousness *of* something (Moran 16) – the human subject is always already connected to the world. Therefore, phenomena should be described as they appear to us *directly*, and not through theoretical abstractions, as it is as that consciousness that they are given to us as what they are (Moran 6). With phenomenology's heterogeneity in mind, we may describe its fundamental project as *exercising* attentiveness to the relation between subject and object, or between

human and world. It is important to not regard the first-person perspective and the dormant idealism in Husserl's goal (to return to the things themselves) as an inescapable leap into solipsism.[17] Although Husserl struggled with this issue, phenomenology holds another potential, which I will demonstrate later, through Merleau-Ponty's view on phenomenology, and the concept of post-phenomenology. To understand phenomenology as an analytical abstraction caught up in itself would, moreover, neglect its capacity to describe things as they are lived. As Moran puts it, although widely discussed, phenomenology has been regarded as 'reviving our living contact with reality' (5), and reinstating philosophy in everyday life. So, the main purpose of phenomenology is not to establish a new theory of the world. Rather, it is a stance that urges us to look at the world anew, or makes us attentive to the world in which we always already live. It is this *change in awareness* that I find fruitful in relation to the study of computer games. In other words, I do believe that phenomenology – especially the post-phenomenological branch which I will introduce shortly – has been able to sketch out concrete and usable analytical concepts. Hence, I am not on a mission to develop a *new theory* of computer games, but I hope to both, inspire, and revive attention to our living contact with these phenomena, and provide conceptions that have analytical value in this respect.

Moving further into phenomenology, I will delineate the phenomenological method. This will lead to a description of how I intend to use it as a foundation for further examining the somatic experience of playing computer games.

[17] Solipsism is the notion that the world only exists in consciousness, myself being caught up in my own head, so to speak, never able to verify whether what I experience exists beyond my subjective experience (Moran 175-179).

A RETURN TO 'ESSENCE'?

With the heterogeneity and the inquiring nature of phenomenology in mind, Merleau-Ponty poses the incipient question almost fifty years after the movement's initial conception: 'What is phenomenology?' (*Phenomenology of Perception* vii). Merleau-Ponty formulates an answer that emphasises Husserl's grounding work, but also moves beyond it. Like Husserl, he sees phenomenology as a study of essences. In both the phenomenological catchphrase 'to the things themselves', and in Merleau-Ponty's note that phenomenology 'does not expect to arrive at any understanding of man and the world from any starting point other than that of their 'facticity' (*Phenomenology of Perception* vii), we are promised a return to the essence of things. However, it is important to be aware that phenomenology does not present us with 'essence' in an idealist sense, as a retreat to pure consciousness, as found in the work of Descartes and Kant (*Phenomenology of Perception* x).

I find the notion of *facticity* important when coming to grips with the way Merleau-Ponty uses the term 'essence'. As I see it, the facticity of man and world is *being-in-the-world*. The concept of being-in-the-world (used by Merleau-Ponty throughout his work) references another prominent figure in the phenomenological movement, Martin Heidegger. In-der-Welt-sein (Being-in-the-world)[18] is a term coined by Heidegger, in an attempt to avoid the presuppositions inherent in concepts of *consciousness* and *intentionality* when describing the inherent connectedness of human and world. That is, Heidegger sees consciousness and intentionality as remnants

[18] In the translation of Heidegger's concept of *In-der-Welt-sein*, to *Being-in-the-world*, *Being* is usually spelled with a capital *B* in order to avoid any confusion with lower case *being*. Lower case *being* meaning 'a living thing or entity', capital *B*, *Being*, meaning 'existence' (*Dasein*) (Moran 233). Throughout the rest of this dissertation I will use the capital *B*, *Being*, as the term *existence* (and to some extent *Dasein*) resonates with my conception of the soma as a living, feeling, sentient, purposive body – a Being for whom 'its Being is an *issue* for it' (Moran 238-239).

of a Cartesian mind/body split that is incapable of describing the world as lived (Moran 13-14, 233). Being-in-the-world, on the other hand, refers to our basic relationship to the world as always already 'caught up in' the world. Thus, Being-in-the-world describes the relationship between human and world as fundamentally indivisible into mind/body, subject/object, human/world. In consequence, returning to Merleau-Ponty, *essence* is inherent in our Being-in-the-world. *Essence* is not to be found in a metaphysical realm, but in the 'facticity' of the existential thrownness in-the-world. Merleau-Ponty sees phenomenology's task as the return to this primordial *grasp* of the world and things. In other words, phenomenology's principal task is to disclose the inherent knowledge we have of our direct and immediate contact with the world. As Merleau-Ponty phrases it, 'Looking for the world's essence is not looking for what it is as an idea once it has been reduced to a theme of discourse; it is looking for what it is as a fact for us, before any thematisation' (*Phenomenology of Perception* xvii). This may sound very much like Husserl's intention of reaching the things themselves. But whereas Husserl relied on a 'transcendental ego' (Moran 168-169) as the binding force of the world's 'givenness' and its immediate meaning (eventually seeing phenomenology as a study of this ego), Merleau-Ponty chooses a different path.

To Merleau-Ponty, the world is given as a meaningful fact set against the background of perception, and not through an ego or a consciousness. What he seeks to disclose then, is what we might call immediate or pre-reflective perception. He rejects representationalist (or indirect) accounts of perception, and dismisses the idealist notion that a *cogito* ('I think') autonomously *constructs* the world through reason, which subsequently *gives* it meaning. Meaning is always already there, in perception:

> For if I am able to talk about 'dreams' and 'reality', to bother my head about the distinction between imaginary and real, and cast

> doubt upon the 'real', it is because I have an experience of the real as of the imaginary, and the problem then becomes one not of asking how critical thought can provide for itself secondary equivalents of this distinction, but of making explicit our primordial knowledge of the 'real', of describing our perception of the world as that upon which our idea of truth is forever based (Merleau-Ponty, *Phenomenology of Perception* xviii).

Thus, reversing Descartes famous phrase *Cogito ergo sum* ('I think, therefore I am') to *Sum ergo cogito* ('I am, therefore I think'), as Thøgersen (58) proposes, positions Merleau-Ponty and his phenomenological project in opposition to idealism. Instead, his phenomenology intends to show us a path to rediscovering what things are, and what they mean in our concrete relations to them, disclosing the meanings of phenomena in pre-reflective perception. But, how does this return to the things themselves come about? And, more importantly, is this return even possible?

THE PHENOMENOLOGICAL REDUCTION

Phenomenology, according to Merleau-Ponty, is a manner or style of thinking. It is a certain way of *looking* at the world, or a certain kind of attentiveness to the world, which enables a description of the things themselves. In such a description, we must concern ourselves with how, as opposed to what things are – attend to the *experiencing* of things, as opposed to the things of experience, that is, how things spontaneously disclose themselves to us, and not how we might understand them, through objective reflection. Accordingly, approaching the essence of things is accomplished by descriptively revealing how we relate to them, not by explaining or analysing the thing as something in itself (Merleau-Ponty, *Phenomenology of Perception* vii-ix). As Merleau-Ponty states, 'The real has to be described, not constructed or formed' (*Phenomenology of Perception* xi). In this sense, phenomenology is a holistic approach that grasps the integrity of experience. Subsequently, phenomenology presents

us with a 'tool' for realising this description: *the phenomenological reduction*. It is important to note that this conception of *reduction* does not contradict the ambition of grasping the integrity of experience, as one might initially think. In explaining *reduction*, Merleau-Ponty emphasises Eugen Fink's formulation of it as "'wonder" in the face of the world' (*Phenomenology of Perception* xv). That is, performing a phenomenological reduction is to employ the previously-mentioned way of 'looking' – attending to the *experiencing*. Thus, what is 'reduced' is not the phenomenon of description, but rather the presuppositions normally privileging the view of particular phenomena. My apparent familiarity with things and the world, what is also referred to as my *natural attitude*, is bracketed in the reduction. However, one might rightfully ask, does this (to wonder at the world) not lead us away from, and abstract the world to something it is not? That is, does the phenomenological reduction become the intellectual reflection or objectification that phenomenology sets out to avoid, in the return to the things themselves? Additionally, there is the apparent predicament that language always inserts a clear distinction between describing (e.g. talking or writing about an experience), and actually having an experience.

In his later (and regrettably unfinished) philosophy, *The Visible and the Invisible* (1968), Merleau-Ponty identifies some of the questions he poses in *Phenomenology of Perception* as insoluble, as the language he uses is already caught up in a consciousness/object abstraction (Matthews 150-151). But in *Phenomenology of Perception*, he tackles the issue in a different way. Describing the phenomenological reduction he states, 'The most important lesson which the reduction teaches us is the impossibility of a complete reduction' (*Phenomenology of Perception* xv). That is, he acknowledges that, as always already in-the-world, critical reflection is a part of the temporal flux it tries grasp – I cannot escape my Being-in-the-world. So, in its 'impossibility', the reduction does in fact return one to the world, as it indicates my 'facticity' in the world: 'radical reflection amounts to a consciousness of its own dependence on an unreflective life which

is its initial situation, unchanging, given once and for all' (Merleau-Ponty, *Phenomenology of Perception* xvi). In other words, the 'type' of reflection found in the phenomenological reduction is not an objectification of the world and things, instead, it allows me to 'take a step back' and become aware of my relationship to the world. This brings the existential relational condition to my attention, and lets me describe my connection with the world, instead of taking it for granted, or overlooking it. In short, the phenomenological reduction makes reflection sensitive to the ground from which reflection arises. In consequence, from Merleau-Ponty's point of view, by continuously relearning to look at the world through the phenomenological reduction, the main achievement of phenomenology is the uniting of extreme subjectivism and extreme objectivism. What phenomenology has taught us is that, as we are 'condemned to meaning' by Being-in-the-world, rationality and truth is not set in a 'realm apart' (subjectivism) or 'into the world' (objectivism) (Merleau-Ponty, *Phenomenology of Perception* xxii). Instead, 'we witness every minute the miracle of related experience, and yet nobody knows better than we do how this miracle is worked, for we are ourselves this network of relationships' (Merleau-Ponty, *Phenomenology of Perception* xxiii). As a result, the discrepancy between having and describing an experience is not overcome, owing to the mutual *dependence* of the reflective and the pre-reflective (i.e. there is no such thing as pure experience or pure reflection to return to). The phenomenological reduction instead identifies the relational structures or 'the network we ourselves are' (Merleau-Ponty, *Phenomenology of Perception* xxiii) as the *real* that must be described.

In other words, the phenomenological desire to return to the things themselves, and Merleau-Ponty's conception of the phenomenological reduction as critical reflection that in its impossibility makes us sensitive to the pre-reflective and reflective nature of experience, seems to be a solid foundation for the exploration of the somatic flux of the computer game experience. As I will outline in the following section, there is also another sense in which the work of Merleau-

Ponty may inform the exploration of the computer game as a somatic experience.

THE INTENTIONAL SOMA

The key contribution of *Phenomenology of Perceptio*n (which is centred on the phenomenological description that Merleau-Ponty performs with regard to perception, arguing that the body is a *lived intentional body*, and not merely a physical object controlled by a *mind/consciousness*) is that it demonstrates how the soma (as a living, feeling, sentient, purposive body) in-the-world is fundamental to all experience and knowledge.[19] Therefore, this section underscores the general importance of the soma, provides a conception of its experiential structures and point out a direction for a phenomenology of computer game experience.

Merleau-Ponty rejects a Cartesian mind/body split that positions a cogito in control of the body as an object, a body through which the cogito interprets perceptual representations in order to grasp the world. Instead, Merleau-Ponty insists on a unity of mind and body, and points out: 'I am not in front of my body, I am in it, or rather I am it' (*Phenomenology of Perception* 173). This 'mind-body/body-mind' *Being* is always already in contact with the world, because, just as consciousness (or 'mind') is not in the body like an object in a box, similarly, the body is not in the world like an object in a box. In other words, Merleau-Ponty shares Husserl's emphasis on *intentionality* (that consciousness is always consciousness *of* something), but in his

[19] Merleau-Ponty's perceptual phenomenology has been criticised, 'that by proceeding from a gender-neutral, universal (male) subject in his *Phenomenology of Perception*, Merleau-Ponty ignores female experience – i.e., the gender-specific nature of all experience' (Stoller 176). Although I have not claimed a (gender) neutral perspective, but rather acknowledge my own first-person perspective (and its limitations – which will also come to the fore as I discuss my encounter with the female perspective in the first-person-shooter genre, chapter 3), the issue of gender deserves to be addressed more fully in future work concerning the somatic experience of computer games.

emphasis on the integrity of body and consciousness (what I refer to as the soma), he also frames the body as intentional. That is, similar to way that consciousness is never empty, but always already directed at and caught up in-the-world, the body is never just an empty object or container by always already being engaged in-the-world. This intrinsic intimacy between body (soma) and world manifests itself in the reversibility of perception (e.g. the double sensation of the touching and the touched) (Merleau-Ponty, *Phenomenology of Perception* 106-107). That is, when I touch my left hand with my right, I do not only feel an object, I am at the same time also the object that feels the touch. Thus, consciousness does not need to infer my experience of my body on the basis of representations provided by perception. Instead, the reversibility of somatic perception always already facilitates an immediate experience of embodiment that sets it apart from any other phenomenon we usually call *objects*. Put differently, I come to know what it means to be a body, against the background of perception.

The reversible character of perception (externalised in the encounter with the 'other') gives the body a perceived spatiality. This spatiality may be seen as the pre-reflective knowledge I always have, regarding my body (Merleau-Ponty, *Phenomenology of Perception* 112-113). It is an internal and subjective spatiality that tacitly informs me of where my body is. Accordingly, I never have to locate and grab a hold of my body, in order to move it. Even as my body is visible and external among other objects in the world, I do not relate to it in the same way as I relate to, the ball-point pen on my desk, for example. My pen may disappear in a muddle of papers, but my hand is always immediately here, even though it may also be covered by papers. I am in possession of my body, as it is always *given* to me. Such a *givenness* is knowledge or meaning that precedes a mind/body split, in which I come to think of my body as an object, or make assumptions about it. However, this does not mean that my body exists self-contained and cut off from the world; on the contrary, 'my body can be a "form" … in virtue of its being polarized by its tasks, of its *existence towards* them, of its collecting together of itself in its pursuit of its aims; the

body schema is finally a way of stating that my body is in-the-world' (Merleau-Ponty, *Phenomenology of Perception* 115). The term *body schema* designates the spatiality or the 'form' of the body. The body schema is what holds me together, yet at the same time it is an open system that facilitates not only the experience of my body, but also the experience of my body-in-the-world (Merleau-Ponty, *Phenomenology of Perception* 163-164). My experience of my body and the world are inseparable. Explicated in the above quote, my experience of being a body in-the-world is shaped, as my body is polarised by its tasks and its *existence towards* the world. As the world is not something *in-itself*, the body is not *for-itself*. It is through both body and world as ever-present conditions that I experience being a 'form' in the world. And, as Merleau-Ponty emphasises, this 'form' does not arise through a spatiality of *position*, but a spatiality of *situation* (*Phenomenology of Perception* 115). That is, the form that I experience as a body is not the sum of relations in objective space. Rather, the form arises and changes dynamically through *existence*, as I act in the world with different purposes and intentions.

The notion of *existence* was briefly mentioned in the discussion of *essence* and *facticity* as a characteristic of Being-in-the-world. Here, in the context of addressing the experiential structures of the soma, *existence* is reintroduced, as it positions the spatiality of the body, not only in the *actual*, but also in the realm of the *potential* (Merleau-Ponty, *Phenomenology of Perception* 125). Or, as Merleau-Ponty states elsewhere, 'Consciousness is in the first place not a matter of "I think" but of "I can"' (*Phenomenology of Perception* 159). The 'I can' constitutes existence through the body, in the sense that meaning and value is not presupposed by a cogito making sense of the world 'out-there'. How the world becomes meaningful, or rather, how it is always already full of meaning, is instead established through existential action and movement. This existential 'I can' is explicated through the concept of motor intentionality. Motor intentionality suggests that my movements are never 'empty'. Whether I am aware of it or not, my movements are meaningful against the background of motor

intentionality (Merleau-Ponty, *Phenomenology of Perception* 127). As an existential Being-in-the-world, consciousness of phenomena arises only as I move through the world and reach for certain objects. To give an example of this intentionality, most of the time I do not pay attention to my ordinary movement, for example walking, or sitting on a chair, as I have a somatic knowledge of myself. It is a knowledge that is pre-reflective. Nevertheless, or perhaps exactly due to its pre-reflective character, it keeps me upright, breathing, walking and so on, and is immediately adaptable to various situations – i.e. what Merleau-Ponty calls 'the unreflective life of [somatic] consciousness' (*Phenomenlogy of Perception* xvii). That is, my actions make sense against the background of always already being directed towards the world as a moving soma. I just 'do' these things (breathe, walk, sit, etc.), without further scrutinising my actions or directing my attention to them. Motor intentionality positions my soma not *in* space or time, but rather lets me *inhabit* space and time, or allows me to *belong* to space and time (Merleau-Ponty, *Phenomenology of Perception* 161-162).

Merleau-Ponty gives other examples of the body's ability to generate meaning, which are equally important when establishing a basic conception of why the experience of computer games should be characterised as somatic. Through the acquisition of habit, the body schema is rearranged and renewed, exemplifying the body's ability to comprehend or grasp significance. As Merleau-Ponty says of habit, 'it is the motor grasping of a motor significance' (*Phenomenology of Perception* 165) and 'to understand is to experience the harmony between what we aim at and what is given, between the intention and the performance – and the body is our anchorage in a world' (*Phenomenology of Perception* 167). His most basic example is, as I walk through a doorway, I do not stop to compare the width of the doorway to that of my body. The habitual body is a source of a fundamental significance. Moreover, habit often consists of developing intimate relationships with the world through different objects, exemplified in Merleau-Ponty's examples of the woman with a feather in her hat, and the blind man with his stick (*Phenomenology*

of Perception 165-166). These individuals incorporate objects into their somatic Being-in-the-world. The woman knows 'from within' how far the feather extends from her hat. Similarly, the blind man senses the world at the junction between stick-tip and world, and not where the hand grasps the stick. As Merleau-Ponty formulates it, 'Habit expresses our power of dilating our being-in-the-world, or changing our existence by appropriating fresh instruments' (*Phenomenology of Perception* 166). Thus, the plasticity of the body schema is a condition of somatic experience, and what makes such an existential embodiment meaningful.

A PHENOMENOLOGY OF COMPUTER GAMES?

The ensuing questions are now, *why* and *how* is the phenomenological outlook on experience and Merleau-Ponty's account of perception interesting, when establishing a perspective on the somatic experience of playing computer games?

First, I share the phenomenological attitude, in my desire for a new beginning when exploring the phenomena of computer games, in general. This may be formulated as an effort to grasp the complexity of the experience of playing games, rather than reducing the experience to the formal elements of the game or physical responses of the player's body. The introductory section of this dissertation should be understood as an attempt to perform a phenomenological reduction in relation to what computer games are, as experienced – turning towards the *experiencing* of things, rather than focusing on the things of experience (a game-centric or player-centric approach). In my examination of games as experienced, I: as does Merleau-Ponty's phenomenology: try to position myself between subjectivism and objectivism, between an idealist and realist view of the experience of the game. The experience of playing a game is founded in the material, human–machine relationship, and thus cannot be abstracted into an act of pure consciousness (idealism). At the same time, the experience of playing a game cannot be reduced to the material or

formal elements of the game or the player (realism). The experience of the game happens somewhere between the two. In phenomenological terms, I try to grasp computer games, 'as they come into being'. Secondly, it is evident that Merleau-Ponty's account of the intentional body is a suitable starting point if one wishes to argue, that the computer game experience is founded and savoured in the soma. Just as the body is our medium for having a world, as Merleau-Ponty describes, is the body is our medium for having the world of the computer game. The experience of the game-world manifests in the spatiality of the body schema: 'Bodily spatiality is the deployment of one's bodily being, the way in which the body comes into being as a body' (Merleau-Ponty, *Phenomenology of Perception* 172). Put differently, as the body is not *in* space, but rather *of* it, the spatiality of the game-world is 'drawn from' the player, and in consequence shapes the form of his body as a part of this game-world. The game-world relies on a player exerting effort, and cannot be reduced to something in itself. It is through acting to achieve certain goals that the player comes to feel a somatic 'form' when playing games. Consequently, playing games may be understood as the acquisition of habit, and as Merleau-Ponty says, 'It [habit] is knowledge in the hands, which is forthcoming only when bodily effort is made, and cannot be formulated in detachment from that effort' (*Phenomenology of Perception* 166). Hence, the player comes to 'know' the game and the body he becomes when playing, through somatic intentionality. In other words, the game makes sense as it becomes habitual through the body's silent appropriation of the material and virtual aspects of the game. In the most basic sense, the game is experienced through its artefacts (controller, speakers, screen etc.), rather than through thought or imagination. As I will discuss in the following section, I am not the first game researcher to discover Merleau-Ponty's insightful description of the body.

The Patron Saint of the Body in Game Research

In addition to being the 'patron saint of the body' in Western

philosophy (Shusterman, *Body Consciousness* 49), Merleau-Ponty is, arguably, also becoming the patron saint of the body in computer game research.[20] And Merleau-Ponty no doubt deserves attention in the field of game research, as his meticulous accounts of our perceptual Being-in-the-world are informative when describing and understanding our relation to computer generated environments as integrated and 'real', holding a mind/body dualism at bay. Beyond Nørgaard's use of perceptual phenomenology[21] as a way to account for the inadequate attention the body has received within game research (*The Body under the Mask* 7-8), Merleau-Ponty has most often been used to underscore the importance of the body in the experience of playing, although with different intentions. I will first present a brief (chronological) overview and subsequently, in the following two sections, discuss some of these uses of phenomenology and Merleau-Ponty: Ryan (2001) draws on Merleau-Ponty to develop a phenomenology of reading in new electronic media. Klevjer (2006) approaches the relation between player and avatar

[20] Beyond explicit references to Merleau-Ponty and perceptual phenomenology in theoretical discussions, phenomenology has also, implicit and explicitly, been pursued in more hands-on directions. As mentioned in the introduction, in *Pilgrim in the Microworld* (1983), Sudnow performs a descriptive phenomenology of his encounter with computer games (e.g. *Missile Command, Breakout* and *Pac-Man*). Reeves et al. uses Sudnow's account in an exploration of skill in game-play *Experts at Play: Understanding Skilled Expertise* (2009) Games and Culture 4.3. 205-227. Kryzwinska argues for the validity of a phenomenological first-person approach (combined with other methodologies) in *The Pleasures and Dangers of the Game: Up Close and Personal,* Games and Culture 1.1 2006, 119-122. Mallon and Webb, similarly, argue that phenomenological methodology could inform empirically based evaluation of games *Applying a Phenomenological Approach to Games Analysis: A Case Study,* Simulation and Gaming. 37.2 (2006): 209-225. In *A Structural Phenomenology of Play* (1991) Apter argues for a phenomenological approach for addressing *play experience* in general (not specifically related to computer games). Despite the differences among these approaches, and my use of phenomenology, we share a common interest, not so much in the *what* of experience, but the *how* (Apter 14).

[21] Nørgaard's argument is based on Drew Leder's *The Absent Body* (2004), and not Merleau-Ponty, but as the work of Leder emerges from a Merleau-Pontian way of thinking about perception and body, it deserves to be mentioned here.

phenomenologically, using Merleau-Ponty to examine how different avatars structure experiences of 'vicarious embodiment'. Sommerseth (2007) emphasises the body's role in the perception of realism in computer games. Behrenshausen (2007) founds a discussion of performativity on Merleau-Ponty's thoughts on intersubjectivity. Flynn (2008) refers to Merleau-Ponty's description of space as existential and positional in her exploration of the experiences and pleasures of navigating computer game spaces. Gregersen and Grodal (2009) use Merleau-Ponty to describe how interfaces facilitate experiences of agency and ownership. Crick (2011) uses Merleau-Ponty to disprove film philosopher Vivian Sobchack's characteristic of digital imagery as disembodied. Nørgaard (2011) refers to the concept of body schema and argues for a bodily link between player and avatar, with regard to a question of identity.

All of the above provide compelling arguments for their individual pursuits, using Merleau-Ponty (and perceptual phenomenology in a more general sense) as way to emphasise the importance of the body. Nevertheless, there is a sense in which Merleau-Ponty's vivid evocations of perception and embodiment, in some cases, blinds us to crucial aspects of the *specific* experience at hand – i.e. the use of Merleau-Ponty (and perceptual phenomenology) often stops precisely at the *evocation* of a general pre-reflective body (somatic experience). In other words, my criticism is that the naturalising characteristics of pre-reflective bodily experience (which Merleau-Ponty excels in describing) come to frame the experience of the computer game as *too natural*. For example, Crick describes, and rightfully I think, 'it is precisely our capacity as sensual embodied beings in the world that allows us to engage with a game's artificial world in a way that would engage those senses in real life' (266), but I find that there is a need to emphasise, that it is simultaneously 'our capacity as sensual embodied beings' that allow us to experience the world of the computer game as *different* from, or a *particular instance* of, real life. Recalling my introductory description of the computer game experience, it always involves a certain consciousness: I simultaneously know and feel that

I am driving as well as not-driving the race car (see *Between Somatic Experience and Experience of the Somatic*).

Prosthetic Extension

The tendency to equate basic somatic experience (favouring the pre-reflective life of consciousness) with the experience of playing computer games shows itself in accounts favouring the controller as an extension into the game-world. As Crick argues, 'the control device acts as an extension of the player's body' (Crick 266), I agree that it is part of playing games, but the characteristics of this incorporation of the controller, and extension into the game-world, 'enabling a fluent engagement with the virtual world' (Crick 267), should not be reduced to the body's propensity to naturalise objects – I would argue that the controller as something that resists incorporation is also an important part of playing computer games. A similar issue, concerning a bias towards the 'natural body', emerges in Sommerseth's discussion of the experience of realism in gaming, alluding to Heidegger, 'Anyone who has ever played a video game will know that the process of transforming the joypad from an object that is present-at-hand to ready-at-hand is fundamental to the gaming experience' (766-767). This process of incorporation or prosthetic extension, becoming accustomed to the interface of the game is no doubt fundamental, but we explicitly need to attend the characteristics of it – how this experience of somatic extension differs from the experience of incorporating other objects – if Sommerseth's notion of 'gamic realism' is to be more convincing. Discussing how game interfaces shape players experiences, Gregersen and Grodal (also discussed in the introduction) conclude that current game interfaces support agency and feelings of ownership and efficacy (relying on the body's pre-reflective abilities) while 'experiences of being patients, being objects of embodied actions deriving from game worlds, are presently not supported by existing interface technology' (82). From the mapping and interface perspective that Gregersen and Grodal assume, it is certainly true 'that video game characters cannot touch us

in a purely somatosensory way' (80), but from an experiential point of view, I would argue that the technological constraints do not prevent a sensation of resistance or of being 'acted upon', and moreover that the fundamental asymmetry of the interface experience is part of the somatic form of the games, and essential in the pleasure of the computer game experience (I will develop these points throughout chapters 3 to 6).

I find Klevjer's use of Merleau-Ponty (discussing of the relationship between player and avatar) to be more insightful with regard to describing how the player's extension is not merely pre-reflective. Although the avatar is seen as a habitual prosthetic extension that provides 'maximum grip', Klevjer also emphasises it as a '*reflexive* extension' (*What is the Avatar?* 95) – that is, in contrast to Crick, Sommerseth and Gregersen and Grodal, Klevjer's use of Merleau-Ponty does not make him blind to the more reflective aspects of computer game experience. But whereas Klevjer focuses on the avatar, relying on its 'fictional', 'model', 'miniature' or 'make-believe' characteristics (*What is the Avatar?* 94-96), as what makes one's phenomenological relationship to the game a *computer game experience* and not just 'pre-reflective' *natural experience*, I will pursue the reflectiveness of the computer game experience at a more fundamental level, that is, as I will discuss in the section on *Post-Phenomenology* shortly, there is also a resistance in one's immediate encounter with the analogue as well as digital aspects of computer game technology.

Movement and Space

Merleau-Ponty's evocation of the intentional body has also been used to describe how interactively engaging with controllers facilitates an experience of movement through space. Since Ryan's use of Merleau-Ponty's architectural walkthrough (*Phenomenology of Perception* 235), where the 'active engagement of the mobile body with space and time produces a succession of points of view through which the spectacle of the world smoothly unfolds to perception' (Ryan 72), to describe how

computer generated environments, whether it is the virtual reality that one navigates via a head-mounted display or traditional mouse, keyboard and screen, offer 'a dynamic experience of space' (Ryan 73), a notion of self-movement have been emphasised as essential to our experience of the game-world, and rightfully so. As I play a racing game or navigate a 3D game-world, I sense the space of the game-world and the act of moving through it, and occasionally this is also made observable for people not playing the game, as 'my body intuitively leans toward the direction to which I require my avatar to run' (Crick 266), as if I was positioned in that space. Or as Nørgaard argues in the question of player–avatar relationship, 'In accordance with the concept of the body schema players know themselves as avatars through the corporeal-locomotive action they undertake' (*The Joy of Doing* 6) and elsewhere 'We experience the game as we move' (*The Body Under the Mask* 9). But there is a sense in which we should be aware not to reduce the experience of the computer game to these basic pre-reflective experiential structures of space, movement and self-movement, because even though the computer game experience is undoubtedly founded on and presupposed by these, it necessarily also manifests as a *distinct* experience of *space*, *movement* and *self-movement* that we relate to and discuss as such. We might say that the experience of many games may be characterised as *problematic* space, movement and self-movement, and never exclusively facilitates unconscious bodily experience (as I have argued previously, playing computer games involves a certain somatic consciousness of the act of playing). Nørgaard is also sensitive to the fact that the self-moving 'I can' that ground my experiences in-the-game-world as spatial and present is not *pure* movement, 'There is an intermingling of action, sensing, and thinking in my gaming practice, it has a "fleshy" as well as a sensuous, perceptive, and cognitive dimension which must be united if my gaming practice shall become successful' (*The Body Under the Mask* 9). Similarly, in Flynn's exploration of spatial navigation in computer games, although Merleau-Ponty once again is evoked to describe how the existential space of the body opens up and to some extent naturalises one's position in the game-world (126),

it is also emphasised how this pre-reflective engagement overlaps and dynamically involves other dimensions of spatial experience: 'representations of space … and the cognitive and imaginative processes emerging from the spatial experience' (143).

Moving Beyond 'Classical' Phenomenology

I wish to emphasise two main points from the above discussions: 1) The insights available from the rich tradition of phenomenology should not only be seen as way of *explaining* our experience of computer games. 2) We should not reduce the experience to pre-reflective incorporation of game controllers or game space. Consequently, as I will propose in the following section, one way to avoid these phenomenological 'pitfalls', yet still acknowledge the work of Merleau-Ponty and the phenomenological tradition in general, is to introduce the concept of post-phenomenology. I find that post-phenomenology provides a phenomenological perspective, which more explicitly than that of 'classical' phenomenology, is sensitive to identifying and discussing how our perceptions and somas naturalise as well as adapt to and change our surrounding media environment – i.e. the *transformation* of somatic experience and the experience of the somatic that computer games facilitate.

Before I continue, it is important to note that in adopting a phenomenological stance, I cannot help but acknowledge the previously-mentioned paradox that lies in the effort to return to the flux of immediate experience through the abstractions of language. As the overall aim is to establish an analytical perspective on the somatic experience of computer games, and not discuss phenomenology as such, my goal in the following sections will not be to abolish this paradox, but to repeat Merleau-Ponty's optimism (from *Phenomenology of Perception*), and understand phenomenology as the 'ambition to make reflection emulate the unreflective life of consciousness' (xvii), that is, description that is not blind to the impossibility of being a description of *pure* experience, but rather

description as an *emulation*, that makes me attentive to the lived relationships between player and computer game.

POST-PHENOMENOLOGY

The founding father of post-phenomenology, Don Ihde, regards phenomenology as essentially being occupied with the structures of experience. That is, phenomenology does not take the functionality of experience for granted (Ihde, *Technology and the Lifeworld* 22-23). Instead, the structure, *experience of* ____, exemplified in the basic I–world relation, becomes the ontological foundation for phenomenology, the starting point for all its studies, in consequence also the starting point for post-phenomenology (Ihde, *Technology and the Lifeworld* 25). Yet, post-phenomenology is also inspired by the broader post-modern idea of context-dependent truths (Verbeek, *What Things Do* 113). Hence, we might say that post-phenomenology insists on subjective human experience and its relational structures as its starting point, adhering to its phenomenological roots, but makes an explicit stand against any conception of subject being something in itself (thereby, clearly breaking with Husserl's essentialism).

In his book, *Technology and the Lifeworld*, Ihde sets out to examine how technology transforms the *I–world* relation – which has traditionally preoccupied phenomenology – into what he considers an *I–technology–world* relation. To Ihde, the keyword is *experience*. Following in the footsteps of Husserl, Heidegger and Merleau-Ponty, Ihde sees experience as what emerges when humans perceive. And, because humans are surrounded by technological artefacts (technology being a condition of human existence), Ihde's goal is to examine how our perception is transformed by these, affecting our experience of the world. From Ihde's perspective, the term 'technology' encompasses any material or concrete artefact that is part of some form of human practice (*Philosophy of Technology* 47). Therefore, using a stick to reach an apple in a tree, and talking on a mobile phone are equally *technological* activities. Although they

differ in their material manifestations, the stick being natural and the phone manmade, they are both technologies, as they mediate human existence. At first, such a definition of technology might seem unnecessarily broad. But an initial plasticity is crucial, and serves as a phenomenological way of attending (bracketing) the experiencing of things, as opposed to the things of experience, allowing Ihde to focus on the *how* and not the *what* of experience. Through his analysis, Ihde identifies the basic structure of the *how* of technological experience as a simultaneous *amplification* and *reduction*. That is, in the practice of using technology certain aspects of experience are amplified while others are reduced. One example would be the telephone's 'auditory near-distance' (*Technology and the Lifeworld* 78), which brings forward a certain intimacy of voice while there is a visual and spatial absence of the person at the other end of the line. Although simultaneous, the amplification/reduction structure is somewhat biased towards what is *brought forward*, as Ihde describes it, 'fascination attaches to magnification, amplification, enhancement. But, contrarily, there can be a kind of forgetfulness that equally attaches to the reduction. What is *revealed* is what excites; what is concealed may be forgotten' (*Technology and the Lifeworld* 78). Consequently, I propose to revise Ihde's vocabulary by saying that technology is not only 'in a *position of mediation*' (*Technology and the Lifeworld* 73), but also of *immediation*, in the sense of being in 'immediate or direct' contact.[22]

The post-phenomenological emphasis on the amplification and reduction, immediating and mediating characteristics of technology does not mean that it loses sight of the perceiving soma. Instead, the distinction between *micro-perception* and *macro-perception* supports my argument that as a living, feeling, sentient, purposive soma, experience necessarily always manifests as a simultaneity of pre-reflective and reflective, of somatic experience and the experience of the

[22] 'immediation, n. Immediate or direct action, communication, etc. (The reverse of *mediation*.)' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

somatic. That is, our immediate sensory perception (micro) is always intertwined with cultural perceptions (macro).

> What is usually taken as sensory perception (what is immediate and focused bodily in actual seeing, hearing, etc.), I shall call micro-perception. But there is also what might be called a cultural, or hermeneutic, perception, which I shall call macro-perception. And both dimensions of perception are closely linked and intertwined. (Ihde, *Technology and the Lifeworld* 29)

Peter-Paul Verbeek (another post-phenomenologist) elaborates Ihde's idea: 'Human experiences can be conceived as "interpreted perceptions", in which the interpretations are always informed by the cultural context in which they take place' (*What Things Do* 122). In other words, no experience is more natural or authentic than another. There is no primordial experience (or perception) to return to, only intertwined micro- and macro-perception – i.e. the emphasis on micro- and macro-perception is an acknowledgement of the impossibility of a complete phenomenological reduction. Technological mediation should in turn be thought of as always intertwined in the perceptual layers of being an existential soma positioned in a historical and cultural setting – to recall Merleau-Ponty 'we are ourselves this network of relationships' (*Phenomenology of Perception* xxiii).

The post-phenomenological interest in how technology shapes experience also has phenomenological roots. Merleau-Ponty is sensitive to the relationship between human and artefact, for example, as is evident in his description of how the blind man reaches the world through his stick, or, the cases of the typist and the organist, where their instruments become means of expression, and not only a way of reaching the world (*Phenomenology of Perception* 166-168). In each instance, there is an intimate relationship between human and artefact. And, as handling the artefact becomes habitual, a way

of Being-in-the-world is established. Although Merleau-Ponty sees the incorporation of an artefact as a way of fulfilling one's existence, he does not provide a comprehensive description of this possibility (as discussed in the previous section *A Phenomenology of Computer Games?*). Heidegger is also concerned with the relationship between Dasein and various tools. He emphasises the connectedness between Dasein and tool, as what discloses the world in a particular way, most famously exemplified in his hammer analysis (Heidegger 98). However, one of the limits to his analysis might be that the relationship (found in terms of 'present-at-hand' (vorhanden) and 'ready-at-hand' (zuhanden)) is only seen as a matter of being engaged or not being engaged via these tools. Hence, one might ask, are there not gradations between these two extremes? Ihde makes a similar criticism. Although Ihde agrees that 'human activity from immemorial time and across the diversity of cultures has always been technologically embedded' (*Technology and the Lifeworld* 20), he accuses Heidegger of favouring simple artefacts when describing the relationship between human and technology (*Postphenomenology* 107-109). According to Ihde, this 'romanticism' makes Heidegger blind to the subtleties of more complex and modern technologies. For Ihde, human–technology relations and how they shape our experience of the world exist in a variety of manifestations (*Technology and the Lifeworld* 72-112). When technologies are in the foreground of experience, they may be described as a continuum that consists of what he calls *embodiment*, *hermeneutic* and *alterity* relations. At one end of the continuum, we find the embodiment relation, where technology is taken into perceptual experience, forming a *quasi–I*, a relation that captures what Merleau-Ponty describes as our ability to become habituated to and embody various artefacts. At the other end of the continuum, we have the alterity relation, where technology is experienced as a *quasi–other*, manifested, for example, in the 'otherness' of a robot performing autonomous actions. Between the quasi-I and the quasi-other, the hermeneutic relation calls attention to itself, but simultaneously, refers to that which is beyond, as a map refers to the world, when read as it was intended to (Verbeek, *What*

Things Do 127). In addition to these, there is also what Ihde calls *background* relations, for example, an air-conditioning system, which, when operating properly stays in the background and does not require any focal attention, 'Yet as a present absence, it nevertheless becomes part of the experienced field of the inhabitant, a piece of the immediate environment' (*Technology and the Lifeworld* 109). As Ihde demonstrates in his own account of the human–technology relations of computer game experience, it is the foreground relations that may help us characterise the somatic experience of the computer game.

A POST-PHENOMENOLOGY OF COMPUTER GAMES

In *Technology and the Lifeworld*, Ihde touches – albeit briefly – on the human–technology relation of computer games (100-101). He characterises playing computer games as involving *embodiment* and *hermeneutic* relations, but the *alterity* relation comes to the fore as the most influential (or as what pervades the experience of playing computer games). In the alterity relation, which Ihde schematises as: *I→technology–(–world)*, the player engages with the computer game as a quasi-other (the arrow → indicates at which aspect of the relation the *I* is intentionally directed). The world is only a silent background for this relation (hence it is bracketed), in which technology is experienced as autonomous (Ihde, *Technology and the Lifeworld* 107). Ihde emphasises the element of competition related to games. Subsequently, he states that the player engages in a 'dialogue' with the machine as a quasi-other, motivated by a desire to defeat the machine. Like Huhtamo (see *Defining Computer Games: A Human – Machine Relationship*), Ihde traces the fascination with computer games back to the automaton, which, through its mechanic automation, exercises machine-autonomy and facilitates an experience of alterity in the spectator (*Technology and the Lifeworld* 101). Disregarding the world by bracketing it characterises the player's relation to the computer game, as an experience that never touches the world. However, in referring to the automaton as an alterity relation that is similar to that

found with computer games, Ihde overlooks that these amusement machines – as Huhtamo showed – evolved from being *automated*, displaying a sense of 'otherness', into also having *proto-interactive* features. That is, through interaction, automatons and slot-machines became a means for exercising power, and were no longer merely artefacts that fascinated as they exerted 'otherness'. These features have been further developed in computer games, which also may be seen as means for relating to the world. As discussed in the section, *Defining Computer Games: A Human–Machine Relationship*, the interaction with a computer game does transcend the concrete material and fictional aspects of the relation. Consequently, I find it insufficient to conclude that the salient characteristic of my relation to computer games is that I engage with it as an *other*, 'cut off' from the world.

Ihde holds on to his concept of alterity, and states that such a relation shapes a *disengaged engagement*. As a disengaged engagement, it falls into the same category as activities such as play, creating art, or sport (*Technology and the Lifeworld* 107). Although I agree that the somatic practice of playing computer games is somewhat similar to these activities, I think the notion of *disengaged engagement* should be addressed and rephrased. Most importantly, it should not be confused with a transcendental state of isolation from the world, or the Kantian conception of *disinterested interest*, which would be the sort of idealism post-phenomenology seeks to avoid. I propose a brief excursion into Heidegger's *Being and Time*, as he provides an account of how artefacts disclose the world in a particular way, which will clarify what Ihde means. At the same time, this brief excursion will complement the Merleau-Pontian description of how we are always already in the game-world, through a focus on the technology or the 'artefacts' of the computer game and not the perceiving body. My specific points of departure are Heidegger's thoughts on Dasein and Being-in-the-world in chapter three, *The worldhood of the world*, of *Being*

and Time (Division one, Ch. 3, §§ 14-24).[23] Heidegger identifies the concept of 'world' as interrelated with Dasein's Being. Hence, 'world' should be understood existentially, rather than as something in itself (Heidegger 92-93). Put differently, the world presents itself as possibilities: as tasks, goals, options and things to be done. To Heidegger, one of the characteristics of Dasein is a certain existential *Sorge* (care/concern) that constitutes both world and Dasein. The world becomes 'world' because I have an ongoing and fundamental interest in it. Something similar may be said of the game-world: It is a world in which I am primarily an actor, not a spectator. When playing a game, I am concerned with unfolding the game-world, as I pursue certain interests (e.g. following the game's narrative, exploring the game-world in playful manner or playing against a friend, on- or offline). Whatever my interests may be, they can only be pursued, and potentially fulfilled, by picking up the controller and engaging with the game through explicit somatic effort. The material aspects of the game (the screen, the speakers and the controller) serve as a 'totality of equipment' that, in their usability of 'in-order-to', possess a certain 'readiness to hand' (Heidegger 97-98). In other words, they are available for me to pursue the possibilities of, and my interests in the game-world. I am in the game-world via this 'equipmental totality'. And, as Mulhall argues, 'Encountering objects as ready-to-hand (and so as referred to a particular possibility of Dasein's Being) is the fundamental ground of Dasein's Being-in-the-world' (52). In this totality of equipment, I am engaged in-the-game-world as it is incorporated into the structure of Dasein's Being-in-the-world – I exercise an existential 'concern' to the game-world through these artefacts, which constitutes my basic relation to the game as a *Being-in-the-game*. Hence, what I might be disengaged from (in Ihde's sense), when I play a computer game, is the world of objective 'truths' as identified by scientific instruments (which is the type of

[23] Although widely debated, I concur with the view that the notion of *Dasein* is Heidegger's way of discussing the human being as a specific entity, whose Being is an issue for it (Moran 238-239).

technological mediation that Ihde focuses on). However, as I am sure Ihde would agree, being without scientific interest does not mean that I am cut off from the world. In a Heideggerian sense, the game-world is no less 'worldly' than other objects and phenomena in the world, as I am intentionally directed towards them and incorporate them into my Being. They become tools *in-order-to* fulfil an existential purpose. Consequently, I will argue that my relation to the game does not disengage me from the world, but instead re-enacts my condition of Being-in-the-world as a body. Given Ihde's focus on instruments that serve scientific purposes, he does not attend to the subtleties of how we relate to computer games (and the other disengaged engagements he mentions).

Whereas scientific instruments present us with (constructs) a world of measurable and objective things, the computer game facilitates a singular experience of a 'potential' world. From my point of view, one of the important features of the somatic experience of playing computer games is that it presents us with 'a' possible world, rather than 'the' world. On various occasions, Merleau-Ponty describes phenomenology as being possibly linked with a general effort in modern thought, most visible in modern art (Matthews 135; Merleau-Ponty, *Phenomenology of Perception* xxiv). As manifested in the works of Balzac, Proust, Valéry, Picasso or Cézanne, Merleau-Ponty finds a phenomenological 'will to seize the meaning of the world or of the history as that meaning comes into being' (*Phenomenology of Perception* xxiv).[24] That is, experiencing the possible worlds of these works of art arguably offers to revive our perspective and understanding of our condition of Being-in-the-world. I do not consider computer games to be art, however, as creators of 'possible worlds' they may hold a similar potential as an epistemological engine that provides new perspectives. This anticipates the possibility

[24] Heidegger also had the idea that particular works of art served as a form of *unconcealment* (*Unverborgenheit*, derived from the Greek notion of truth, *alétheia*), as being able to disclose the *true* Being of things (Moran 12).

that my pursuit of games as experienced might also provide a more general insight in our contemporary relationship to the virtual realm of computers, where most of us spend hours each day. As Hansen anticipates: 'digital technologies lend support to a phenomenological account of embodiment and expose the technical element that has always inhabited and mediated our embodied coupling with the world' (26). First, let us return to how post-phenomenology deals with these 'disengaged engagements'.

FROM DISENGAGED TO DISPLACED SOMATIC EXPERIENCE

Demonstrated in the previous section, Ihde's post-phenomenology frames the experience of the computer game as a *disengaged engagement*, and thus creates the possibility to approach this experience phenomenologically, without getting stuck in notions of pure perceptual experience. However, in relation to the experience of a possible world (described above), I find the notion of *disengaged*, in the sense of something that 'loosens', 'detaches', 'liberates' or 'frees',[25] to be insufficient. In other words, to play computer games is an experience that is different from our average everyday engagement in-the-world, which the concept of *disengaged engagement* covers sufficiently, but to describe the computer game experience as something which 'detaches' or 'liberates', is only one side of the story (and to some extent also mirrors the bias towards the pre-reflective, which I have been critical of in the previous sections). Recalling the discussion of how technological mediation/immediation always amplifies and reduces, we might say that Ihde, by using *disengaged*, demonstrates his own point; that we tend focus on the *amplification* and somewhat forget the *reduction* of technological mediation (see the section *Post-Phenomenology*). That is, although playing computer

[25] 'disengage, v. 2. a. To loosen from that which holds fast, adheres, or entangles; to detach, liberate, free.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

games often is pleasurable and a break from our everyday activities (what we might call 'liberating'), it is also a highly confining activity that first and foremost dominates one's senses (a point I will develop throughout the thesis). This does not entail that we should throw Ihde's conceptions overboard. We just need to be aware, that whereas scientific technological mediation/immediation (Ihde's main focus), tend to reduce or neutralise the soma, and amplify the object the soma is directed towards (in their pursuit of the objective measurable scientific world), something else is going on in the technological mediation/immediation of computer games. To anticipate what I will argue in the following section, what sets the human–technology relation of computer games experientially apart is that they tend to emphasise the soma and the perceptual nature of the mediation, just as much as they emphasise a possible world. Therefore, in order to explicitly acknowledge how the experience of the computer game amplifies as well as reduces, as the relation transforms habitual engagement with the world (at both micro- and macro-perceptual levels), I prefer to frame the experience as a *displaced engagement*, that is, as an experience that first of all 'puts out of proper or usual place'[26] one's sense of world as well as one's sense of soma.

The characteristics of displaced engagement may be developed further through Verbeek's discussion of what he calls a *composite relation* between human and technology. Scrutinizing the hermeneutic relation of post-phenomenology, Verbeek inserts an additional arrow between technology and world: *I→(technology→world)*, and dubs it the *composite relation*. This arrow denotes that technology has some sort of *intentionality*,[27] and underlines the immanent non-neutrality

[26] 'displace, v. 1. a. To remove of shift from its place; to put out of the proper or usual place.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

[27] Verbeek uses the term *intentionality* when discussing how technology is directed towards specific aspects of the world. I will limit my use of *intentionality* and exclusively use it in relation to human perception and instead use *directedness* when it concerns the ways in which technology may have a certain 'perceptual interest' in the world.

of technology as technologies are attuned to various aspects of the world, what Ihde described as amplification/reduction. Important in Verbeek's introduction of the composite human–technology relation, is that the particular directedness of technology (its amplifying and reductive characteristics) becomes an essential part of the experience, as he puts it: 'rather than putting these intentionalities in the service of human relations to the world – as is the case in Ihde's hermeneutic relations – they explore technological intentionalities as relevant *in themselves*' (*Cyborg Intentionality* 393). From this perspective, when playing the computer game, the player is somatically directed towards the game technology's directedness towards the game-world – the immediation/mediation itself is at the centre of the player's perceptual attention (both micro- and macro-perceptually). That is, the combination of human intentionality and technological directedness constitutes a game-world. Using Verbeek's words, the purpose of engaging in these relations is to: 'generate a new reality which can only exist for human intentionality when it is complemented with technological intentionality' (*Cyborg Intentionality* 394). Thus, the computer game becomes an experience that differs from the average everyday flux of being engaged in-the-world, as the player's intentionality is complemented with the analogue and digital directedness of the game, transforming and displacing somatic experience (and not because it 'detaches' or 'liberates').

What I find to be missing in Verbeek's description is an attention to the first arrow in the composite relation. That is, I will argue that the purpose of engaging in these relations does not exclusively lie in the spectacle of a possible world or 'new reality' (*Cyborg Intentionality* 394), but also, the purpose of engaging in these relations is to generate a new sense of being a possible soma that only exists when human intentionality is complemented with technological intentionality. This transformational aspect of the first part of the composite relation, wherein the player's relation to technology constantly displaces the

somatic experience of 'a' world and 'an' I, is described similarly by Hansen through the works of Myron Krueger:[28]

> On one hand, human embodiment serves to "naturalize" technical modifications of the world (and, potentially, of the body); on the other hand, these modifications provide an important source for decoupling or deterritorialization by which the body's habitual intercourse with the world gets disturbed and (potentially) expanded. (28)

Apart form reaffirming the phenomenological and post-phenomenological points already in this chapter, that our somatic Being-in-the-world naturalises and creates possible worlds, Hansen's quote more importantly underlines how technology also disturbs and expands our sense of somatic selves, and furthermore that this displacement or transformation is *important*. Hence, framing the human–technology relation of the computer game as a displaced engagement, which facilitates an experience of transformation, I may pursue the continuities and similarities of the pre-reflective and the reflective, somatic experience and experience of the somatic.

A NEW PATH TO PURSUE

Before I move on to the next chapter, to explore the notion of *transformation* further, and develop a vocabulary for discussing it, I will briefly sum up the phenomenological endeavours of this chapter. I started out by posing the question 'is it possible to grab, hold on to and describe the somatic flux of experience without compromising its delicate nature?' From the outset, phenomenology has prevented

[28] Myron Krueger is considered one of the pioneers within interactive media art. Works like *Glowflow* (1969), *Metaplay* (1970), and *Videoplace* (1970) all show distinct attention to the potential of human embodiment. That is, the technologies used in his works served as extensions of the body, and showed its ability to create a world (Hansen 26).

any easy insights that would allow me to either answer 'yes' or 'no', owing to its reluctance to ever becoming a finished system of thought. However, my efforts have not been in vain, in the sense that Merleau-Ponty's description of the impossibility of a complete phenomenological reduction, arguing how we are always already caught up in our approach to the world, provided a 'shift' that somewhat put the introductory question aside, and instead (more productively) encouraged a description of this 'caught-up-ness' – what post-phenomenology would call the *I–world* relation. Consequently, in relation to approaching the somatic experience of the computer game, having circled the *I–world* relation and discussed its perceptual (Merleau-Ponty), existential (Heidegger) and technological (Ihde, Verbeek) nature, has allowed me to developed a new direction to pursue.

'Classical' phenomenology gave an account of how Being-in-the-world immediately forms the world and things as well as the soma. This account provided essential insights with regard to how the player is positioned as, and experiences, a *Being-in-the-game*. Through a critical revision of existing phenomenological approaches to computer game experience, I identified a tendency to get caught up in what Merleau-Ponty describes and hails as 'the unreflective life of consciousness' or 'non-reflective consciousness' (*Phenomenology of Perception* xvii, 337). While these perspectives, circling the pre-reflective, are informative when it comes to an evocation of the body's rightful place in game research, I find that most of them fall short when it comes to fully addressing *the somatic consciousness* also involved in the experience of Being-in-the-game. Consequently, I my recurring argument that the computer game as a somatically savoured experience does not solely rely on the soma's silent acquisition of in-game habits, or the embodiment of the experiential forms of the interface, I also proposed a move towards post-phenomenology. Subsequently, Ihde's and Verbeek's emphasis on the essential role that technology plays in our somatic knowledge and sense of presence in-the-world created a new path to pursue. The concepts of micro-

perception/macro-perception, amplification/reduction, immediation/mediation allowed me to move beyond the discussion of whether the computer game experience is more pre-reflective than reflective, or vice versa, that is, through these distinctions that acknowledge the intertwinedness and continuity of the pre-reflective and the reflective, I identified the concepts of *transformation* and *displacement* as new way to bracket the somatic experience of the computer game.

Chapter 2

AWARENESS OF THE SOMATIC

In the previous chapter, I discussed how technological immediation/mediation is a condition of Being-in-the-world. This condition is intertwined with an existential possibility: I can choose, change and shape who I am, and to some extent, the world that I am always already in, by extending my intentionality through objects and instruments – reaching for possible 'worlds' and possible 'somatic selves' through technology. This transformational character of the amplification and reduction of technology is essentially what grounds the somatic experience of playing computer games. Now, the question is: Why and how do the transformational characteristics of the computer game experience manifest themselves as *unique* instances of the existential conditions and possibilities of technology?

This chapter introduces a theoretical tradition that is sensitive to the somatic dimensions of experience – a tradition different from, yet related to the phenomenological perspective presented in the previous chapter. First, discussing the concept of *aesthetic experience* and its transformational characteristics, will, despite of the concept's faithfulness to the domain of art, position it (as originally intended), as *a theory of sensory knowledge*, suited to addressing the experience of playing computer games. Secondly, this will identify *somaesthetics* as a discipline and a mode of experience that, with its emphasis on the perceiving soma and a distinction among *experiential*, *representational* and *performative* dimensions of *somaesthetic* experience, offers an analytical perspective on the somatic consciousness involved in the experience of playing computer games. Moreover, the introduction of aesthetics and somaesthetics also works as a way to 'balance' my

analytical perspective, that is, this chapter serves as a productive bias in relation to the presentation of the pre-reflective soma found in the previous discussions of phenomenology: 'When we identify the body only with spontaneous and unreflective subjectivity, it becomes too easy to contrast it with the mind and to identify it narrowly and simplistically with an uncritical, wildly Dionysian, antirational force' (Shusterman, *Soma, Self, and Society* 315-316). In other words, through aesthetics and somaesthetics, I am taking my initial description of the computer game experience (as both a somatic experience and an experience of the somatic) to new level, which will distance me further from a dualistic conception of experience.

AESTHETICS: A THEORY OF SENSORY KNOWLEDGE

Aesthetics achieved status as an autonomous philosophical discipline in the mid-eighteen century. Conceived, by Baumgarten, as 'a general theory of sensory knowledge', aesthetics, 'Deriving its name from the Greek "aisthesis" (sensory perception)', initially, in an inclusive manner, explored the value of the perceptual relation between subject and object (Shusterman, *Somaesthetics* 300), advocating for 'the cognitive value of sensory perception, celebrating its rich potential not only for better thinking but for better living' (Shusterman, *Somaesthetics* 300). Over time, the aesthetic discipline narrowed its scope to most often identify the prototypical relationship between work of art and its observer, thereby achieving status as a 'theory of art', addressing the work of art, rather than sensory perception, implicitly locates the 'value' of the experience as existing in the object, and not the perception of the object.

Introducing concepts of *aesthetic experience* and *art* into the discussion of computer games as somatic experiences is not meant to debate whether computer games should be *categorised* as art, nor is the introduction of aesthetic theory aimed at revising what we call art, to include computer games. As noted above, the introduction of

aesthetics should be seen as a shift in analytical perspective, from the general experience of embodiment and technological transformation, to the individual experience of playing a specific computer game. That said, as works of art and computer games exist in the cultural domain of Western society, the link between them also manifests as a more than merely theoretical one. At a concrete level, computer games are used explicitly in various works of art and art projects. For example, *Super Mario Clouds*[29] and *dead-in-iraq*[30] demonstrate the potential of computer games as material, structure and creative tools for artistic expression, and sites for critical interventions, arguably in an ongoing modernist tradition of *play* or 'aestheticism of interactivity' (Martin 91). As Martin argues in his exploration of aesthetic practices in computer games, we may also identify an underlying affinity between the non-linearity of the computer, and aesthetic and philosophical breaks with metaphysical logos-thinking (88). Incorporating the concept of *aesthetic* in my discussion of the computer game as a somatic experience, I aim to underline an affinity: not between the structural characteristics of the computer and aesthetic theory, but between the perceptual structures of the traditional art experience, as described by aesthetic theory, and the somatic experience of the computer game. We may approach this common perceptual ground by considering 'aesthetic experience' as a background condition, rather than an indicator of works of art and art experiences. Shusterman

[29] *Super Mario Clouds* (Cory Arcangel 2002) was produced by manipulating the hard- and software of renowned Nintendo classic *Super Mario Bros.* (1985), removing everything from the game-world, except the blue sky and clouds: http://www.coryarcangel.com/things-i-made/supermarioclouds/ – last retrieved 28 Aug. 2011.

[30] *dead-in-iraq* (Joseph DeLappe 2006 – ongoing) uses the US military recruitment MMOG (massively multiplayer online game), *America's Army* (2002 –), as a platform for creating a 'fleeting, online memorial' (DeLappe) for American soldiers killed in Iraq. Logging on to the game with the username *dead-in-iraq*, DeLappe uses the game's text messaging system to share the names, ages, service branches and dates of the deaths of the soldiers, with other players: http://www.unr.edu/art/delappe/gaming/dead_in_iraq/dead_in_iraq%20jpegs.html – last retrieved 28 Aug. 2011.

advocates the use of aesthetic experience as a *background condition*. He states: 'such a background condition concerns the *point* rather than the *extension* of the concept of art' (Shusterman, *The End of Aesthetic Experience* 38). Therefore, aesthetic experience may be understood as the background against which the experience of art is *one* particular instance. I wish to adopt a similar approach when using the term 'aesthetic experience' in relation to the experience of computer games. As stated above, I am not employing the concept of aesthetic experience for the purpose of demarcation. In line with Baumgarten's initial conception of aesthetics as *a theory of sensory knowledge*, and Shusterman's concept of *somaesthetics* (which I will introduce shortly), I also conceive aesthetics as a discipline that (should) offer a perspective on the value and structure of perceptual experience, and not a discipline that categorises objects as art, or not. I consider the experience of the computer game and its value to be neither equal to art, nor an aesthetic experience. Instead, the experience discloses itself against the conditional background of aesthetic experience, as a fundamental mode of Being-in-the-world.

On our way to establishing an analytical perspective that will enable a discussion of the somatic experience of playing computer games, let us first address the characteristics of aesthetic experience, to better understand the value of the structure of sensory perception (in aesthetic experience) and the somatic consciousness it entails.

THE CHARACTERISTICS OF AESTHETIC EXPERIENCES

On various occasions, Shusterman outlines the characteristics of aesthetic experience, through both Continental and Anglo-American philosophy. He emphasises four features that, across the different aesthetic traditions, are common to aesthetic experience:

1) Aesthetic experience has an *evaluative* dimension, often (but by no means exclusively) in the sense that it is pleasurable.

2) Aesthetic experience has a *phenomenological* dimension – it is subjectively felt and appreciated as something distinct from the everyday flow of experience.

3) Aesthetic experience has a *semantic* dimension – it is meaningful as something more than immediate sensation.

4) Aesthetic experience has a *demarcational-definitional* dimension – it is an experience often related to the autonomy of art. (Shusterman, *The End of Aesthetic Experience* 30; Shusterman, *Aesthetic Experience* 218-224)

An initial response to these characteristics may be that they comprise an unnecessarily broad definition of aesthetic experience, especially when the demarcational-definitional aspect is disregarded. Somewhat like the concept of human–machine relationship (presented in the section *Defining Computer Games: A Human–Machine Relationship*), we may criticise the above distinctions of being *too* general to say something about the experience of playing computer games, in the sense that there are a variety of experiences that have semantic, phenomenological and evaluative dimensions, without necessarily being regarded as aesthetic experiences. But, in Shusterman's revision, it is possible to delineate an idea of what I would call *transformation* (and a certain consciousness of it) as inherent in aesthetic experience, setting it apart from other experiences with evaluative, phenomenological and semantic aspects.

Quoting Adorno, Shusterman defines aesthetic experience as something which 'requires self-abnegation', and explains aesthetic experience as having a transformational aspect as 'it is something undergone or suffered' (*The End of Aesthetic Experience* 30). Although aesthetic experience is described as a dynamic relation, the subject is not in full control of, but instead determined through ideological structures of the work of art (or aesthetic object). Moreover, the transformation arises as the subject and object are dialectically

intertwined, and consequently comes to the fore as a somewhat transient state, as it only exists in the relationship between subject and object, and not something in itself (aesthetic experience manifests in perception, we might say). With Gadamer, the transformative aspect of the aesthetic experience is also present: 'the work of art has its true being in the fact that it becomes an experience changing the person experiencing it' (Shusterman, *The End of Aesthetic Experience* 31). Furthermore, a possible relation between the somatic experience of computer games and art become evident, as the work of art is compared to games, which 'plays its players, submits those who wish to understand it to the rigors of its structures' (Shusterman, *The End of Aesthetic Experience* 31). Related to the above-mentioned notion of a *self-abnegating* sensibility, in this context aesthetic experience is something the subject undergoes by being constrained in certain ways, but is nevertheless a voluntary activity to which one submits to if one *wishes*. Consequently, being a voluntary and intentional act, aesthetic experience also involves a consciousness of perceptual directedness and a level of self-consciousness concerning a desire for a possible sensation of change or transformation. Similarly, in Dewey's philosophy we find the aesthetic experience as something which *happens* when the *art product* is engaged in some kind of exchange with a subject: 'the actual work of art is what the product does with and in experience' (Shusterman, *The End of Aesthetic Experience* 33 – quoting Dewey). That is, aesthetic experience is essentially played out as a relation between subject and object, and not inherent in the subject or the object as discrete entities. Last, turning to Benjamin, we find a concept of aesthetic experience related to a 'process'. With Benjamin, 'true' aesthetic experience is characterised as a more profound experience, which contrasts the fragmentary modern world, '(as Erfahrung) that requires the mediated, temporally cumulative accretion of coherent, transmittable wisdom' (Shusterman, *The End of Aesthetic Experience* 31). In this perspective, the transformation has explicit cultural and political implications, related not only to the individual, but to the experience of the modern world as such.

I find that a discussion of the somatic experience of playing computer games (encompassing both the sensation of *being* and *having* a body in-the-game – somatic experience and the experience of the somatic) may be pursued through a similar notion of *transformation*. Computer games have transformational characteristics, in the sense that playing games is a voluntary act in which the player engages at both micro- and macro-perceptual levels. For example, by choosing to play a game, the player agrees to take on the task presented by the game, whether it involves being a race car driver, a space-marine, or something else. Also, game-play is something in which the player engages; it requires a certain self-abnegating sensibility to have an experience that is meaningful in its phenomenological immediacy. In other words, the player makes a somatic effort to master and adapt to its challenges, effectively push buttons, handle a perspective, and so forth, dynamically exploring somatic conditions and possibilities in-the-game. We might also speculate that when a computer game no longer offers transformation, whether at the micro- and/or macro-perceptual levels (e.g. its narrative has been purged, the player has mastered all its game-play mechanics, or handles the controller perfectly), it eventually loses its appeal, and the player stops playing. Furthermore, it is important to note that this transformation occurs momentarily. That is, the transformation is experienced as valuable in relation to everyday experience. It is not a permanent transformation that the player takes with him when he puts down the controller; instead, it is something the player moves in and out of, or may return to.

Despite the transformational similarities between the art/aesthetic experience and the experience of computer games, one might still argue that the gap between the fleeting 'entertainment' of computer games and the more 'profound' nature of aesthetic experience remains. We may address this gap, and question its existence, by turning to Shusterman's concept of *somaesthetics* as *enhanced somatic*

self-awareness.[31] Through the somaesthetic discipline, the notion of transformation (and consequently the *aesthetic experience* facilitated by the computer game) becomes less ephemeral/fleeting, as it is explicitly tied to the perceiving subject, and centred on the *experiential*, *representational* and *performative* dimensions of somatic experience (I will describe these dimensions shortly). At the same time, the focus on the perceiving subject, poses new questions regarding the 'profoundness' of the experience of playing computer games.

THE SOMAESTHETIC DISCIPLINE

> The term 'soma' indicates a living, feeling, sentient body rather than a mere physical body that could be devoid of life and sensation, while the 'aesthetic' in somaesthetics has the dual role of emphasizing the soma's perceptual role (whose embodied intentionality contradicts the body/mind dichotomy) and its aesthetic uses both in stylizing one's self and in appreciating the aesthetic qualities of other selves and things. (Shusterman, *Body Consciousness* 1-2)

Somaesthetics denotes a melioristic philosophical discipline that in various ways deals with practices and experiences that revolve around the soma. Acknowledging somaesthetics as a discipline positions it within a tradition of aesthetic theory that has (as described in the previous section) as its principal task the exploration of the perceptual

[31] The question of 'entertainment' and 'aesthetics' is also discussed elsewhere, for example, Part I *Aesthetic Experience and Popular Art* of Shusterman's *Performing Live – Aesthetic Alternatives for the Ends of Art*. Cornell University Press, 2000. 15-111. Or particularly with regard to computer games, Henry Jenkins' *Games, the New Lively Art* in *The Wow Climax: Tracing the Emotional Impact of Popular Culture*. New York University Press, 2007. 19-40.

relationship between subject and object.[32] Through the above definition of 'soma' and 'aesthetics', there is an obvious link to the overarching thesis of this dissertation, 'that playing computer games is a bodily founded and bodily savoured activity', in the sense that the somaesthetic discipline foregrounds the *soma* and its perceptual capacity as both the foundation for engaging in, and vehicle for savouring the world around us. This means that the somaesthetic discipline takes Baumgarten's initial conception of aesthetics seriously, with a rigorous focus on the significance of the inherent reversibility of perception and conscious reflection. Furthermore, through its description of various somaesthetic practices, somaesthetics enables me to indicate three analytical arcs, along which I may further pursue the transformational character of the experience of computer games, outlined in the sections above (and implicitly found in the discussions of the previous chapter, *A (post-)Phenomenological Foundation*, concerning the naturalising and decoupling, amplifying and reducing characteristics of the I–technology–world relation), and demonstrate that the experience of playing computer games manifests in the intersections of both *being* and *having* a body (somatic experience and the experience of the somatic).

As a discipline, Shusterman defines somaesthetics as the:

> …critical meliorative study of one's experience and use of one's body as a locus of sensory-aesthetic appreciation (aesthesis) and creative self-fashioning. It is therefore also devoted to

[32] As I am interested in the somaesthetic discipline as a working analytical perspective on computer games, an in-depth examination of the theoretical implications of somaesthetics is beyond the scope of this dissertation. These issues may be explored in the discussions of Shusterman's somaesthetics by Antonia Soulez, Thomas Leddy and Paul C. Taylor in *Journal of Speculative Philosophy*, vol. 16, no. 1 (2002): 1-38, Martin Jay, Casey Haskins, Gustavo Guerra and Kathleen Higgins in the *Journal of Aesthetic Education*, vol. 36, no. 4 (2002): 55-115, Jerold J. Abrams in *Human Studies,* vol. 27, no. 3, (2004): 241-258, Eric C. Mullis in *Journal of Aesthetic Education*, vol. 40, no. 4 (2006): 104-117, and Shaun Gallagher in *Metaphilosophy*, vol. 42, no. 3 (2011): 305-327.

> the knowledge, discourses, and disciplines that structure such somatic care or can improve it. (*Body Consciousness* 19)

> Somaesthetics connotes both the cognitive sharpening of our aesthesis or sensory perception *and* the artful reshaping of our somatic form and functioning, not simply to make us stronger and more perceptive for our own sensual satisfaction but also to render us more sensitive to the needs of others and more capable of responding to them with effectively willed action. (*Body Consciousness* 43)

The somaesthetic discipline has a close relationship with philosophy, as Shusterman regards them as sharing a common focus on: knowledge, self-knowledge, right action, the pursuit of virtue and justice (*Body Consciousness* 19-22).[33] This relationship also acknowledges that there are thinkers, not explicitly associated with the somaesthetic discipline, who have paid attention to the somatic aspects of human existence (e.g. Foucault, Merleau-Ponty, de Beauvoir, Wittgenstein, James and Dewey, as discussed in Shusterman's *Body Consciousness – A Philosophy of Mindfulness and Somaesthetics*). However, according to Shusterman, two elements are missing in the existing philosophies of bodies and embodiment: first, a structural overview, capable of organising the various somatic approaches into a productive framework; second, a clear pragmatic direction that may be translated into practices that improve somatic awareness (*Somaesthetics* 304). It is his hope that somaesthetics as a discipline may revise these aspects.

[33] Shusterman also discusses how somaesthetics should be classified in relation to the already existing branches with which it shares common ground, such as aesthetics, history, anthropology and bodily practices. Ultimately, he deliberately leaves the question unanswered as it should be a collective process among the branches and thinkers involved (Shusterman, *Somaesthetics* 307-309).

The somaesthetic discipline consists of three overriding dimensions: *analytic*, *pragmatic* and *practical* somaesthetics (*Body Consciousness* 23-30):

1) Analytic somaesthetics is a theoretical and descriptive dimension that includes: ontological, epistemological and socio-political perspectives on how somatic perception and somatic practices shapes our conception of knowledge and reality.

2) Pragmatic somaesthetics is a methodological and normative dimension 'proposing specific methods of somatic improvement and engaging in their comparative critique' (Shusterman, *Body Consciousness* 24).

3) Practical somaesthetics is an active dimension devoted to making concrete use of methods and practices of self-care and cultivation. Shusterman states, 'For practical somaesthetics, the less said the better, *if* this means the more work actually done' (*Body Consciousness* 29).

As I am interested in a *working* analytical perspective (as stated earlier), my work spans analytical, pragmatic and practical somaesthetics, in the sense that my *practical* playing of computer games, reflected in, and discussed through the concepts of *pragmatic* somaesthetics (introduced in the following paragraph) informs my *analytical* take on computer games as a somaesthetic experience.

By outlining the difference between somatic and somaesthetic practices, Shusterman describes the merits of pragmatic somaesthetic methods and practices:

> What distinguishes somaesthetic training from mere somatic training is a mindful cultivation of enhanced somatic 'self-awareness' and reflection about one's somatic states, feelings,

> perceptions, and actions, and their structuring, engaging contexts, so that such mindfulness, if properly pursued, will also take one well beyond the somatic self to wider realms of culture and society in which the self is situated. (*Body Consciousness and Music* 100)

To be more specific, somaesthetic methods and practices consist of two intertwined levels somatic Being: *somaesthetic perception* and *somaesthetic self-reflection*. That is, in somaesthetic practices, 'we are consciously and explicitly aware of what we perceive, whether such perception is of external objects or of our own bodies and somatic sensations' (Shusterman, *Body Consciousness* 55), and these may consequently be described as practices, dominated by an awareness of the perceptual characteristics/qualities of a given action/activity (somaesthetic perception). Shusterman then argues that this awareness of perception may be taken to a meta-level, which he calls 'somaesthetic self-consciousness or reflection' (*Body Consciousness* 56). In other words, somaesthetic self-reflection is a mode of Being dominated by an awareness of our awareness of the perceptual characteristics/qualities of a given action/activity, as Shusterman puts it: 'Here we are not only conscious of what we perceive as an explicit object of awareness but we are also mindfully conscious of this focused consciousness as we monitor our awareness of the object of our awareness through its representation in our consciousness' (*Body Consciousness* 55). Shusterman finds these levels of somatic consciousness (somaesthetic perception and somaesthetic self-consciousness) essential to practices that, in different ways, are directed at improving our somatic Being-in-the-world (e.g. meditation, yoga, the Feldenkrais method or the Alexander Technique). It is important to note that these practices do not deny the existence of the unreflective perception of the soma as what grounds our Being-in-the-world (described in the previous chapter on phenomenology); instead, we might say that the somaesthetic levels occur momentarily in the figure-ground contrast of somatic consciousness and consciousness of the somatic (Shusterman, *Body*

Consciousness 67). In such somaesthetic practices, acute attention to the perceptual characteristics of experience (somaesthetic perception) and awareness of our perceptual awareness of somatic sensations (somaesthetic self-reflection) hold the potential, for the ability to improve our somatic selves, as well as for a greater appreciation of our somatic selves as perceiving bodies, for example, as Shusterman argues in a description of somaesthetic self-reflection oriented towards breathing (e.g. found in some variations of meditation): 'we will also be aware of *how* our self-consciousness of breathing influences our ongoing breathing and attentive awareness and related feelings' (*Body Consciousness* 56).

It is important to note that the introduction of the concept of *somaesthetics*, as a manifestation of consciousness of the soma and the somatic, is NOT a return to a mind/body dualism, on the contrary, we might see the somaesthetic practices (that revolve around perception and self-reflection) as practices that encourage phenomenological reduction or bracketing, which makes us attend to the micro- and macro-perceptual *experiencing* of things, as opposed to the things of experience. In a somaesthetic 'double sensation' such practices potentially 'makes reflection sensitive to the ground from which reflection arises' (see the section *The Phenomenological Reduction*). Put differently, the meliorism of somaesthetics, that is, its emphasis on how 'properly pursued' practices of body consciousness will lead to somatic 'care', 'improvement' and 'effectively willed action' that will 'take one well beyond the somatic self to wider realms of culture and society in which the self is situated'(Shusterman, *Body Consciousness and Music* 100), should not be confused with a dualistic conception of the mind (consciousness) as something separate from the body, 'guiding' the naïve or unknowing body to proper action. Nor is the concept of somaesthetic consciousness a return to *aesthetics* as a philosophy of mind, where the mind tells the body what to sense and feel, and how to appreciate art and art experience. First, Shusterman's pragmatist emphasis on 'doing', through the concept of *practice* means that the somaesthetic levels of consciousness arise (momentarily

and in immediate experience – as described above) *as* the practices are performed in the full-body act of exercising them (not *before* – drawing out a mental guide to follow – or *after* – as a reasoning or sense-making retrospection of what the body did). These somaesthetic levels of consciousness are the results of the body-mind integrity of the lived soma, not be reached transcendentally, through pure consciousness, but always already inherent in the continuous material flux of somatic experience.

The concept of somaesthetics is important in the further development of my thesis, for two main reasons. First, as a conjunction of *soma* and *aesthetics*, somaesthetics brings the issue of *transformation* more 'down to earth'. The notion of *transformation*, as an inherent aspect of aesthetic experience (as described in the previous section), is taken to an explicitly somatic level. The continuous references to the *self* (e.g. found in the quotes above: 'stylizing one's self', 'self-fashioning', 'self-awareness' or 'reshaping of our somatic form and functioning'), foreground how the sense of transformation, which makes aesthetic experience stand out, is a state of reflective, subjective experience. And, combining this with an emphasis on sensory perception ('sentient body', 'sensual satisfaction', 'somatic states', 'posture, breathing, ritualized movement etc.'), the integrity of the soma as a body-mind is emphasised, as the reflective experience (and its value) is grounded and savoured through somatic perception. Hence, as the concepts of *aesthetic experience* and *transformation* are tied to the reversibility of consciousness and lived somatic sensation, rather than features that are intrinsic to the object, or of which the object is merely a representation, discussing the value of *aesthetic experience* and *transformation*, in the somaesthetic discipline, becomes a very direct matter of addressing our conscious experience of sensory perception, and not a speculative account of how such sensations of aesthetic experience and transformation are imposed on us (as we are immediately in contact with them). Second, having the intertwinedness of somaesthetic perception and somaesthetic self-reflection as a guiding analytical principle, keeps me on a

steady phenomenological course, favouring neither pre-reflective nor the reflective dimensions of the somatic experience of playing computer games. However, does this mean that computer games are somaesthetic practices?

SOMAESTHETICS AND COMPUTER GAMES

There is one sense in which the concept of *somaesthetics* is unsuited for addressing the computer game experience – also allowing us to immediately answer, 'No!', to the question that ended the last section. The recurring meliorism and the normativeness of the somaesthetic discipline stand in direct contrast with both the content and form of most computer games. Although there are sport and fitness games ('exergames', a concept to which I will return in chapter 6), such as *Athletic World* (1986), *Wii-Fit* (2007) or *EyeToy: Kinetic* (2005) and 'brain games' for cognitive improvement, such as *Big Brain Academy* (2005), keeping the definition of somaesthetics in mind, and the practices Shusterman mentions – bodily modification/decoration, diets, massage, dance, yoga, martial arts and so forth (*Body Consciousness* 24) – I believe it would be significantly misleading to claim that the vast majority of commercial computer games contribute to a 'mindful cultivation' (Shusterman, *Body Consciousness and Music* 100), or 'render us more sensitive to the needs of others' (Shusterman, *Body Consciousness* 43); consequently, I might even be accused of exploiting the somaesthetic discipline 'devoted to the knowledge, discourses, and disciplines that structure such somatic care or can improve it' (Shusterman, *Body Consciousness* 43). Nevertheless, I find it equally insufficient to say that computer games are 'just' somatic training (merely relying on pre-reflective consciousness), and hold no somaesthetic potential – in other words, computer games may not be explicitly somaesthetic practices, but they contain the potential for somaesthetic *experiences*: first, because the technological transformation inherent in the activity of playing computer games amplifies and reduces (naturalises and decouples) the player's micro- and macro-perception, as discussed

in the previous chapter. Put differently, since playing computer games is an essentially somatic practice (at a micro-level, developing and training somatic skills, handling the controller and exercising fast responses, and, at a macro-level, playing with identities, roles and physical representations), associating the somaesthetic ideals of sharpening and reshaping sensory perception and form, and facilitating conscious reflection concerning these actions, does not seem far fetched. Secondly, the somaesthetic discipline is not blind to the necessary diversity of somaesthetic experience, as Shusterman diplomatically states in a discussion of Foucault's philosophy and its 'extreme' somaesthetic practices, advocating sadomasochism and drug use: 'To the extent that each particular self is the unique product of countless contingencies and different contextual factors, we should expect and respect a certain diversity of somaesthetic methods and goals for self-cultivation' (*Body Consciousness* 30). In other words, the efficiency or the potential of the somaesthetic experience must be evaluated according to the somaesthetic perception and self-reflection it 'actually' facilitates, and not exclusively through the means which it is pursued.

The discussion of basic somatic consciousness versus consciousness of the somatic (somaesthetic perception and self-reflection) in the experience of playing computer games will reappear throughout my analysis of specific games, where the shift from one to the other becomes obvious (and later, in a discussion of the future potential of my analytical perspective, in the conclusion), as there is an interesting tension between a focus on unreflective and reflective embodiment (surrounding both the computer game discourse and practice). I now will return to Shusterman, and examine his various suggestions for distinguishing between the perceptual characteristics of somaesthetic practices/experiences, in order to have some guidelines for my further exploration the computer game experience.

SOMAESTHETIC DIMENSIONS OF TRANSFORMATION

To Shusterman, practices devoted to somaesthetic perception and self-reflection, for example dance, yoga, bodybuilding, martial arts, body modification/decoration and so forth (introduced as part of the pragmatic branch of somaesthetics), may be grouped in different ways. Some practices are *holistic*, centred on the integrity of the body or the I of the person engaging in the practice, while others, with their focus on individual aspects of the body, may be characterised as *atomistic* (Shusterman, *Body Consciousness* 24). Somaesthetic practices may also be conceived as *self-directed* or *other-directed*. That is, either they focus on the practitioner himself or the body of others (Shusterman, *Body Consciousness* 24-25). The grouping of somaesthetic practices should be regarded as distinguishing rather than strict categories. That is, just as the concept of *self* and *other* are implicit in each other, the focus on a specific aspect of the body or what it feels like to be a body may function as a key to unlock the whole, or vice versa.

Turning to computer games, we may also identify a tension between the holistic and the atomistic. Through the notion of *immersion*, the commercial discourses surrounding computer games emphasise a holistic fantasy, merging player- and game-world, yet there is a simultaneous tendency to objectify specific aspects of perception (e.g. *vision*, through photorealistic and high resolution images), in an effort to situate the player in the game. Similarly, in the act of playing computer games, investing 'atomistic' effort in mastering specific button combinations, cut off from the flow of game-play, does give the player a sense of full-body presence in the interface/game-world, once it has been mastered. The distinction between the self- and other-directed is equally hard to uphold, as both modes of experience are explicit in the practice of playing computer games. That is, players are often positioned as *subjects* in game-worlds that rely on the presence of *others*, in online- and cooperative-game-play. Even within the ego-centric withdrawal into the single-player game experience,

the *other* continuously reappears, owing to the fact that the relation between player and game does not exist in a vacuum, but takes place in a social and cultural context (I will return to and discuss these issues at relevant points in the following chapters). In Shusterman's vocabulary, the distinction that I find most useful for discussing the experience of playing computer games is that which exists among *experiential*, *representational* and *performative* somaesthetic practices. This is a distinction that emphasises practices that focus on the soma's subjective/internal side, 'making us "feel better"' (Shusterman, *Body Consciousness* 26), its objective side, 'the body's exterior or surface forms' (Shusterman, *Body Consciousness* 26), or the demonstration/performance of 'bodily strength, skill, or health' (Shusterman, *Body Consciousness* 28). Like the holistic/atomistic and self-/other-directed distinctions, the experiential, representational and performative dimensions of experience should not be regarded as strict categories. As Shusterman notes 'there is a basic complementarity of representation and experience, outer and inner. How we look influences how we feel, and vice versa' (*Body Consciousness* 26). Fig. 1. outlines how I understand the intrinsic relationship among the experiential, representational and performative dimensions.

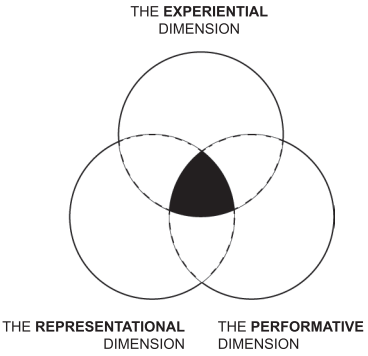

Fig. 1. The intersection of the experiential, representational and performative dimensions of experience (coloured black) represents the actual lived somatic experience, where any distinction among the three becomes problematic. That is, there are no 'purely' experiential, representational or performative experiences.

I propose that the experiential, representational and performative dimensions simultaneously run through and constitute the process of playing computer games, their internal relationship varying from genre to genre, game to game, and, potentially, also from game-play session to game-play session. Briefly returning to the phenomenological point of departure, we may say that the experiential, representational and performative distinctions *bracket* the *experience of the object*, and not the *object of experience*. In other words, it is not a question of whether computer games are experiential, representational or performative, but rather how the experience of playing a computer game manifests in instances of a predominantly experiential, representational or performative character, and, consequently, how these modes of experience facilitate somatic consciousness and consciousness of the somatic (somaesthetic perception and self-reflection). The following three sections briefly outline the characteristics of the experiential, representational and performative dimensions, specifically in relation to computer games. In this revision, a certain *sensational*[34] trend is outlined as being characteristic of the experiential, representational and performative dimensions of computer game experiences. And, although this sensational trend favours the un-reflective life of the senses and the soma, the evident potential for somaesthetic perception and self-reflection paves the way for in-depth analysis of specific computer games in the subsequent chapters.

[34] 'Sensational, adj. 3. a. Of works of literature or art, hence writers: Dealing in 'sensation' (see sensation n. 3a), aiming at violently exciting effects. Also of incidents in fiction or in real life: calculated to produce a startling impression' (*Oxford English Dictionary,* Second edition, 1989; online version June 2011). 'Sensation, n. 3. a. An exciting experience; a strong emotion (e.g. of terror, hope, curiosity, etc.) aroused by some particular occurrence or situation. Also, in generalised use, the production of violent emotion as an aim in works of literature or art' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

The Experiential Dimension

> … experiential disciplines … aim more at making us 'feel better' in both senses of that ambiguous phrase (which reflects the productive ambiguity of the aesthetic): to make the quality of our somatic experience more satisfyingly rich but also to make it more acutely perceptive. (Shusterman, *Body Consciousness* 26)

We might say that the experiential dimension of experience is crucial to any computer game, in the sense that the game must 'feel good'. I suggest that this is not merely a question of ergonomic efficiency or transparent interface design. From an experiential point of view, the notion of *feeling good* or *better* is far more complex, not least when it also involves the question of somaesthetic perception and self-reflection. There are a number of reasons for this complexity. First, in computer games, the experiential, somaesthetic maxim of 'making us "feel better"' is often substituted with a maxim of 'making the player feel *as if* he is in the game'. Such experiential ideals are present in games that strive to give the player an experience of being a pilot by confronting him with the complex interface of a cockpit, for example. Second, the experiential 'being there' is not only pursued through a high degree of 'machine or interface fidelity', but also through the audiovisual oxymoron of the first-person perspective, that is, being confronted with the game-world of the perspective, rather than the perspective of a game-world, by looking through the eyes of the game-character, seeing the 'seeing of someone else', as we are promised on the Electronic Arts website for the upcoming (autumn 2011) first-person shooter, *Battlefield 3*: 'Battlefield 3 immerses players physically and emotionally to [*sic*] the world around them like never before' (Electronic Arts, *Battlefield 3 Game Info*). The common goal of such games is to affect the player's perceiving body, whether it involves confronting with the complexity of flying a plane, or the chaos of warfare: 'Battlefield 3's cutting edge animation, spectacular visuals and real as hell battle gameplay attack your senses and make you feel

the visceral warrior's [*sic*] experience like no other FPS' (Electronic Arts, *Battlefield 3 Game Info*). A third example of the experiential dimension, one that is not rooted in the visual aspects of the experience, reveals itself in the ongoing tradition of making physical controller gadgets that more closely relate the in-game environment to the player. For example, playing a game that involves shooting may require a gun replica pointed at the screen, vibrating as shots are fired. Similarly, in a racing game, a driver's seat and vehicle paraphernalia, in the shape of a steering wheel, shift stick and pedals, similarly enhance the experiential dimension. In recent years, the 'opposite' trend has emerged (although with a similar attention to the visceral aspects of the player's experience), with cameras and motion-sensors positioning the player's physical movement in the game, instead of putting game-world objects in the hands of the player. Here, the experiential dimension relies on the game-world or game-space as something that extends beyond the screen, to include the player's physical position, movement and gestures. Both these mimetic interface trends focus on the material aspects of playing computer games, and strive to enrich the experiential dimension of the computer game experience.

Common to the experiential dimension across a variety of computer game genres is that they revolve around making the experience *satisfyingly rich*, through perceptual shock. That is, the player is situated in worlds that do not make him 'feel better', but instead, in worlds that facilitate an experiential boost by being 'extreme' or explicitly unpleasant, often revolving around the ultimate limit-experience, death. The *Battlefield 3* game, mentioned above, is an obvious example – advertisements encourage the player to 'fight your way through the war of tomorrow' (Electronic Arts, *Battlefield 3 Game Info*). We may even see in this a connection to Shusterman's discussion of Foucault advocating sadomasochism and hard drugs: 'his [Foucault's] anhedonia and extremism clearly express a common trend of late-capitalist Western culture, whose unquestioned economic imperative of ever-increasing growth also promotes an unquestioned demand for constantly greater stimulation, ever more

speed and information, ever stronger sensations and louder music' (*Body Consciousness* 39). I am not arguing that computer games as a somaesthetic experience or practice should be ranked alongside transgressive sexual practices or drug use, but nevertheless, the continuous representation of violence, the possibility of engaging in it within the game, the sensational trend and quest for perceptual extremism (e.g. the ongoing pursuit of better graphics, higher image resolution and the promise of more extreme game experiences) in computer games does suggest a lust for the extreme, and possibly, a degree of anhedonia among the people who play these games, with potentially grave consequences for them as perceiving Beings. I will argue that the issue is not that simple. A game such as *Flower* (2009)[35] contrasts sharply with the usual blockbuster game, for example *Battlefield 3*, and consequently challenges the conception of computer games as exclusively focused on 'negative' limit-experiences. When compared to *Battlefield 3*, *Flower*'s soft colours, slow motion effects, ambient classical music and organic movements position it at the opposite end of the sensational continuum. In game-play, the 'swooshing' sensation of flying over and through the grassy fields, created by the audio-visual decelerating and accelerating shifts in perspective, which push and pull the vegetation, is, in its own 'quiet' sense, an 'extreme' sensation. A further discussion of perceptual extremism is important, as *Battlefield 3* and *Flower* represent stereotypical oppositions on a continuum of visceral computer game experiences far more complex – I will return to the issue later, as my analysis (in the following chapters) hopefully will inform my ability to discuss this. Right now, an outline of the structure and variety of the experiential dimension, in order to pursue the way in which it facilitates somaesthetic perception and self-reflection, is more important.

[35] Using the PlayStation3 SIXAXIS motion controller, the player controls a flower petal that flies through the wind, collecting a swarm of other petals, passing by flowers in the landscape: http://thatgamecompany.com/games/flower/ – last retrieved 28 Aug. 2011.

I suggest that the experiential dimension of the computer game experience may be addressed via three concepts inherent in the somaesthetic discipline. In a note, Shusterman points out that, in neurophysiology, the concept of somaesthetics (or somesthetic) denotes 'sensory perception through the body itself rather than its particular sense organs' (*Body Consciousness* 2). These 'modes' of full-body perception are divided into 'exteroceptive (relating to stimuli outside the body and felt on the skin)', 'proprioceptive (initiated within the body and concerned with the orientation of body parts relative to one another and the orientation of the body in space)' and 'visceral or interoceptive (deriving from internal organs and usually associated with pain)' (*Body Consciousness* 2). By explicitly incorporating these distinctions into the somaesthetic vocabulary, they come to define instances of experiential somaesthetic perception and self-reflection, and not merely un-reflective or silent physiological exteroceptive, proprioceptive and interoceptive perception. In other words, I regard these as distinctions that enrich the possibility of discussing *how* the game *feels*, experientially. I will return to these distinctions throughout the following chapters.

The Representational Dimension

> For the somaesthetics of representation remains far more salient and dominant in our culture, a culture largely built on the division of body from spirit and economically driven by the capitalism of conspicuous consumption that is fueled by the marketing of body images. (Shusterman, *Body Consciousness* 28)

More often than not, the representation of bodies in computer games supports Shusterman's observations, and manifests as something that is characterised by certain *physical ideals* within Western culture. A content analysis of female and male images in a sample of top-selling video games show, while female characters were generally

thinner (Martins, *A Content Analysis of Female Body Imagery in Video Games* 831), the male characters 'were systematically larger than the average American male' (Martins, *Virtual Muscularity* 47), in relation to muscle mass. Gendered stereotypes in action games, such as the testosterone pumped body of Duke Nukem, or the elegant, yet lavishly shaped Lara Croft, may serve as prime examples of this.[36] However, such findings are to some extent also 'stereotypes', and should not make us regard the representational dimension of computer games as something which automatically leads to body dissatisfaction. As Martins also suggest, in relation to the male images, the representations might not after all be that 'ideal', as the disparity between the average real world male and in-game characters 'may be due to American men becoming more *un*-ideal [at the time of the study, 2010, 18 % of the U.S. male population considered clinically obese]. In other words, video game characters are representing bodies that real, healthy men should have … achievable without the use of drugs or excessive weightlifting' (*Virtual Muscularity* 47-48). Hence, instead of *idealistic*, we could also regard the representational bodies of computer games as *sensational*, similar to the overriding tendency within the experiential dimension of computer games. That is, these 'out of the ordinary' body images not only 'reduce' one's self-images, but also 'amplifies' and creates exciting experiences or emotions.

The representational somaesthetics of computer games, emphasising 'the body's exterior or surface forms' (Shusterman, *Body Consciousness* 26), is, owing to the interactive nature of computer games, not restricted to the anthropomorphic images of bodies on-screen, but is also manifested in the implied body of a prospective player,

[36] The gendered bodies may be regarded not only as representational physical ideals, but also as the representations of the prevailing sexual orientations. While *Duke Nukem Forever* (2011) (although in a certain tongue-in-cheek manner) supports a male dominated heterosexuality (e.g. through cheesy tag-lines and sparingly dressed female characters), the lack of contact with the opposite sex or thematisation of the relation between the two sexes in *Tomb Raider: Underworld* (2008) reduces Lara Croft's (implicitly female) sexuality to her exterior features, silently submitting to the same male dominated heterosexuality.

that is, the distance between the player and the virtual bodies (the perspective *on* and *of* the bodies in the game), and what this body can *do*. Exemplified in the 'playboy-archaeology' of the *Tomb Raider* series (1996 -), the third-person perspective enables the body of the character to be an *object* for the player, consequently emphasising the external forms and gender of Lara Croft. Conversely, the first-person perspective of *Duke Nukem Forever* (2011) positions the player inside the body of Duke, but even though such a perspective erases an explicit bodily representation of the player-character, Duke's masculine body is implicitly outlined through the game's score, audio effects and intent focus on weapons.

Beyond the above representations, which support stereotypical somaesthetic perceptions (e.g. Duke Nukem's strong body should make the player 'feel' powerful), a more dynamic reshaping and manipulation of bodily surfaces and forms is present in other computer games (more explicitly creating a potential for representational somaesthetic self-reflection).[37] One example is the *character customisation feature*,[38] which enables players to shape the appearance of their player-body/character. The concrete game-play effect of these changes varies from game to game, from having no effect at all, to explicit narrative changes and new ways of interacting with aspects of the game-world. Regardless of the consequences, as a feature of single- and multi-player, on- and off-line games, the practice of manipulating the surfaces and forms of characters manifests itself as both a self- and other-directed representational

[37] It could also be argued, and rightly, I believe, that *Duke Nukem Forever* (2011), as the continuous 'over-representation' of the male-action-hero stereotype, eventually distances the player from the context of the game, and holds self-reflective somaesthetic potential.

[38] Character customisation also involves choosing and manipulating the character's game-play abilities (e.g. magic powers, stamina, weapon type etc). Depending on whether these abilities influence the character's appearance or the players options in the game, such ability-customisation is positioned somewhere between the experiential and representational dimensions.

somaesthetic practice. Although *The Elder Scrolls IV: Oblivion* (2006) is a single-player game (most often played from the first-person perspective, rendering the player character invisible (except arms and hands) to the player during game-play), the game still offers extensive customisation options at the beginning of the game. Beyond the in-game consequences of this reshaping – for example the choice of race (Argonian, Breton, Dark Elf, High Elf, Imperial, Khajiit, Nord, Orc, Redguard, Wood Elf) – the representational customisation also reshapes the narrative to the player's preferences. Similarly, the *Game Face* feature of *FIFA 11* (2010) is a refinement of a customisation option present in other Electronic Arts games (*Tiger Woods PGA Tour 11* (2010), *Fight Night Round 4* (2009)). Through a website, the player uploads photos of his own face and maps it on to a facial model of a player character, allowing him to, as Electronic Arts states, 'play alongside your footballing [*sic*] heroes' (Electronic Arts, *FIFA Game Face*). *Game Face* is allegedly only the beginning of what we might call a trend of *'explicit' self-representation* in game-worlds: 'PLEASE NOTE: Game Face is our first step towards a full 3D avatar on the web, and as such will remain in "BETA" stage until all of its core features are rolled out and fine-tuned to provide to all the best experience possible'. (Electronic Arts, *FIFA Game Face*)

I also find it important to note that, although the reshaping and decorating of a player-character's form do not directly affect to the player's body (as real-life representational self-fashioning and modification might do), these self-reducing and self-amplifying possibilities may still shape the player's experiential self (somaesthetic perception) or foster a consciousness of his somatic self (somaesthetic self-reflection). That is, 'reshaping' yourself, playing an Orc in a fantasy game such as *The Elder Scrolls IV: Oblivion* (2006), or enhancing your virtual football skills through the *Game Face* feature of *FIFA 11* (2010), suggests that the experience of playing computer games is somatically savoured beyond the un-reflective life of somatic consciousness.

Other games demonstrate a representational somaesthetic dimension (favouring somaesthetic self-reflection) by explicitly turning the body into the focal point of game-play. The *5 minutes to kill (yourself)* game series (2007 -) gives the player the goal: Kill your own character.[39] In the first game of the series, situated in an office setting, the protagonist has to avoid attending a forthcoming meeting by committing suicide. Insulting co-workers so they become offended and assault the player-character, sticking the protagonist's head in the paper shredder, or becoming creative with a stapler are some of the ways of inflicting damage on the virtual body, eventually killing it. This game-play explicitly inverts traditional game-body-logic, challenging the player's conception of the player-character as a representation of the player, as playing the game, potentially, is a transgressive, self-reflective and, owing to its cartoonish nature and absurd setting, fun experience of killing yourself.

The Performative Dimension

> To the extent that such performance-oriented disciplines aim either at external exhibition or at enhancing one's inner feelings of power, skill, and health, we might assimilate them into either the dominantly representational or experiential mode. (Shusterman, *Body Consciousness* 29)

Although Shusterman suggests that the performative dimension of somaesthetic practices is dominantly either a form of experiential or representational somaesthetics, I would like to maintain, at least when it comes to computer games, that the performative as a mode of somaesthetic experience should be treated independently, at the

[39] *5 minutes to kill (yourself)*(2007) may be played online: http://games.adultswim.com/five-minutes-to-kill-yourself-adventure-online-game.html – last retrieved 27 May 2011.

same level as the experiential and representational. With the term *performative*, I wish to emphasise that, in various ways, the player's somatic interaction may be understood and appreciated by others (and the player self) as a *performance*.[40] Gathering around the computer to watch others play and demonstrating your own skills have always been parts of playing computer games (in arcades, at home or at a friends house, at LAN-parties or on-line), and may serve as examples of the performative somaesthetic dimension of playing computer games, that is, a conscious experience centred around the *act* of playing computer games. Here, the *act* or *operation* of playing the game, and the *quality* of this process, is valued positively, as it meets (or surpasses) a certain *standard* or level of skill and competence – a standard, established at the intersection of the game's formal challenges, and the cultural and social context in which they are unfolded.

During the last decade, a similar performative trend has proved to be commercially successful. We may outline the characteristics of this trend by returning to the focus on physical interaction with game interfaces, mentioned above (e.g. camera sensors, steering wheels and physical controllers that register player movement). The Nintendo *Wii-remote*, the Microsoft *Kinect* sensor-bar or a game series such as *Guitar Hero* (2005 -) or *SingStar* (2004 -) are prime examples of games that facilitate an explicit performative dimension. That is, when playing tennis in the living room via *Wii Sports* (2006), challenging Zakk Wylde in *Guitar Hero: World Tour* (2008), or gesturing wildly in front of the *Kinect*'s sensor based interface, the *situation* and the *act* of playing the games is emphasised. Nonetheless, 'playing tennis', but not really playing tennis, 'playing guitar' – but again, not really – brackets the players' actions, and establishes a

[40] 'performance, n. 1. a. The accomplishment or carrying out of something commanded or undertaken; the doing of an action or operation. b. The quality of execution of such an action, operation, or process; the competence or effectiveness of a person or thing in performing an action; *spec.* the capabilities, productivity, or success of a machine, product, or person when measured against a standard' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

performative space surrounding the activity of playing (a space that encompasses both somaesthetic perception and self-reflection). The *doing* becomes an important aspect of these practices, in the sense that even though a game of tennis, in *Wii Sports* (2006), or a song in *Guitar Hero: World Tour* (2008) may be played sitting down, only moving hand and wrist, this is not what the commercial discourse surrounding the game, and the game-play situation affords. Instead, moving like a tennis player or a rock musician is implicitly part of the interface, consequently, the player's *doing* comes to the fore in the social practice that these types of games encourage. Compared to the experiential and representational dimensions of somaesthetics, the *sensational* aspect of the performative dimension does not rely on external or internal sensations; instead, the 'spectacle' of playing the computer game with the body is what gives the performative dimension a sensational and exciting character. The potential for both somaesthetic perception and somaesthetic self-reflection are present in the act of playing a computer game (in the sensational nature of the performance). The somaesthetic perception of playing tennis or playing music, and being good at what you do, may seem trivial, but anyone who has experienced *Guitar Hero* will probably testify to the power and addictive nature of the immediate somaesthetic sensation that lie in the performative operation or process of playing music. The experience of somaesthetic self-reflection is not only a matter of 'simple' social performativity (the player becoming aware of others watching and appreciating how skilled, unskilled or foolish he looks while playing the game), it is also a matter of demonstrating cultural knowledge through the body, challenging, transforming, and/or abiding by certain performance structures in the game-play situation. For example, understanding and exercising an awareness of the cultural codes related to rock and guitar-culture (through the somatic handling of the guitar controller) is an important aspect of the performative dimension of playing *Guitar Hero*. In such a game, the quality of the performative dimension is valued and savoured, not only as the performance meets a *standard*, but to large degree, also as the performance transgresses a standard.

Although the above examples highlight the social aspect of the performative dimension, single-player game-play also has a performative quality (owing to the phenomenological condition that a consciousness of the *other*, and the social context in which one is always positioned, is immanently present in our Being-in-the-world). At a micro-level, the player always performs for the computer game as a quasi-other (as Ihde suggests, see the section *A Post-Phenomenology of Computer Games*), in the sense that playing games is a process or an operation of having one's skills measured and evaluated by the game/computer/machine as a structural system. At a macro-level, performing specific actions (engaging in combat as a soldier, creating a family of Sims, etc.) may be seen as a demonstration of certain cultural skills, or one's understanding of cultural structures. From a formal perspective such performances are only a matter of the player living up/submitting to certain standards, but they necessarily do not manifest as such in the experience of playing the game (as I will discuss in the following chapters). In a similar manner, the *achievement*[41] feature inherent in many contemporary games (and an integral part of the PlayStation Network, Xbox-Live and Valve Steam services), works as a testament to the performative nature of single-player game-play. I see the achievement feature not only as a demonstration of one's single-player skills and performances to other players, it is also a way to return to one's own performance, and asses one's overall skill as a player/gamer. Moreover, the act of unlocking the most difficult achievements in game-play often involves an explicit level of self-reflection or consciousness of oneself as a player, as the achievements bracket the act of playing the game, for example, by requiring continuous repetitions of specific 'meaningless'

[41] Achievements may be described as a set of meta-challenges that do not directly affect the progress of game, and exist beyond the diegetic level of the game. For example, in *Grand Theft Auto IV* (2008), the achievement *Chain Reaction* requires that the player blows up 10 vehicles in 10 seconds. Once such a challenge has been meet, the player's profile, on the console/computer and the respective online service (e.g. PlayStation Network, Xbox-Live, Steam), is updated with points and a trophy.

actions.[42] In such instances, the player may become aware of the game as a construction, as an *other*, that measures one's skills – i.e. the act, operation or process of playing single-player games becomes, as in *Guitar Hero*, an explicit part of the game-play experience.

TAKING THE EXPERIENTIAL, REPRESENTATIONAL AND PERFORMATIVE DIMENSIONS TO THE NEXT LEVEL

I will briefly sum up the dissertation so far. First, by suggesting that the experience of playing computer games is somatically founded, and by defining computer games as particular instances of a more general aesthetic human–machine relationship, I established my research area and agenda: the development of an analytical perspective suited for discussing the somatic experience of engaging in the technological transformation that is an often unspoken prerequisite for the act of playing computer games. Then, through Merleau-Ponty's perceptual phenomenology, I gave an account of the soma as always already in-the-world and through Ihde's post-phenomenology, I described this Being-in-the-world as constituted in the amplification and reduction of technological transformation, facilitating Being-in-the-game.

In this chapter, introducing the discipline of *aesthetics* as a theory of sensory knowledge and *aesthetic experience* as something the subject intentionally undergoes and savours for its transformational and displacing characteristics, I underlined that the experience of playing computer games is not a forgetful letting go of the perceiving body into pre-reflective (technologically supported) motor action, savoured silently as pure sensation. Simultaneously, the computer game experience is shaped through a somatic

[42] Simple achievements, such as completing the first level of a game, or more satirical ones, as found in *The Simpsons Game* (2007), where the player gets an achievement for pushing the 'Start' button on the controller to begin the game, may also be said to have a self-reflectional potential, emphasising the player's act of playing the game.

consciousness of having a body that plays the game (undergoing its transformation) in social and cultural contexts. Subsequently, introducing Shusterman's somaesthetic discipline, the notions of transformation and displacement were explicitly tied to the perceiving subject, and therefore, exploring these aspects of aesthetic experience was turned into a phenomenological matter of describing the *experiencing* of things. To be explicit: the concepts of somaesthetic perception and somaesthetic self-reflection and how these levels of consciousness transform and displace one's experiential, representational and performative dimensions of experience, became a way to phenomenologically bracket the flux of the computer game experience. And now, to be specific: from a somaesthetic perspective, we may understand the experience of the computer game as something that simultaneously transforms and displaces (through perception and self-reflection) the player's visceral, representational and performative Being-in-the-game. Lastly, this perspective on the computer game experience resulted in three introductory descriptions of how the experiential, representational and performative dimensions somatically manifest – descriptions that should not be seen as representing a hierarchy, instead, they serve to demonstrate that experiential, representational and performative dimensions may come to the foreground as somatic 'nows' across a range of different computer games, genres and game-play contexts.

In the following chapters, I wish to maintain the theoretical distinctions established so far, but approach the experiential, representational and performative dimensions of somatic experience through a more 'local' bracketing. As Gallagher implies in his discussion of the concept of somaesthetics (centred on Shusterman's book, *Body Consciousness*), a focus on sense modalities may help to further define somaesthetics: 'Can we tell whether auditory is better than visual, or visual better than proprioceptive, or thoughts about the body better (or worse) than any of these?' (Gallagher 310). Consequently, recalling post-phenomenology's immediate and practical grasp on experience and human–technology relations, I will

allow myself a similar return to the *I–technology–game-world* relation of computer games, and introduce an eye-, hand-, ear- and 'full body'-focus. In other words, playing computer games involves looking at the screen, grasping the controller with one's hands, listening to the game with one's ears, and in some cases, gesturing with arms and legs (explicit physical movement) as a 'full body' – in other words, computer games cultivate the somatic flux of experience via screens, controllers, speakers and motion sensors. Therefore, the following chapters will be structured around these 'modalities' of micro- and macro-perception and expression, not in order to determine which one is the better, categorise or put them into a hierarchy, rather, I conceive the distinctions as a bracketing that will help explore how eyes, hands, ears and the gesturing body shape the experiential, representational and performative dimensions of somatic experience – four 'keys' to 'unlock' the qualitative integrity of experience.

Centred on my own first-hand experience of four different games, *Call of Duty 4: Modern Warfare*, *Guitar Hero: World Tour*, *Metal Gear Solid 4: Guns of the Patriots* and *Kinect Adventures*, the following chapters also represent a shift in perspective, from theoretical discussions of somatic experience and the possibilities of addressing it, now pursuing a more 'hands-on' approach that in turn may inform the theoretical foundation. Based on the introductory description of computer games as facilitating a certain somatic 'now' (see *Introduction*), the choice of exactly these four games was similarly informed by the experience of a certain 'now' associated with playing them – a visual (eye), tactile (hand), auditory (ear) and gestural ('full body') 'now'. As stated in the previous paragraph, the distinctions between the various sense modalities should not be understood as strict categories – they necessarily flow into each other. However, this does not prevent that some computer game experiences are perceived as more visual, or more tactile, than others. My choice of games could very well have been different, but it has been tentatively restricted to 'action-oriented' games with 'sensational' characteristics because, as hinted in the introduction, I find that our present vocabulary for

discussing the qualities and merits of the experiences facilitated by such games is underdeveloped. The following chapters will not provide finished 'explanations' that cover the entirety of each of the four games, instead the chapters will present and discuss how a visual, tactile, auditory and gestural oriented somatic 'now' manifest in the experiential, presentational and performative dimensions of the game-play experience.

Chapter 3 – The Eye

THE FIRST-PERSON SHOOTER GENRE

Exploring how the visual dimension of the computer game is savoured through somaesthetic perception and somaesthetic self-reflection, the first-person-shooter genre immediately comes to the fore. From a technological perspective, the first-person-shooter genre has played (and still plays) an essential part in the advancement of the visual capabilities of the computer – i.e. continuously pushing the development of hardware (graphics cards) and software (3D and physics engines) – we may see the genre as 'a celebration of modern technological power' (Klevjer, *Gladiator, Worker, Operative* n. pag.). These technological advancements feed into the commercial discourse of the computer game industry that uses graphical fidelity to argue for the sensational potential of the first-person-shooter genre. For example, the 'cutting edge animation' and 'spectacular visuals' of *Battlefield 3* 'attack your senses and make you feel the visceral warrior's [*sic*] experience' (Electronic Arts, *Battlefield 3 Game Info*), while *Unreal Tournament III* (2007) promises, 'Utilizing the power of unreal engine 3, the latest instalment takes graphics and gameplay to a whole new level' (Epic Games, *Unreal Tournament III Game Info*). With notions of 'warrior's experience' and 'over-the-top carnage', *Battlefield 3* and *Unreal Tournament III*, demonstrate how the first-person-shooter genre, in terms of content, is equally driven by a sensational trend, presenting the limit-experiences of warfare. The game that arguably founded the first-person-shooter genre, *Wolfenstein 3D* (1992), seems, with its 64x64 image resolution and pseudo-3D, graphically

challenged.[43] Back in 1992, however, *Wolfenstein 3D*'s visual aspects were emphasised as its greatest feature; the 'state-of-the-art graphic environment featuring 256 colours' provided 'unbelievable graphics' letting the player move through a 'sensationally realistic 3D world', arguably, an extreme experience where 'you must do anything to escape from the belly of a Nazi Dungeon – or die trying' (see fig. 2).

Fig. 2.

> This masterpiece of wild action and unbelievable graphics brings you virtual reality at its best, as you move through a sensationally realistic 3-D world of amazing detail. It's World War II, and you are B.J. Blazkowicz – the allies' bad boy of espionage, a terminal action seeker built for abuse with an attitude to match. There's just one small problem: you've been captured by the Nazis, tortured, and imprisoned beneath Castle Wolfenstein where you await execution. Bummer. Now, you must do anything to escape from the belly of a Nazi Dungeon – or die trying.
>
> Experience a state-of-the-art graphic environment featuring 256 color, smooth scrolling virtual reality.
>
> Hear professionally composed music with Adlib, Sound Blaster, or 100% compatible sound board.
>
> Enjoy four levels of difficulty from the novice to experienced player.

[43] The first-person-shooter genre was born in 1992 when id Software created *Wolfenstein 3D* (arguably influenced by the setting and narrative of 2D stealth action games *Castle Wolfenstein* (1981) and *Beyond Castle Wolfenstein* (1984)). Moving through 3D space, one of the key features of the first-person shooter genre, had been introduced in earlier games such as *Maze War* (1973) and *Battlezone* (1983) (Malliet & Meyer 41; Galloway 57; Allison 185). However, as *Wolfenstein 3D* quickly became a commercial success, id Software founded the genre and its conventions through the successors *Doom* (1993), *Doom II* (1994), *Quake I* (1996) and *Quake II* (1997).

> Battle Nazis, evil scientists, mutants and more with knives, pistols and machine guns.
>
> Start play easily and be instantly immersed in the sights and sounds of all six incredible missions, with 60 action- packed levels of play.

(Apogee, *Wolfenstein 3D* – game package)

The game I will be referring to on the following pages, *Call of Duty 4: Modern Warfare* (*COD4*), is no exception, in terms of having a sensational characteristic on both a form and content level. Within the first-person-shooter genre, *COD4* follows a tradition of what Klevjer has dubbed 'arcade-based first-person-shooter adventure' (*The Way of the Gun* 2), denoting games (such as *Wolfenstein 3D* and *Doom*) that rely on hordes of enemies and fast-paced game-play. *COD4* is set in a contemporary environment, the player acting as a soldier in the British S.A.S ('Soap' MacTavish) and the American USMC (Paul Jackson). The objective of the game is to save the world from a nuclear threat, imposed by an evil alliance of Russian and Middle Eastern terrorists. This is accomplished by completing different military operations. Although this mission based narrative evolves in a linear fashion, the player also plays a section of the game which takes place twenty years prior to the ongoing terrorist threat. Here, Lieutenant Price (later Captain and superior to 'Soap' MacTavish) first encounters the game's main antagonist, Russian ultranationalist, Imran Zakhaev.

COD4's cinematic/media realism, most evidently expressed in the game's cut-scenes and musical score, allow an on-rails *thrill ride* through the spectacle of war. Nevertheless, *COD4* also incorporate elements from what Klevjer calls the tactical first-person-shooter genre, which strive to simulate 'patterns and strategies of action that are presumed to be a central part of being a soldier in a modern war or a special forces operation' (*The Way of the Gun* 6-7). In *COD4*

the player operates as part of a team that 'professionally' focus on accomplishing the mission and not exploring the game-world, which is an essential part of the first-person-shooter adventure. Similarly, the maximum capability to carry three weapons at a time, and no possibility to collect health packs or power-ups throughout the levels, positions the player in what we might call a 'fantasy about a situation', the military operation, as a discrete instance the player effectively handles, instead of 'fantasy about a world' that encompasses all the aspects of war (Klevjer, *The Way of the Gun* 7).

It is evident that the 'unbelievable graphics' and 'sensationally realistic 3D world' in *Wolfenstein 3D* (and most other first-person-shooters) are relative terms, negotiated at the intersection of previous games, visual technological possibilities and one's experience of the 'real'. Moreover, it is evident that 'good graphics' and visual fidelity do not necessarily equal a sensational experience – for example, playing *Tetris* (1986), with its crude graphics and tedious content (falling blocks) may still be considered to produce an exciting experience as the pace and the difficulty increases.[44] Nevertheless, the first-person-shooter genre is, among players, often described as facilitating a specifically exciting experience, for example, player's evaluating their experience of *COD4*: 'The campaign immerses at a level no other FPS [first-person shooter] ever has' (JoeB), 'I loved it and felt like I was in the war' (StefanJ) and 'It is so awesome and feels so real' (AllyR). So what makes these game experiences special? In the ludological branch of game research, the visual (representational and fictional) aspect of the first-person-shooter (and other games) is often considered to be 'eye-candy' – i.e. the graphics are 'sensational' for the mere purpose of attracting the player's attention. For example, in a discussion of the relation between fiction and rules, Juul introduces the first-person-shooter game *Quake III Arena* (1999), and argues that the

[44] A point, computer game theorists Salen and Zimmerman dub the 'immersive fallacy' (451-452). That is, playing abstract or cartoon-like games, and not only photorealistic ones, may also give the player a sense of 'immersion'.

representational layer of the game 'initially attracted' the players (*Half-Real* 139). But the more experienced the players got, they would change graphic settings (e.g. turn off textures) 'to get higher frame rates (and thereby faster feedback), at the expense of graphical detail' (Juul, *Half-Real* 139). Following, Juul states that these modifications of graphical detail emphasise *the rules* of the game and how being able to focus on the performance of a given task, is of great importance. In my continuous emphasis on *transformation*, and game-play as something the player *undergoes*, I agree with Juul in the sense that the player's visual perception of the game is subject to change in the process of playing. However, I will argue that visual perception (for example the fascination that may characterise one's initial encounter with a game), is not simply replaced by a reflective cogito that sees through the representation of the game, into the pure game-play. If the rule structures in themselves were the object of the game, then why even bother to have walls, no matter the resolution? Or, put differently, my point is that the player's visual perception of the game cannot be reduced to the textures, or to an opposition of low and high detail – in short, the visual experience of the game amounts to more than a question of pixels (image resolution). I conceive the pursuit of faster feedback and higher frame rates, which Juul describes as a rule based game-play, to first and foremost be a visual practice, a practice that testifies to the fact that the visual experience of the first-person-shooter genre is more than its pixels – it is highly related to the movement *of* and *through* the images. In other words, when the players' modify the graphics of *Quake III Arena*, they are exercising a *visual sensibility* towards the game rather than (or in addition to) approaching it as a set of rules.

I find it important to question how the visual aspects shape the player's experience of the first-person-shooter. As I see it, the main issue is that whether the visual aspects of the first-person-shooter genre are hailed or regarded as secondary, both stances represent and ideal praise or neglect of the pixels themselves, forgetting the experiential, representational and performative dimensions of

the player's perception of these pixels, in a pursuit of the *things of experience*. The distinction, between the experiential, representational and performative, will serve as an analytical alternative to the usual reduction of visual representations as mere 'icing on the cake', exploring somaesthetic perception and self-reflection in the first-person-shooter experience's visual dimension. Although Klevjer's exploration of the aesthetics of the first-person-shooter is sensitive to its visual aspect, his metaphor of the genre being a 'mirror' (*Dancing with the Modern Grotesque*) (despite it being a transfiguring one) still misses important aspects, in the sense that similar to Juul, vision becomes easily reduced to a mental process. I will discuss these issues further in the following sections.

My argument will revolve around the first-person perspective. Because, as the genre 'introduced' this perspective, the visual content of the screen added a new visual dimension to computer game experience, placing the player 'in' the game-world, and not at a distance to it. As the game-site ign.com suggest in their Top 100 of the all-time best computer games, the first-person perspective was the feature that made *Wolfenstein 3D* something completely different, and not the 'sensational' nature of its content or graphics.

> It wasn't the story, which was suitably sophomoric, or the violence, though there was plenty of that too. No, it was the perspective that made the difference. Wolfenstein 3D and its sibling DOOM, also developed by ID, showed how putting players directly into the boots of the hero by using a first-person perspective could give games a radically different feel and emotional impact. (IGN Entertainment)

In other words, what made the experience of *Wolfenstein 3D* something special was not *what* we saw, but *how* we saw it. In this sense, the first-person-shooter genre offered the player a new way to *perceive* the pixels on the screen. The experiential, representational and

performative implications of this visual transformation of perception are the topic of the following sections. In other words, it is not an exploration of the visual aspects *of* the game, but an exploration of how I, as a soma, visually experience the game.

EXPERIENTIAL MOVEMENT VIA A FIRST-PERSON PERSPECTIVE

Since *Wolfenstein 3D*'s statement that 'you move through a sensationally realistic 3D-world' the first-person perspective of the first-person-shooter genre has been used to visually stimulate the player's sensation of movement through a 'world'. My discussion of the first-person perspective will not (as the following paragraphs will demonstrate) argue that it is more 'immersive' than other visual perspectives on the game-world, a stance that rightfully has been questioned, for example by Newman (2002) or Nørgaard (2011). Moreover, I will also move beyond the discussion of the computer game's general ability to create an experience of movement (presented in the section *A Phenomenology of Computer Games?*), instead, in this section, I intend to describe the characteristics of the experience of the first-person-shooter, with regard to a sense of visual movement, because, as Klevjer argues, I also believe that this genre has something particular to offer in this respect: 'The perspective of the FPS is essentially about speed and movement, the sheer sensual and vertiginous attraction of the responsive illusion' (*The Way of the Gun* 2).

The immediate experience of *COD4* is characterised by a sense of movement through space – a particular kind of movement. I push the left analogue-stick on the controller, and my view on the game-world glides effortlessly through the space I see before me, while I sit still in front of the screen. This sensation of 'still-movement' (recalling the post-phenomenological concept of amplification/reduction) is added a new dimension as the view I occupy reveals itself as somewhat separate from the space that it moves within. That is, as I collide with objects or characters, I have no immediate impact on

them and they have no impact on me, the muzzle of the weapon, that provides a centre and direction for my view, never touches objects or characters. As proposed when the notion of *the experiential dimension* of experience was introduced, the distinction between exteroception, proprioception and interoception may provide a more rich description (and subsequent discussion) of the subjective/internal side of the computer game experience, with regard to *COD4*, the experience of moving the first-person perspective through the game-world space.

The Visual Skin

With the notion of exteroception, I aim to describe the characteristics of the visual 'stimuli outside… and felt on the skin' (*Body Consciousness* 2) of the first-person perspective – and in the sensational nature of *COD4*, revolving around war, there are various external game-world stimuli that constantly bombard its 'visual skin'. Recalling the post-phenomenological way of discussing human–technology relationships (see the section *Post-Phenomenology*), the concept of *quasi-I* will here be used to denote how the first-person perspective is taken in to my experiencing of the game, and becomes my way to sense the game-world. Consequently, this means that the 'visual skin' of the first-person perspective to some extent becomes my 'visual skin', as it shapes the experiential or somatic form of my quasi-I, while playing the game.

The rectangular confines of the screen may seem to impose strict limits on the possibilities, for the 'visual skin' of the first-person perspective, to facilitate an experiential shape of a quasi-I. And, at certain instances, for example, as I failed to notice enemies standing next to or behind me, the field of vision of the first-person perspective did disclose itself in a tunnel-like quality. However, the overall experience of the tunnel-vision was not defined by the sharp edges of the screen. The compass and hit-indicator placed at the bottom of my perspective stretched the 'visual skin' of the first-person perspective beyond its formal limits, making objects and actions that

were not immediately given within the field of vision 'perceivable'. The omnidirectional character of sound coming from the game also exceeded the limits of the tunnel-vision and its 'forwardness', as the auditory horizon blurred the sharp and rectangular edges of the screen and inferred the limits of my quasi-I field of view with a 'fuzziness', similar to the ungraspable limits of my everyday visual perceptions – enhancing the dynamic relationship between the visible and the invisible, by giving voice to the unseen parts of the game-world. Hence, the tunnel-vision may be said to impair my ability to receive explicit visual stimuli, but it added to an overall suspenseful, and at times chaotic, experience of not being able to see *everything*.

The architecture of the game-world also shaped the visual skin of my quasi-I, adding to the experiential tension between the visible and invisible. Being situated (in *COD4*) in urban environments, and other confined spaces, objects in the game-world (hallways, corridors, cars, buildings etc.) most of the time made me forget the limitations of my 'visual skin', in the sense that the shape of the environment, and the objects in it, and not the formal scope of my perspective and the screen, functioned as 'natural' visual constraints on my first-person perspective. This added to the 'forwardness' of the perspective as well as making the 'visual skin' sensitive, almost 'tingling' towards that which it does not include – i.e. there was an excitement in *not* being able to see what/who waited around the next corner.

Positioned in battlefields around the world, I, unavoidably, also came to experience the visual skin of the first-person perspective by being shot and wounded. Hit by a bullet, the vision of the first-person perspective momentarily blurred and my point of view was knocked to either side, which facilitated an explicit visceral feel as my 'transparent' view on the game-world suddenly became opaque and viscous, as the visual skin twisted and turned in dark-red 'fog'. Something similar happened if a flash-bang grenade exploded close to me. In such instances, in a temporary state of shellshock, the screen turned white and the speakers emitted a high-pitched tone, shutting

out all other stimuli from the game-world. In these visual 'shocks', where the first-person perspective was exposed to too much stimuli from the game-world, the form of my quasi-I was experienced as somewhat fragile as well as in direct contact with the game-world.

Having an exteroceptive feel on the game-world was not only a matter of (passively) receiving visual stimuli, I also experienced the shape of my quasi-I by actively 'touching' the game-world, visually, through the weapons of *COD4*. Equipped with high-tech military hardware (handguns, machine-guns, rocket-launchers, grenades, etc.) the 'forwardness' and central position of the weapon, at the bottom of the first-person perspective, sustained my experience of the game-world as a spatial place that extended beyond the flat surface of the screen. Hence, the weapons provided a 'comfortable' way to reach the game-world, in the sense that the distance and forwardness implied by the weapon, made me forget that I was always present in the game at an insurmountable 'near-distance'. Put differently, the weapons drew my attention away from the confines of the screen and directed it *into* the game-world. At the same time, as destructive tools, the weapons served as an 'amplified' way to reach the game-world, covering up my inability to touch it in more delicate ways, as Klevjer argues, 'The visual and auditory response from the weapon that occupies the central position of the game-space is hyper-reactive, loud and graphically in-your-face, forcing an awareness of sheer power and destruction' (*The Way of the Gun* 2). However, as I will argue in the next paragraph, the weapons also served a more subtle 'proprioceptive' purpose, collecting together the invisible body of my quasi-I.

Shaping the Unseen Body

The weapons in *COD4* stimulated my proprioceptive experience of a visual quasi-I – *proprioceptive* denoting: 'the orientation of body parts relative to one another and the orientation of the body in space' (*Body Consciousness* 2). In other words, the weapon served as the 'gathering point' for my experience of having a somatic shape in the game,

as its continuous presence at the bottom of the screen directed my quasi-I into a forward motion. We might say that this proprioceptive centrality of the weapon made itself evident each time I was shot by an enemy. That is, as my perspective was jolted by an attack, the weapon became the way I re-established my visual grasp on the game-world as the direction of the weapon and the crosshair was turned towards the one who attacked me. Even more explicitly, when exposed to a flash-bang grenade, my visual perspective on game-world was completely compromised by a shining white screen that separated my movement, vision, and hearing – dismembering my coherent experiential quasi-I. While in this temporary state of shellshock, the controller still responded to my input, but I could neither see nor hear what I was doing. As my perception was slowly rehabilitated and the weapon started to reappear in the white fog, I felt the quasi-I coming back together and realised the essential position the weapon, and the visual in general, played in my experience of a quasi-I in the game-world – i.e. the visual provided me with a 'resistance' that seemed to be an essential component in facilitating an experientially coherent quasi-I.

Aiming with the weapon was also a visual practice that gave me a proprioceptive sensation of an unified quasi-I with a firmly grounded position in the game-world. As I moved through the various environments (walked, ran or crouched), the four lines forming the crosshair at the centre of my perspective moved further away from each other, and indicated the inaccuracy accompanied by the movement of my quasi-I that otherwise was invisible to me through the first-person perspective, in other words, I implicitly saw a body that stretched or reached towards the limits of its movements. Similarly, my quasi-I was also proprioceptively challenged as the weapons recoiled when fired, driving my perspective upwards and once again dispersing the crosshair. Conversely, as I stopped moving, the four lines forming the crosshair, pulled back together, and I had a sense of my quasi-I and its different parts coming together in a steady position. Even more explicitly, as I aimed down the sight of

my weapon, or used the scope on a sniper riffle, the four lines moved closer together, while a zooming movement narrowed down my field of vision and reduced the speed with which I could move. In these instances, I sensed a visual quasi-I that collected itself together, tightened up, and intently directed focus towards a limited part of the game-world.

Vertigo

As argued, there is a 'sensual and vertiginous attraction' at the hart of the first-person-shooter genre, and apart from the tunnel-vision's tendency to enhance the sensation of speed, as noted by Klevjer (*The Way of the Gun* 2), the first-person perspective's 'visceral or interoceptive (deriving from internal organs and usually associated with pain)' (*Body Consciousness* 2) potential also shows itself elsewhere. Not uncommon to the genre, some players complain about nausea or simulation sickness when playing – for example, the fast paced parkour-action and the bouncing perspective of *Mirror's Edge* (2008)[45] has become renowned for making players uneasy. Similarly, playing as an alien in *Aliens vs. Predator* (2010), being able to move fast and climb walls and ceiling, also has a sickening potential, and while *Portal* (2007) and *Portal 2* (2011) are more slow and puzzle-oriented, going through one portal a coming out of another, still challenges one's spatial perception of the game-world.

In *COD4*, one level in particular, *Crew Expendable*, demonstrated the first-person perspective's vertiginous and interoceptive potential. In *Crew Expendable*, I and my team of SAS soldiers were searching a storm-lashed freighter for a nuclear package. While in the belly of the cargo hold, looking through crates, containers and shooting bad-guys, enemy jet fighters approached, with the intent of sinking the ship. Upon impact, the freighter took severe damage and water

[45] Online magazine *Wired* discusses the widespread internet chatter regarding *Mirror's Edge* ability to make players suffer from motion sickness (Thompson).

started pouring in. My objective was then to navigate my way back up to the surface of the ship, and reach a waiting helicopter, before the ship sank. Back-tracking through the cargo hold, I struggled to keep my quasi-I together just as much as I struggled the nauseating feeling of suddenly having my up and down, left and right orientation displaced as the ship capsized. The other interoceptive aspects of my *COD4* experience were more 'subtle', compared to the above, and as in many other first-person-shooters it revolved around the 'feel' of the weapons. Apart from the differences in sound and muzzle flash, the nuances in how I was forced to readjust the orientation of my first-person perspective, owing to the recoil of the weapons, facilitated an experience of weight, density and 'fire-power' – in the combination of recoil and rate of fire some weapons seemed 'inert' and 'heavy', while others were 'brisk' and 'light weight'.

An Experiential Oxymoron

On one hand, the first-person perspective of the first-person-shooter seems to be the perfect oxymoron for facilitating a somaesthetic self-reflection. That is, will looking through the eyes of 'someone' looking at the game-world not eventually lead to, not only a perception of the game-world but also, an awareness of the fact that I am perceiving it through 'someone' perceiving it? On the other hand, as the previous sections serves as a testament to, the exteroceptive, proprioceptive and interoceptive transformation that I had to undergo in order to play the game dominated my attention, and gave me an experience of being a quasi-I in-the-game. And, in this experiential process of transformation my perceptions were not experienced as the perceptions of 'someone' else or something other. However, I will argue that there still is a self-reflective potential in the transformation of my perceptions – i.e. it is not just pure somatic experience.

From a theoretical perspective, the experience of being 'inside' or 'caught up' in the computer game (for example a first-person-shooter), uncritically perceiving the game-world, is usually referred

to as 'immersion' (Calleja 88). However, if we take a closer look at the term – although it tends to be overlooked – the self-reflective potential of being experientially engaged with a computer game also discloses itself. As the term *immersion* derives from the concept of *tele-presence*, coined by Marvin Minsky in 1980, *spatiality* becomes a defining aspect of the immersive experience (Calleja 83-84). Minsky's thoughts on tele-presence were born at the intersection of human and machine, at a time when he was head of MIT's artificial intelligence research. One of the aspects he pursued was to describe and design for the feeling of being present in a physically remote location, by operating different types of robotic machinery. This line of thinking became important in virtual reality research (later adopted by computer game research) as specific branches of it similarly revolve around the design, construction and experience of acting in a 'remote' environment. And, despite the ontological quarrels regarding the legitimacy of juxtaposing physical and virtual environments, spatiality is also a defining feature of playing computer games from an experiential point of view. Not least, with regard to the first-person-shooter, in the sense that the first-person perspective more explicitly seems to play with one's experience of 'acting at a distance' – that is, seeing things move past you in a 2D side-scroller, you are always at the same distance to the game-world, which is a fundamentally different experience than having things and objects come towards you a 3D game-world. In other words, the concept of *immersion* is related to a spatial experience, a particular experience of space that mirrors the oxymoronic term *tele-presence*. The immersive experience has an inherent 'resistance' as it is an experience of both 'being there' and 'not-being there', so to speak. Manovich points out, 'the essence of tele-presence [the concept from which immersion derives] is that it is anti-presence' (167), emphasising that it is not just a 'being there', but a 'being there' at a distance. Recalling the post-phenomenological concept of the amplification/reduction structure of technological mediation/immediation, and our tendency to focus on that which is amplified, we might say that the immersive experience facilitated by

the first-person-shooter similarly, tends to be noticed for its quality of bringing things closer (but this does not prevent a self-reflective potential).

In my experience of *COD4*, the 'anti-presence' of immersion, or the self-reflective sensation of being 'there' at a noticeable distance, emerged in the level *Crew Expendable* (discussed above). The visual disorientation and nausea (simulation sickness) that accompanied my movement through the capsizing freighter may be seen as an 'experiential oxymoron'. In physiological terms, simulation sickness arises through a discrepancy of perception and movement, for example as audiovisual representations give an illusion of motion that is incompatible with the absence of motion, felt in the inner ear (Hettinger, 1990). In other words, the disorientating experience of 'not being' there facilitated an experiential somaesthetic self-reflection – i.e. my experience of the game turned into an awareness of the incompatibility between my perception and the first-person perspective's perception of the game-world. Moreover, this self-reflection demonstrated how the experiential dimension of my *COD4* experience was shaped at the intersection of somatic experience and an experience of the somatic.

REPRESENTING THE COMPETENT, MILITARY BODY

COD4 did not allow me the possibility to detach myself from the first-person perspective in game-play, nor was I presented with the option to customise my character's appearance before I played. In consequence, I never saw Soap or Jackson (the characters I controlled) from the outside, yet, I still had an experience of their external appearance (and I consequence also the appearance of my quasi-I). As I emphasised when I introduced the notion of a representational dimension, an experience of 'the body's exterior or surface form' (Shusterman, *Body Consciousness* 26) is not only facilitated through static body images – the body is reflected in actions and objects.

Similar to the experiential dimension of my *COD4* experience, the weapon integrated in the first-person perspective played an essential role in shaping the exterior or surface form of my quasi-I.

Klevjer argues that the first-person-shooter genre 'celebrates the gun as the ultimate technology' (*The Way of the Gun* 8), a celebration that manifests in two forms, 'exaggeration and parody' and 'professional training' (*The Way of the Gun* 8). We might say that the 'exaggeration and parody' of imaginative and oversized weapons is most precisely exemplified in Doom's BFG9000 gun that obliterates all enemies on screen in one single shot. Not only having an overtly powerful effect, its name, BFG, an abbreviation of 'Big Fucking Gun' (Hall, section 14.1 *Weapons*), demonstrates a playful attitude towards the role and importance of the weapon, at the game's macro level. Conversely, the contemporary and realistic weapons of *COD4* may be seen as an instance of the first-person-shooter genre's weapon fetish that relies on an ideal of 'professional training'.

Apart from being instances of 'a broader cultural category of violent gun-play' (Klevjer, *The Way of the Gun* 8), I argue that the weapons of the first-person-shooter genre also represent different bodies, and body fantasies. That is, handling the BFG requires a body out of the ordinary, a muscular and perhaps even technologically enhanced body, while the more realistic weapons of *COD4* represents the well trained and professional soldier. In addition to these two instances of gun-play and body-play, more have arrived since Klevjer suggested the distinction between 'exaggeration' and 'realism'. In *Far Cry 2* (2008) or *Condemned 2: Bloodshot* (2008) weapons that jam and eventually break, reflect more problematic bodies: a malaria struck body that needs medicine, and a schizophrenic and hallucinating body that indulges in alcohol to keep a steady aim – two instances of gun- and body-play that emphasise the *unreliability*, *fragility* or *perishability* of both technology and body.

There are also examples in the first-person-shooter genre, where

the weapon and the body almost completely merge, for example, the nano-suit in *Crysis* (2007) and *Crysis 2* (2011) that, among other things, empower my quasi-I with superhuman strength and invisibility. Similarly, the injection of 'plasmids' in *Bioshock* (2007) genetically modifies the game-body with flammable, electric, telekinetic capabilities, and so forth. Moreover, the body of the protagonist may also be a body gifted or cursed by supernatural abilities, like the gangster Jackie Estacado in *The Darkness* (2007). That is, as Jackie is possessed by a demon, tentacles and snake-like creatures emerge out of his body and serve as rather useful extensions to reach the game-world. Common to the examples above is that the various 'weapons' shape one's experience of the exterior or surface form of a body (and quasi-I) that we never really see.

Returning to my experience of *COD4*, the modern (always functional) weapons, the night-vision goggles and scopes available for me to use, represented a competent body able to handle intricate forms of technology. For example, putting on the night-vision goggles, I suddenly saw the clear outline of bodies and objects in the otherwise dark and obscured environment. Through this new possibilities to act, presented to me via the visual amplifications of my perspective, the competence of my quasi-I was once again emphasised – additionally, adding to my experiential sense of being a competent quasi-I, 'The power of the player lies not only in the destructive power of the gun, but in the control and surveillance of the target scope' (Klevjer, *Gladiator*, *Worker*, *Operative* n. pag.). The representation *of*, and my perspective *on*, other characters in *COD4* were similarly important to the representational form of my own perspective (that I never saw with my own eyes). That is, as I witnessed the smooth, motion-captured bodies of the other soldiers on my team, I never questioned that the appearance of my own body could be different from these 'elegant', efficient and professional military bodies. Moreover, owing to the fact that I never saw any characters, besides friends or enemies, the bodily representations I oriented myself with and towards also supported the black and white narrative of the game. That is, these

either/or representations positioned me in a game-world where there was only good and evil, and also outlined my quasi-I as a righteous and uncorrupted body, able to clearly distinguish between friend and enemy, right and wrong.

Confronting One's Own Perspective

Starting out in *COD4* as the British SAS soldier, Soap, I was assigned to a new squad. Approaching my teammates, in the game's training course, Captain Price, my superior, greeted me: 'What the hell kind of name is "Soap"? How did a Muppet like you pass selection, eh?' Apart from this 'tongue-in-cheek' reference to my position outside the game, and the form and appearance of Soap as somewhat a puppet in my control, the representational dimension of my experience had little self-reflective potential. Instead, the representational shaping of the competent, righteous and omnipotent quasi-I that I controlled, mainly seemed to serve the purpose of keeping my experiential feel of being caught up in the game on track. However, as the game progressed, the stereotypical 'good soldier' had a self-reflective potential, in the sense that the sensational representations accumulated, and could only be appreciated as being *too much* or *too perfect*. We may attribute the lack of representational self-reflection in *COD4* to the first-person-shooter's traditional action-oriented focus – playing first-person-shooters it is about *doing things* (shooting), not about thinking or self-reflection. However, a brief look at other games in the genre will nuance the characteristics of a self-reflective potential. That is, a self-reflection that relies on the sensational aspects of the genre and my knowledge of these – i.e. facilitating an awareness of my perception of the game/genre.

In a game like *Condemned 2: Bloodshot* playing through the perspective of the alcoholic and schizophrenic Ethan made me explicitly question the representations provided by the first-person perspective. That is, as I played a level only to find out that it took place inside Ethan's head, or as Ethan's urge for another drink manifested before my (his)

eyes as a monster that had to be fought off with a baseball bat, my perspective on the game became a part of the game-play – it was not only Ethan, but also me, that began to question what was 'real' and what was not. These schizophrenic shifts, where Ethan at one point, was the way to reach the game-world and at other points, was the game-world itself, disclosed my role as a player, as someone looking 'into' the game-world – someone with a non-neutral perspective on (and access to) the game-world.

In other first-person perspective games a self-reflective potential emerges through a play with what we might call gendered representations related to the first-person-shooter. Playing *Mirror's Edge*, I took on the role as Faith, a female, parkour and martial arts trained 'runner'.[46] My actions unfolded in a surprisingly white and sterile city, sharply contrasting the usual gritty hallways of the first-person-shooter. Nevertheless, the seemingly nice city was controlled an evil regime, so, to stay out of sight, I was forced to use the rooftops of the city to get from one place to the next and achieve my goals. In the heights, Faith's acrobatic abilities proved efficient to outrun or outmanoeuvre enemies rather than confront them. And if I occasionally picked up a weapon, it only slowed me down and impaired my agility. Hence, devoid of the technology (both in the game and at the interface level) that usually pervaded the first-person perspective, the body of Faith was represented as a somewhat 'pure' body that shied confrontation with the opponents equipped with weapons, however, this was not the 'contour' of a stereotypical 'inferior gender'. That is, when I could not avoid confrontation with my pursuers, Faith elegantly disarmed them and turned their weapons on themselves. Whether or not *Mirror's Edge* facilitated an 'authentic' female perspective is not the interesting question. Instead, in the representation of female ideals or stereotypes (in Faith's perspective, movement, encounter with enemies and the environment), I

[46] *Mirror's Edge* is sometimes referred to as a *first-person-runner* due to importance of 'parkour game-play' (jumping, climbing, running, crouching, etc.)

experienced the form of the first-person perspective as, if not female, then at least different from the perspective of *COD4*, and moreover, this 'contour' of a different quasi-I made me reflect on the male characteristics of the first-person-shooter genre in general.

In a similar, yet more subtle way, my experience of *Portal* (2007) also demonstrated a self-reflective potential based on the representation of the female body. In *Portal*, I woke up in what seemed to be an abandoned laboratory, not knowing who I was. Mischievously guided through this environment by a robotic voice (GlaDOS, the computer system that controlled the facility) I was introduced to a futuristic technological advancement called *portals*.[47] Catching a glimpse of myself through the portals, to my surprise, I realised that I was a woman. It could be argued that '*Portal* is essentially a feminist critique of the FPS genre' (McNeilly n. pag.), but with regard to my discussion of a self-reflective potential of the first-person-shooter, I merely wish to emphasise that the appearance of the female representation served as a self-reflection on my own male perspective – silently assuming that the first-person perspective of *Portal* belonged to a male character, like most of all the other first-person perspective games I had played.

PERFORMING WITH/FOR THE QUASI-OTHER

Playing through the single-player campaign of *COD4*, I had no one sitting next to me, or watching me as I moved my visual quasi-I through the game-world. Nevertheless, I will still argue that the experience of the game had a performative dimension related to the demonstration/performance of 'bodily strength, skill, or health' (Shusterman, *Body Consciousness* 28).

[47] Portals are elliptical holes that may be placed on walls, floors and ceilings. Through these holes, I am able traverse time and space – going into one portal, I immediately step out of another. For a more elaborate explanation of the concept of portals see for example: http://www.youtube.com/watch?v=Bk2Wr9a4eQs – last retrieved 4 Mar. 2011

I will briefly return to the post-phenomenological concept of the *alterity relation*, as I find it helpful when explaining how my experience of *COD4* had a performative dimension. Ihde borrows the term *alterity* from Emmanuel Levinas and defines it as 'the radical difference posed to any human by another human' (*Technology and the Lifeworld* 98). In the encounter with another human there is an infinite difference between me and the other, and in the encounter, 'I' become 'me' because of the other, and vice versa. Hence, the 'alterity' or 'otherness' in this human to human relation is defining for both me and the other. Another way to describe this relationship is to say that I often come to see myself through the eyes of others. Consequently, I coordinate my actions and act depending on whether someone is watching me or not – i.e. I am shaped and shape myself through the gaze of the other. With regard to technology it is, according to Ihde, possible to have a similar experience of technology as something autonomous and different from me, shaping my experience of who I am, and how I act. This experience of technological alterity always retains a sense of 'quasiness', being different from the otherness of a genuine human other. Playing *COD4*, there was a sense in which I performed and demonstrated my somatic skills through such an alterity relation. That is, the game constantly watched over me, rewarded or punished me for specific actions, consequently, I made and effort to perform according to this standard, and avoid *game over*.

This performance was not only a micro-perceptual dance, coordinated by right or wrong input or output, it was always already intertwined in macro-perceptual alterity. What we might call a demonstration or performance of a cultural body was continuously part of my *COD4* experience – the visual perspective was one way to stage this cultural performance. Allison argues that in the WWII first-person shooter *Call of Duty: Big Red One* (2005), the perspective of the squad that accompanies the player throughout the game, becomes a remediation of the camaraderie found in WWII film 'demonstrating the 'melting pot' ethos that the US government encouraged during the 1940s

in order to increase unity and support for the war effort' (Allison 187). In *COD4*, I performed as the competent, professional and righteous soldier that had been outlined to me in the representational dimension of the game experience (discussed in the previous section). That is, through the alterity of the other perspectives in the game (both friends and enemies), I began to act as the 'good' soldier. As friendly quasi-others, the members of my squad shared my interest in the game-world – moving forward as I did, showing me the right direction, shooting at enemies, and so forth – and firmly grounded my performance as part of the squad. This squad performance eventually failed, either as I accidentally shot at one of the members of my squad, or if I was shot and killed by an enemy. In both instances the screen faded to black, if I had shot at my team mates, I was confronted with the statement 'Friendly fire is not tolerated!', and if I died, I was 'rewarded' with quotes concerning war, such as: 'Mankind must put an end to war, or war will put an end to mankind' – John F. Kennedy or 'All warfare is based on deception' – Sun Tzu. Hence, even as the game revealed its machine alterity (at a micro-level) ending my game-play, my performance, and the evaluation of it did not stop at the black screen, it always gave me the impression of being something *more* – i.e. I was still caught up in the performance as a specific cultural soma.

The alterity of the enemy perspectives was similarly important to my performance in *COD4*. Since the first-person-shooter genre's beginning, it has presented a stereotyped perspective not only *of* the player character (e.g. the 'good' soldier of *COD4*), but also *on* the player character in the sense that the player is most often only met by a generic aggressive gaze. Exploring the WWII computer game, Allison notes a bias towards representing the European and not the Pacific part of the war, arguing that it is partly due to a concern over racism (187). Similarly, we might argue that the 'Nazi-gaze', introduced by *Wolfenstein 3D*, as part of a collectively imagined war nostalgia, has become a way to remember, replay and perform the 'last "good war" in which military force was justified' (Allison 183). Moreover, as the embodiment of evil in the twentieth century,

the gaze coming from the Nazi quasi-other does not question the player's act of murdering an abundance of fictional characters firsthand. Shaping my performance through the alterity of the terrorist-perspective, *COD4* continues this 'tradition' where I am only allowed to perform and meet (never surpass or subvert) certain cultural standards – there is only *one* perspective. Evidently, *COD4* demonstrates the ethos of the Western world's 'war against terror', and engaging in this performance made it difficult for me to see my own perspective from the outside (from the perspective of the other). Nevertheless, there were moments of self-reflection within my *COD4* performance that relied on the perspective *on* and *of* me as a 'player'. Put differently, the distinct line between I and quasi-I, facilitated by the perspective of the quasi-others became blurred at specific moments – more on this issue in the next section.

Death From Above

In the level *Death From Above*, aboard an American gunship, my goal was to provide air-support for friendly troops on the ground. Through a night-vision camera, positioned with a birds-eye view on the game-world, controlling the gunship's weapon system, I no longer occupied a first-person perspective, but instead the mechanics and technology of the gunship. As the camera interface zoomed and GUI elements changed accompanied by the sound of buzzing motors and electronics inside the plane, I got a feel of the materiality of the gunship. Additionally, the time it took for the push of a button on the controller to manifest as an explosion that lighted up the ground and was heard as a low frequency 'thumb', made the distance between myself and the battlefield immediately experienced, sharply contrasted by the immediacy of firing weapons in the first-person perspective. Despite this distance, I was simultaneously positioned closer to the events that the game made an effort to mediate, in the sense that this was presumably what a soldier in an actual gunship would be confronted with: A screen, several joysticks and buttons in order to aim and fire at the enemies on the ground. Bearing witness

to the 'real' mediated war (from Iraq and Afghanistan) through the crude black and white images of precision bombings shown in newscasts and on the internet, performing the game-war of *COD4* resulted in an uncanny feeling. Up until that point (playing *COD4*), the conventionalised 'being' and 'not-being there' of the first-person perspective had worked as a buffer, separating me from the actions in the game – giving me status as a quasi-I. But when positioned in the gunship, the alterity of the perspective disappeared and left me with my own eyes to experience the war. The macro-perceptual perspectives from newscasts that I had come to know (and recognise) as my 'objective' access, and 'authentic' way, to experience war, were now transformed into a micro-perceptual perspective that I myself had to perform and somatically internalise. In other words, I became aware of my own perspective outside the game.

Apart from the technological transformation of my perspective, the self-reflective characteristics of the *Death From Above* level were also brought forward through the disappearance of the terrorist quasi-others perspectives on me. As argued in the previous section, being confronted face to face with the stereotyped hostile terrorist-perspective shaped my performance as a competent and righteous soldier. But now, positioned miles above the battlefield, the gunship perspective made it difficult to distinguish between friend and foe, as the quasi-others did not immediately return my perception, as either hostile of friendly. Consequently, as the performative shape of my quasi-I, the 'good' soldier, became blurred, so did the one-sided, unambiguous perspective on the game-world and its performative standard. Here my experience was that the first-person-shooter momentarily fulfilled what *Wolfenstein 3D* initially had promised: to position me in the boots of the soldier. A soldier, who, positioned at the controls of a gunship or an unmanned drone, with all probability, experiences a similar uncertainty with regard to the tiny people on the screen. However, there is still an experiential difference – or else, I would probably not have played through the *Death From Above* level – as a game journalist noted the first time he took control of the

gunship, 'It was a bit chilling watching the silent explosions take out our faceless enemies but, at the same time, it was impossible not to love it' (Tuttle, n. pag.). In other words, this self-reflective emphasis on me as an 'I' outside the game, becoming aware of my performance as a player, did not hinder me from playing the game, it also emphasised me as 'merely' a player (arguably cancelling its own critical potential).

Experiencing the blurriness or the transformation induced by the shifts between I and quasi-I, between performative somatic experience and experience of a somatic performance might even make the experience of the game more 'intriguing'. As Allison discusses (Allison 188-189), the use of old newsreel footage in cut-scenes (an integral part of almost any WWII shooter) is double sided, in the sense that it on one hand positions the player outside as a passive spectator at an insurmountable historical distance to these events, but on the other hand, it also serves as an authenticity cue that gives the fleeting 'now' of game-play a cultural density. In *COD4*, the black and white camera images from the gunship were technological cues that gave me an experience of working on the 'now' of contemporary media-reality, but still, at a safe distance. As one of the quotes from *COD4*'s game-over screens suggests: 'War is delightful to those who have not yet experienced it' – Erasmus.

A SOMAESTHETIC OF VISUAL DISPLACEMENT

Discussing the aesthetics of the first-person-shooter, Klevjer concludes that 'The FPS-adventure gives you the carnivalesque in a box' (*Dancing with the Modern Grotesque* n. pag.) – the carnivalesque 'according to Bakhtin, is an aesthetic of mockery, inversion and excess, grown out of the body-based and grotesque elements of popular culture in the middle ages and the renaissance' (*Dancing with the Modern Grotesque* n. pag.). Against the background of my explorations of the somaesthetic dimensions of *COD4* (how my experienced revolved around an experiential, representational and performative quasi-I), I wish to emphasise that it is when the carnivalesque moves

beyond the box that the first-person-shooter demonstrates its aesthetic potential. That is, in addition to Klevjer's argument that in the first-person-shooter 'The grotesque has found its place as a displaced other' (*Dancing with the Modern Grotesque* n. pag.), I will argue that playing a first-person-shooter is also a transformation and displacement of one's somatic *self*. It is true that the representational and performative dimensions of the first-person-shooter (*COD4* being no exception) have elements of 'dismemberment' and grotesque affirmation that are centred on the materiality of the *other's* body (the endless battle against terrorist quasi-others). However, as I have argued, we should include the representation and the gaze of the quasi-other as aspects of the experience that also shape the surface form and performative potential of the one (the player as a quasi-I) to which the quasi-other becomes *quasi-other*. Even more explicit, as described when discussing the experiential dimension of my *COD4* experience, appropriating the first-person perspective by playing the game may be seen as an exteroceptive, proprioceptive and interoceptive dismemberment and subsequent transformation, of my habitual soma, into a quasi-I. Consequently, the somatic self becomes an integral part of the carnivalesque in the first-person-shooter and not only a quality that belongs to the other/quasi-other.

In *COD4*'s representation of violent limit-experiences, through the media images of contemporary warfare, the *Death From Above* level underscores that this imitation not only takes place inside the game, but also in the player's performance of playing it. Consequently, it would be interesting to further pursue the somatic representations and performances in other first-person-shooters, in order to re-evaluate Klevjer's statement that in the first-person-shooter genre 'there is no voice of cultural or political critique to be found, only regressive parody' (*Dancing with the Modern Grotesque* n. pag.). That is, if we conceive the experiential, representational and performative to be dimensions of the game-play experience where the player and the context in which he is positioned are not only reflected as 'The genre holds up a grotesque mirror' (Klevjer, *Dancing with the Modern*

Grotesque n. pag.), but also allows him to step *inside* and transform his experiential, representational and performative soma, then the potential for self-reflection and consequent self-criticism becomes evident – i.e. a potential that lies in the somatic *process* of unfolding the game and its spectacle and not merely in the *genre* as a reflection. Lastly, returning to the discussion from the introduction to this chapter, concerning the experiential quality of the first-person-shooter's visual dimension, I will still argue that the visual attraction of the first-person-shooter consists of more than its photorealistic spectacle. That is, the displacing and self-reflective potential that the explorations of my experience identified, has demonstrated that the visual dimension of the first-person-shooter revolves around playing with different perspectives (establishing a quasi-I perspective), and having one's quasi-I perspective on the game-world returned by quasi-others. And most importantly, performing this quasi-I perspective and having it returned was neither a mental or imaginative exercise nor an unreflective stimulation of my visual senses, instead it was founded and savoured in the transformation and displacement of somatic experience and the experience of the somatic.

Chapter 4 – The Hand

BRINGING THE CONTROLLER BACK INTO PLAY

This chapter will focus on the hand–controller junction. I have previously argued that the player's micro- and macro-perceptual experience of the computer game flows through the material game controller. Hence, I find that in its function as a 'conduit', the controller's role in our appreciation and understanding of the computer game needs to be explored.

Kirkpatrick also suggests that the relationship between the hand and the controller is important, if we strive to understand the aesthetic form of computer games.[48] He notes that we should 'look at the role of the hand in connection with the computer game system as instrument, analogous with traditional, musical instruments' (*Controller, Hand, Screen* 127). That is, one should direct attention to how the game (somewhat similar to the experiential shape of music) discloses itself through the subtle handling of a material instrument. And as discussed by Alperson, 'It is hard to overestimate the importance of the idea of the musical instrument in our appreciation of music and our understanding of musical practice' (37). Concepts of melody, tone, the musical work, the musical performance and so on, all relate to someone playing an instrument. Even computer generated music (or the older tradition of machine music) that, in

[48] Defining it through Adorno, Kirkpatrick describes 'aesthetic form' as 'that which refuses to be caught in the net of scientific, we would say physical, descriptions of the world; as a real thing that is nonetheless recalcitrant to modern, instrumental science' (*Controller, Hand, Screen* 128).

some variations, works hard to erase the musician, the artist or the composer by hiding behind the machine or the title of 'programmer', can-not transcend the fact that the machine must be built and controlled. This fundamental interdependence between human and instrument is the focal point for my exploration of the hand–controller junction. Drawing a parallel to musical practice, playing computer games are equally hard to imagine without considering a player engaging with some sort of instrument (controller). In short, if no one grasps the controller, nothing happens.[49]

Approaches to the study of the controller have attracted some attention in the field of game research. Griffin's *Push. Play: An Examination of the Gameplay Button* is an informative 'call to arms', in terms of becoming aware of the importance of the physical interface in computer games. Nevertheless, in its inability to distinguish between the *bodily* and the *physical* (an issue described in the introduction to this dissertation) it does not delineate the subtleties of embodied interaction. Instead, this approach regards the physical button as something that 'reflects a disregard for the body's abilities' (Griffin). The trivial button that is either pressed or not (using a single finger) might be described as 'anti-bodily', if we reduce the soma to measurable physical movement. However, as I have consistently argued, the simple push of button may be just as somatically exhilarating as more explicit physical movement – i.e. the bodily should not be reduced to physical movement. Additionally, Griffin's approach also falls under Crogan and Kennedy's diagnosis of how the physical interface is usually approached in game research, that 'the question of the technological is more or less answered in advance' (Crogan & Kennedy 109), considering technology either *neutral* or

[49] Computer games that does not rely on controllers will be addressed in chapter 6.

conditioning.[50] In terms of being neutral, a dominant focus on the software aspect of games has fostered an *instrumental view* of the hardware aspect, reducing the material and technological to 'available tools' for the 'configurational acts' of the game system (Crogan & Kennedy 108). On the other hand, as conditioning, technology may be understood as governing existing relations of 'social power and political economy' (Crogan & Kennedy 109). Consequently, I do not share Griffin's somewhat exclusive presuppositions regarding technology as alien to an ideal soma: 'The pleasures of the hand can play no part when the control structure is defined by the symbolic nature of button-based input' (Griffin). Instead, as I have argued through the concepts of representational somaesthetics and macro-perception, the hand (and the soma in general) has inherent symbolic and cultural layers, which can-not be defined as opposing *the pleasures* of the hand as a pure physical thing, as they are integral parts of its material and grasp on the world. Additionally, the post-phenomenological framework of human–technology relations demonstrates how the button (and other symbolic interactions and gestures) facilitate not only *hermeneutic relations*, but, through the 'plasticity' fundamental to Being-in-the-world, also, may be described as *embodiment* and *alterity relations*. Based on these post-phenomenological and somaesthetic presuppositions, and in line with Crogan and Kennedy's inclusive view of technology, I take my point of departure in regarding the controller as a piece of hardware (a piece of technology) that facilitates an embodied cultural instrumentation.

Questions regarding technology (as instrumental cultural practices) do not become less important when we deal with mimetic interface games (such as *Guitar Hero* or *Rock Band*) that explicitly

[50] Taking a line through Latour and Stiegler, Crogan and Kennedy work with an inclusive definition of technology (somewhat similar to my post-phenomenological definition, see the section *Post-Phenomenology*), as a mutation of human cultural practices, 'as applied scientific knowledge, as instrumentation, engine, productive or informational system, and so forth' (Crogan & Kennedy 108).

foreground the controller.[51] Therefore, I will explore the role of the hand–controller junction in the experience of the computer game, through the *Guitar Hero* game series,[52] as the guitar-shaped game controller demonstrates that the hand–controller junction is never merely an 'anti-bodily' or neutral conduit that silently lets the player 'configure' the game. In other words, starting out by identifying a connection to musical instruments and musical practice brackets the hand–controller junction, and allows me to attend the experiential, representational and performative dimensions of handling the controller. It is evident, when playing an instrument or attending a rock, jazz, electronic or classical concert, that the musical instrument and the various ways in which it is handled may be characterised as experientially rich, representationally dense and explicitly performative.

The technological prejudices that Crogan and Kennedy describe are also present in some of the existing approaches to studies of *Guitar Hero*. For example, in *A Casual Revolution,* Juul explores mimetic interfaces with a focus on the circumstances of play and the guitar-shaped controller is seen as having 'high compatibility' with commonly known activities (*A Casual Revolution* 34-35). Shultz's music theory perspective (also informative, as I will later discuss) focuses on music games (including *Guitar Hero*) and their semiotic representation of music, contrasting them to traditional ways of learning music. Examining the musical fidelity of *Guitar Hero* in

[51] There are also mimetic interfaces – interfaces that permit 'players to play from the perspective of their physical presence in the real world' (Juul, *A Casual Revolution* 103) – that are more focused on the consistency of the player's movements, instead of the controller as an object (e.g. the Nintendo *Wii*, Xbox *Kinect*, PlayStation *Move*). Such mimetic interfaces will be addressed in chapter 6. We may also note that Japanese gaming culture has a tradition for music and rhythm games, for example *Dance Dance Revolution* and *Guitar Freaks* (which, released in 1999, precedes *Guitar Hero*).

[52] My findings are based on my single- and multi-player experience of the 'career mode' in *Guitar Hero: World Tour*.

relation to a real guitar, Arsenault emphasises melody, harmony and rhythm as the defining features of the guitar-playing experience. A characteristic of these approaches is that the *Guitar Hero* controller itself, and the physical handling of it, do not attract attention. In consequence, it recedes to the background as a neutral or available tool, while focus is directed at the situation (Juul), the educational potential (Shultz) and the musical fidelity of the game (Arsenault). In other words, the questions in these perspectives are somewhat more concerned with *what* the game/controller produces, and not *how* – the things of experience, and not the experiencing of the things. Consequently, the interrelatedness of the experiential, representational and performative aspects of the hand–controller junction is overlooked. Bizzocchi and Tanenbaum propose a more inclusive approach towards instrument controllers as they frame the *Rock Band* experience in terms of *ludic*, *kinesthetic* and *narrative* experiences. However, although their discussion of kinesthetic experience includes what I call representational and performative aspects (Bizzocchi & Tanenbaum 130), the statement that 'Traditional video game interactions take the player outside of an awareness of the body' (129), and an emphasis on the drum controller as providing 'continuous and explicit bodily awareness' (129), reduces the experiential dimension, to physical movement.

This chapter is an exploration of how my post-phenomenological and somaesthetic perspectives might add more nuances to our understanding of the hand–controller junction, in the experience of playing *Guitar Hero*. Looking ahead to the conclusions of my exploration, in *Guitar Hero*, the aesthetics of the controller manifests itself in the sense that, while in my hands, the controller becomes a way of *listening* to sound/music with a somatic sensibility. In Miller's ethnographic study of *Guitar Hero* as a *schizophonic performance*, the notion of authenticity keeps reappearing in connection with the game. To anticipate another point, in the following sections I will argue that I consider these ongoing discussions (evident in both the practice of playing the game, and in the reception discourses surrounding

the game) regarding the 'realness' or 'authenticity' of the game and its elements, as testifying to a possible change in our sensibilities, with regard to music. *Guitar Hero* (and perhaps the computer games, in general) transforms our experience of what music is, thereby displacing ideas of what makes music authentic. Therefore, a notion of authenticity is more or less evident in my exploration of the hand–controller junction, both in terms of handling the controller/instrument, and in relation to listening to/performing the music in the game. I will return to these aspects, as my analysis of the game develops.

AN EXPERIENTIAL GRASP ON THE GUITAR-SHAPED CONTROLLER

This section revolves around the experiential dimension of using the controller, the immediate subjective/internal feel of the controller and how this grasp facilitates an experience of a guitar hero quasi-I. From a functional perspective, handling the guitar-shaped controller is fairly simple: Hold down the button on the controller-fretboard, and, as the matching note in the visual interface reaches the bottom of the screen, press the strum-bar button on the controller.[53]

Having the guitar-shaped controller in my hands for the first time was an immediately gratifying experience. Although it smelled a bit of cheap plastic, the guitar-shape of the controller, and the way I hung it around my shoulder (hands positioned on its neck and strum-bar), clearly outlined an experiential shape of my guitar hero quasi-I, even before the game had begun. In comparison, putting my hands

[53] The neck/fretboard of the physical guitar-controller is equipped with five buttons (green, red, yellow, blue, orange). On the body of the guitar, in the area where a guitarist would strum the strings on an actual guitar, a strum-bar button is flicked, up or down, to 'activate' the notes of the coloured fretboard buttons. In the game-play interface, coloured notes appear on screen at the back end of a horizontal fret-board and, at a steady tempo, move towards the front of the screen, waiting to be 'played' as they reach the five buttons that represent the buttons on the physical controller.

around a traditional controller, a specific game has to be loaded and on-screen, before I have a similar experiential feel of a quasi-I form. However, playing the plastic guitar for the first time was conversely a somewhat frustrating experience: I looked down at the fretboard, and tried to remember where the different colours were positioned on the neck, and to which fingers they related. Simultaneously, I made an effort to keep track of the stream of oncoming notes on the screen. Initially, this coordination was extremely challenging. Being accustomed to playing a real electric guitar, I had probably overestimated my skills as a 'guitar hero' and set the difficulty of the game too high. Moreover, my troubles also had something to do with my listening, as a musician, as Arsenault suggests, 'I had trouble understanding the link between what the screen was telling me to play and what my ears were decoding' (n. pag.). Overall, seeing the notes fly by, but not hitting them, was accompanied by a sense of disbelief – how could it possibly be so hard? I was frustrated, handling a seemingly inconsistent interface that would not let me do what I was supposed to: 'make music'. As a natural consequence, I did not feel like a guitar hero at all, instead I somatically struggled to coordinate and assemble the different parts of the guitar hero quasi-I (the controller, and the audio-visual interface) into a whole. I just could not get the different parts of my quasi-I into the rhythm, the game required.

Eventually – after changing the difficulty setting, and practising – my guitar hero quasi-I started coming together, I got the colours of the notes and buttons *into my fingers*, and without any trouble, I was, miraculously, it seemed, able to coordinate their alignment with a push of the strum-bar button. And, as the notes began to light up at the bottom of the screen, it all started to make sense, not because I understood the concept of the game better, but because a pattern of pre-reflective somatic knowledge emerged by my continuously handling the controller – what we might call a proprioceptive coherence of the controller and visual aspects of my quasi-I. This was similar to Sudnow's phenomenological account of playing jazz

piano: At first, with a lot of effort, I 'grabbed' for the notes and chords, trying to 'comfortably sink into' them, and eventually, 'As my hands began to form constellations … a consistency developed in seeing not its [the notes] note-for-noteness, but the pattern of its location as a configuration emerging out of the broader visual field of the terrain' (*Ways of the Hand* 9). As a moderately skilled *Guitar Hero* player, I similarly began to play the different colours (or notes) separately, or assemble them as 'chords', as they appeared on-screen, without noticing their specific colours, or their positions, as such (their 'note-for-noteness'). The continuous stream of notes was incorporated into a larger field of view that I felt competent to manage, because I had come to somatically understand the *visual* rhythm of the game, a rhythm based on the 'driving' perspective of the horizontal fretboard, mapping musical time with movement through space (Shultz 184).

My guitar hero quasi-I became visually directed towards the screen to the extent that it occasionally was disturbed, when I looked down at my hands working the fretboard, trying to reason with my rapidly-moving fingers, and understand what exactly they were doing. On one hand, the guitar-shaped controller moved into the experiential background, and became an extension of my intention to strike the right notes. On the other hand, it seems incorrect to say that the guitar controller was in the background. Put differently, the controller might have been in the 'background' with regard to my conscious reflection on how I am handling it, but it was in the 'foreground' of my 'bodily' experience (pre-reflective somatic consciousness) – an explicit part of the fully concentrated quasi-I that I was when playing. I exteroceptively and proprioceptively 'read' the shape and surface of the controller, the physical layout of the buttons with my hands, fingers, the positions of my arms and my overall somatic posture, without the need to think about which button corresponds to what colour – I instantaneously knew. And, in this immediate, somatic attention to the controller, I actually began to feel somewhat like a 'guitar hero'. My concentrated somatic effort resulted in a visceral experience of moving through the previously alienating stream notes

on-screen, and the music played by someone else. So, even though I 'knew' that it was not *my* music (in the sense that I had not written it, or was playing it on 'real' traditional instruments), the experiential dimension facilitated through the hand–controller junction told me that it was indeed mine.

The Limits of being a Guitar Hero

The somatic experience of handling an actual electric guitar and the guitar-shaped game controller share a feature that we might describe as a musical *process of habituation*, and a musical way of *reading* the score on the screen. In other words, the experiential dimension is dominated by a sense of 'playing' music (as Shultz and Miller also argue). However, the hand–controller junction also facilitates an experiential self-reflection – i.e. I constantly also become aware how I am *not* a guitar hero.

While the process of habituation involving a musical instrument spans weeks, months and years, *Guitar Hero* condenses the habituation process by offering various difficulty settings – failing miserably with the *normal* setting in my initial efforts, I changed to the *easy* setting, and was instantly able to 'play' music. And yet, as I progressed, and slowly turned up the level of difficulty, I also noticed how the songs sounded the same across the different difficulty settings. Hence, my experience of improvement seemed to be facilitated through the experiential transformation afforded by the settings, and had little to do with sound or music – the harder the setting was, the more notes (and buttons) had to be managed, at a greater speed. This underscores the point: that the habituation that takes place through the controller in *Guitar Hero* is not particularly related to a musical practice (if we consider music as having something to do with tone and melody). I am not somatically present in the creation of the sound of a traditional instrument and the *Guitar Hero* controller in the same way.

> … with their [the musicians'] bodies, they are contributing to the overall musicality of the piece by supplying rhythmic and timbral interest as well as by accenting and thereby bringing to attention particular melodic, harmonic, textual, and phrasal features of the music (Alperson 39).

The experiential process of habituation in *Guitar Hero* does not include this option of being guided by an embodied *musical intentionality*, what Sudnow would describe as a sense of 'going for the sounds' (*Ways of the Hand* chapter 2). The sense of progression on the controller is linked to hand-eye coordination, and secondarily to its auditory aspects.[54] In *Guitar Hero*, I will never experience the creation of a melody as I can on a musical instrument, although as Arsenault argues, the experience of producing a melody is simulated (somewhat reductively) by the buttons of the controller, and their positions on the guitar controller's neck – the closer to the body of the guitar the button is positioned, the higher (pitched) the note it produces. However, this does not change the impossibility of *aiming* for the notes in the same way as I can on an actual musical instrument. 'Melody sounds are different sounds from the sounds of vibrating strings' (Sudnow, *Ways of the Hand* 45), and since the vibrating strings of *Guitar Hero* are reduced to buttons whose immediate auditory qualities are distinct, both in sound and physical nature, from the immediate musical output the game produces, it is not possible to exert and feel the *difference* of a melodic note that is induced by human intentionality through vibrating strings. And, while harmony is visually represented in the interface on-screen, as the coloured buttons come to represent strings on the virtual fingerboard, the experience is 'satisfactory, but not perfect' (Arsenault). From his music theory perspective, Shultz arrives at something similar. Analysing the same musical sequence (a guitar riff) across the

[54] Not that it would be much fun, but the game is playable without turning on the sound, but not when the screen is turned off.

easy, medium, hard and expert levels of the game (using traditional musical theory and notation) reveals that the rhythm or the timing of the riff is mapped onto the controller by reducing its complexity from 'expert' to 'easy'. At the same time, there is no consistent relationship between the tones (the melody) of the riff and the buttons that need to be pressed. As Shultz argues: 'This consistency of approach encourages a metrically hierarchical hearing of rhythm. With contour, however, there is no simple hierarchy of reductions' (188). Owing to their different perspectives, Shultz and Arsenault do diverge when it comes to the rhythmic aspect of the game. Arsenault identifies the game's either/or logic as being 'too strict' in terms of simulating the rhythmic experience of a guitar (and playing with a band). Meanwhile, Shultz sees a more general, educational potential for teaching the basic experience of keeping time through this 'strictness' (187). From my perspective, neither the simulative fidelity nor the educational potential is the important factor, when regarding the rhythm aspect of the game. In terms of rhythm, learning to handle the guitar-shaped controller was just as much an experience of unlearning the 'auditory' sense of rhythm that I had acquired through a metronome's clicks, practicing on an actual electric guitar, as it was an experience of appropriating the visual rhythm of the stream of oncoming notes on-screen.

The (In)authenticity of the Experiential Grasp

We might agree with the predominant reception discourse surrounding games such as *Guitar Hero* (and *Rock Band*), which point out the inferiority of the guitar-shaped controller (well documented by Miller), and sum up the experiential dimension of the hand–controller junction as 'genuinely' inauthentic (at least if we consider authenticity as a manifestation of personal and creative intentionality (Miller, 406)). But as described above, and in other player accounts (Miller, 407), labelling *Guitar Hero* as 'inauthentic' from an experiential perspective is somewhat beside the point, as the experience thrives on NOT being the same as *the real thing*, and not

being true to the experiential qualities of an actual electric guitar. The game succeeds in facilitating a musical experience – an experiential sense of being *in* or *a part* of the music – because it condenses the complexity of the hand–instrument junction, into a hand–controller junction. This does not mean that the guitar-shaped controller facilitates an experiential somaesthetic of 'mockery' or 'parody' – in my devoted attention of learning to play the guitar-shaped controller, my experience and the way I handled the controller was, necessarily, exercised with 'genuine' and 'serious' effort.

Returning to Kirkpatrick, who started this chapter, and his suggestion that to understand aesthetic creation and, by extension, the aesthetic form of computer games, we should pay attention to the 'technique' of the 'artist' (*Controller, Hand, Screen* 131). This view is inspired by Focillon, who emphasises that the act of handling instruments and materials, and not just the final product/work of art, is of great importance (both from the artist's and the audience's perspectives, particularly with music). Similarly, *the creation of form*, shaped by the 'touch' of the 'artist' (Kirkpatrick, *Controller, Hand, Screen* 132), is how the experiential dimension of *Guitar Hero* becomes 'authentic'. My status as an 'artist' is definitely debatable, as argued above, I *know* that I am not really creating the music, and it is impossible for me to exert a 'melodic touch', which is no doubt one of the essential aspects of what we might call the aesthetic form of music (at least from a romantic perspective). Moreover, if I do not conform to the stream of notes on the screen, the music stops – there is not only just one way to play the music right, there is also only one way to play the music wrong, regardless of which level of difficulty you are using. However, this is not a passive or disembodied experience of an aesthetic *object*. As a player, I realise and 'touch' an already existing musical form from the inside, through a physical effort and skill (Miller 411). I embody the music, and have a certain grasp of it. Therefore, the idea of a *virtuoso* (perhaps even more specifically a *controller virtuoso*), rather than the *artist*, might be a better description

of the role of the player.[55] Although the efficiency of the virtuoso may have a tendency to make the form somewhat 'empty', compared to the authentic form created by the *true* artist (Kirkpatrick, *Controller, Hand, Screen* 132), it does not mean that the controller virtuoso do not experience form, when playing the game. Playing *Guitar Hero* may be 'empty' from a third-person perspective, only reproducing already existing musical pieces, and reducing the complex interface of the electric guitar to five coloured buttons, and three more or less successful simulations of melody, harmony and rhythm, but nevertheless, from a first-person perspective, through the hands of the virtuoso (or even a player with minimal skills) the forming of a guitar hero quasi-I, and the experience of reading the notes is a dense, experiential experience, not only in the functional/instrumental sense of its becoming a way to beat the game, but also in the sense that, as a player, one directs a certain level of attention towards the somatic process of handling the controller. This attention makes itself evident as a process of habituation that enriches the soma with a sense of experiential progression (exteroceptively, proprioceptively and interoceptively transforming my quasi-I) and an experience of being able to 'read' the notes through the hand–controller junction. Therefore, the experiential handling of the guitar-controller is authentic (a manifestation of personal and creative intentionality), as it revolves around developing a close relationship between one's soma and tools (guitar-shaped controller) and materials (the audiovisual content of the game). Moreover, the experiential dimension facilitated through the hand–controller junction is also authentic, not only as it foregrounds one's own soma and its dispositions, but in the sense that it brings forward an experience of someone or something *other*. It would be going too far to state that I, while playing the game, felt the kind of identification with the original artist that some classical

[55] *Virtuoso*, meaning one who has attained a high level of skill or technique handling the controller – 'One who has special knowledge or skill in music; *spec.*, in modern use, one who excels in, or devotes special attention to, technique in playing or singing' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

musicians experience after having worked for years to perfect a certain piece: 'as I educate myself physically about the highly characterized work of this composer, these changes occur in the image, or rather the feel, of *someone else*. They delineate him with an uncanny and entirely un-visual clarity' (Maus 16 – quoting LeGuin). Nevertheless, I suspect that the player of the game may experience some kind of somatic identification with a certain musical genre, or perhaps the overall feel of a song (e.g. uplifting, melancholic or aggressive) as the totality of a specific song's auditory and visual expressions is unfolded in the experiential intimacy of the hand–controller junction.

THE GUITAR-SHAPED CONTROLLER AS A REPRESENTATIONAL OBJECT

Attending the representational dimension of the *Guitar Hero* experience, it is easy to get caught up in the on-screen content, which invokes 'the power of the guitar as metaphor' (Miller 413), and a sense of musicianship, in general (at least within Western capitalist standards), through its rock career narrative (Miller 419), revolving around playing venues, in order to climb the ladder of fame. Additionally, a variety of player characters – for example, the skinny punk rocker, or the long-haired and lazy-eyed hippie – demonstrates how rock and guitar hero culture revolve around a representation of certain bodily 'clichés'. Moreover, the possibility of creating one's own character, and customising it as the game progresses, demonstrates an 'ideal' of transformation or transgression related to the 'rock body'. Overall, representations of bodies and rock culture that add to the overall shape of one's guitar hero quasi-I.

If we turn our attention to the guitar-shaped controller, new aspects of the representational dimension of the *Guitar Hero* experience comes into focus. That is, the exterior or surface form of the controller seems to play an ambiguous part in the experience of playing *Guitar Hero*. Despite of the guitar-shaped controller's novelty when compared to traditional controllers, in the act of playing the game, I

found that any attention to its representational features fairly quickly retreated – I simply had no time to consciously attend them. At the same time, I am still encouraged to direct my attention towards the shape and surface of the controller in between songs, for example, some editions of *Guitar Hero* provide stickers to decorate and customise the controller to one's own liking, and there is a variety of signature controller editions sold separately from the game, not to forget, the possibility of customising the in-game guitar of my character.[56] Whether this customisation happens in-game or on the physical controller, the 'sound' and function of the guitar-controller stays the same, while the experiential feel of handling it is potentially different.

The importance of this representational dimension of the controller will no doubt vary from player to player. First, the customisation of the controller may amplify the experienced form of one's guitar hero quasi-I, in the sense that it establishes an individual relationship between player and controller, emulating that which exists between the musician and his/her guitar – 'My guitar is not a thing. It is an extension of myself. It is who I am' (Joan Jett). Similarly, the effort invested in making the controller more than a controller may be understood as a quest for authenticity, exemplifying the transgressive tradition of rock culture, representing one's adherence to this tradition. Secondly, we may also conceive this representational practice as an effort to reduce or cover up the controller as a controller. That is, buying a controller that looks *more* like an actual electric guitar somewhat reduces the toy-like character of the controller, and the relatively large amount of space it takes up in the living room, as 'merely' a controller. Some controller hacks (or perhaps more correctly, electric guitar hacks) that insert the functionality of the controller

[56] In between songs, and as I earn money from performing concerts, it is possible to customise the in-game guitar, change its colour or shape, or buy new strings, pickups, etc.

into an actual electric guitar may also be seen as a more extreme way of representationally disguising or 'dressing up' the controller.[57]

In my own experience, the representational practices mentioned above took up very little of my time. Instead, the controller as a way to engage in the representational layers of music was more defining for my experience. Alperson makes an important point when he states that 'Many performers nowadays play instruments whose sounds are in large part shaped by encoded information that reflects past or changing historical styles and traditions' (40). Any instrument has a representational level intertwined with the immediate experiential qualities of the instrument and its sound – i.e. no instrument is experientially 'pure'. Similarly, this applies to the guitar-shaped controller that allows me to 'sample' rock sounds and songs that appear in the game because they have an 'authenticated iconic status' (Miller 406). As a player, I not only play the sounds and the songs, but also their myths, and those of the musicians performing them. The tongue-in-cheek, animated representations of rock icons and stereotypes that reflect the plastic guitar in my hands become an immediate way of embodying these songs and myths that would be more difficult to access if I was to learn the songs on actual instruments. Playing the game, I am not merely represented on-screen through the characters, I also enact these characters – become a representation of them. Through the hand–controller junction, the plastic guitar serves as both an experiential and representational cue for embodying the characters on-screen, and becoming a representation of what happens on-screen – becoming a guitar hero.

[57] Various guides on the internet demonstrate how to take out the electronics of a *Guitar Hero* controller, disassemble an actual electric guitar (remove strings, pickups, etc.), and consequently merge the functionality of the controller with the shape and looks of the electric guitar (Cage).
There are also controller/electric guitar hacks more functionally oriented. The *OpenChord* project revolves around turning an actual electric guitar into a controller, and not the other way around: 'instead of pressing buttons on a guitar-shaped piece of plastic, you press real strings on the guitar, and strum with a real pick' (OpenChord).

In other words, the historical styles and traditions embedded in the representations of the rock songs and characters allow me to play like a guitar hero, once I have the controller in my hands. This should not be understood in the naïve sense of me 'believing' that I am the character on-screen, or that this is somehow necessary for playing the game. However, the hand–controller junction is the conduit for embodying the representational reversibility between player and game.

Representational Tension

On one hand, the on-screen representations have the potential to devalue the embodied authenticity inherent in the songs in the game, as they become *too easily* accessible (Miller 406), because rock mythology is also the story of certain bodies, a story *Guitar Hero* neglects, in the sense that playing the rock songs in the game no longer requires hard physical effort, in terms of spending years practising an instrument, and in more general terms, actually living a 'rock n' roll life' (hedonistic or destructively pushing bodily limits with alcohol, drugs, sex, etc.). On the other hand, listening to a band consisting of punk rock and metal characters, fitted out with leather, spikes and tattoos, playing a perfect rendition of The Eagels' soft-rock classic, *Hotel California*, as the controller in my hands clicked incessantly, did not devalue neither The Eagles, the characters on-screen or my own handling of the controller. Instead, if these tensions did anything, it was definitely of a positive manner, adding a dimension of 'displacement'. Maus suggests a similar potential, in his discussion of a *somaesthetics* of music: 'it could be that, sometimes, performers' bodily experiences point away from, rather than toward, alignment with other interpretive aspects of music, and that need not be problematic' (17). I argue that this 'in-alignment' of the experiential, the representational and the performative is a defining feature of playing *Guitar Hero*. Furthermore, it might also be an essential aspect of computer games in a more general sense. To Kirkpatrick, building up and releasing tension through action is how we experience the form of game-play (*Controller, Hand, Screen* 133-

138). First, there are the actions of playing-out the on-screen fiction; that is, the tension of throwing a spear (the example Kirkpatrick uses), kicking a football or pulling the trigger of a gun is condensed into the push of a button on the controller. Secondly, playing computer games also means participating in a 'cultural phantasmagoria', where the tensions of play and work, childhood and adulthood are at work (Kirkpatrick, *Controller, Hand, Screen* 136-137). Through a physical and cultural habituation to the controller and the game, these tensions are repressed, and allow us to enter the game. However, these micro- and macro-perceptual tensions are released, for example when dying in the game, or seeing the controller represented on-screen – reminding us of the illusion, and paradoxically, demonstrating the aesthetic form of the computer game as an 'physical activity in contemporary culture' (Kirkpatrick, *Controller, Hand, Screen* 138), by breaking it down. In *Guitar Hero*, such a release might come from the clash between the visual and auditory representations of a song, and one's playing of it. In consequence, we might say that 'inauthenticity' is what makes *Guitar Hero* come alive. Put differently, the way for *the game* (and not the music) to be authentic is to pursue some sort of naïve musical authenticity that eventually collapses. Retrospectively, the representational transformational practices (discussed in the previous paragraph), customising and hacking the shape and form of the controller could also be conceived as providing a similar tension and release – in turn, providing a more 'full' experience of the form of the game.

A PERFORMATIVE GRASP ON THE GUITAR-SHAPED CONTROLLER

Guitar Hero is commonly conceived as a performative game, in the sense that it is fun playing with and in front of others. For example, Miller argues that the wide variety of genres and styles in *Guitar Hero* has the potential to provide players with different performative scripts to explore (Miller 422). Moreover, as Svec describes them, *Guitar Hero* and the like are games that 'beg to be played in front of others'

(n. pag.). So, in addition to the game's on-screen fictional world, where I perform for the virtual audience in the game, the hand–controller junction also activates my soma in terms of performing for other players, positioned as spectators to my actions in front of the screen. The bodily cues (Miller 413) inherent in the physical gestures, for example, hanging the guitar controller around one's neck, handling it like a real guitar, raising it vertically to activate the 'star-power' function and using the whammy bar are not only experientially rich, they also invite players to participate in a rock performance, and activate not only the body as such, but a certain culturally coded soma – a rock body. At least this is how I would describe my own experience of the game. Because, even though the guitar controller does not weigh down on one's shoulder with the three to four kilograms of a real guitar, 'star-power' may be activated with the push of a button and the songs may be played sitting down, this has not been the way to play in the social context where I have performed/demonstrated my *Guitar Hero* skills.

These performances were not, exclusively, demonstrations of 'functional' skills, inept players, here among myself, provided just as 'good' performances as more skilful players did. As Shultz notes, the discrepancy created by using the whammy bar inaccurately (in terms of not getting the correct pitch) but still achieving points, and making the on-screen crowd go wild, is something the player can use as a performative feature: 'by playing "against the grain", players demonstrate not only fluency with the game's musical systems, but also a recognition of their differences from full-fledged musical performance' (184). Hence, overdoing one's playing style, mirroring or mocking the characters movement on-screen or perhaps even not 'performing' at all (e.g. standing completely still only moving one's fingers), proved just as gratifying as getting a high score. Similarly, Miller describes the performance in *Guitar Hero* as having a subversive 'camp' or queer potential (421-422), while Svec argues that the game 'begs the player to imagine and perform something else: something other' (n. pag.). In other words, apart from a

demonstration of guitar hero skills, the performance of playing the game is not restricted to a serious (naïve) take on the role of a 'guitar hero', uncritically assuming the bodily ideals in the game. Instead, displaying self-awareness of one's own performance, shifting between somatic experience and an awareness of one's own somatic experience, becomes a way to demonstrate one's mastery of the game as a musical practice, at both micro- and macro-levels, as both an instrumental and a cultural practice. Moreover, as is presented in Miller's discussions (421-422), engaging in the performance of the game becomes a way to take part in the authenticity discussions that constantly surround the game (and music consumption in general). Common to both these 'critical' stances is that they are assumed by somatically handling the controller in a performative way.

As a *schizophonic performance* (Miller 400, 424), *Guitar Hero* is a game (and a musical practice) that unites recorded music and the performing body, challenging, to some extent, the hierarchy that the schizophonic condition[58] has introduced into our understanding and appreciation of music. In other words, the performance related to playing *Guitar Hero* (whether it is subversive or serious) becomes meaningful as a way into the music, facilitating a new sensibility with regard to musical works that are most often appreciated from a distance. As Frith notes, Europeans, and Western cultures in general, have acquired a way of thinking of music as a number of entities, as musical *works* (recording technology as a material manifestation of this tendency that goes further back) (Frith 137). Contrastingly, African cultures perceive music as intrinsically linked with action and process: 'music, in other words, is defined by its performance, only exists as it is performed' (Frith 137). Perceiving *Guitar Hero* through such a non-Western sensibility with regard to music, the handling of the guitar-shaped controller and the re-enactment of the works

[58] The schizophonic condition (see for example, Schafer 1973) refers to the separation of sound from its original source, introduced with the appearance of recording technology (Edison's invention of the phonograph, 1877).

arguably become an immediate way *into* the music. However, this way is not *immediate*, in the sense of being rhythmic, and rhythm being more natural, primordial, or bodily than melody, as linked to a romantic conception of the human heart beat. Instead, Frith argues, of the stereotyped relationship between rhythm, sex and the primordial, 'It is...the rhythm-focused experience of music-in-the-process-of-production that explains the appeal of African-American music and not its supposed "direct" sensuality' (Frith 141). Similarly, I argue that it is not the sounding beat or the rhythm as such that makes *Guitar Hero* appealing; rather, it is the *doing*, the experience of making a sound, which is appealing. This is similar to describing a somatic performance, such as dance, as not only a way of expressing oneself, but also a way of listening (Frith 142), in other words, the 'dance' of the hands on the guitar-shaped controller is a way of listening to the music. Handling the controller, responding to what happens on-screen, is to participate in the music – a condensation and continuation of the *call and response* tradition mentioned by Frith, and that we find, at concerts, among other places – the live performance.

In this perspective, the 'real' music of *Guitar Hero* comes to exist as I respond to it, through the manipulation of the controller. Hence, the performative dimension of handling the guitar-shaped controller should be described not only as an experience of the somatic, as a demonstration of one's ability to acquire and shift between cultural scripts, it is at the same time a somatic experience of music as performance. And, by embodying the music through the controller, *Guitar Hero* also frees the listening to and understanding of the songs, from being merely works or objects.

A SOMAESTHETIC BEING-IN-THE-MUSIC

Guitar Hero is an example of a computer game that facilitates a 'audial/musical' experience. Besides being the conduit for functionally playing the game, the guitar-shaped controller offers a new way into the music in the game. In other words, the somaesthetic of *Guitar*

Hero revolves around music – i.e. an experience of the somatic dimension in music. As I experientially, representationally and performatively handle the guitar-shaped controller, I form a guitar hero quasi-I and simultaneously have a *somatic experience* of music and an *experience of the somatic* in music. The controller lets me experience the musical works from the inside out, while allowing me the opportunity to perform the music, and my own understanding of it, through somatic efforts, expressing a sensibility that is broad enough to include attention to both *what* the game 'produces' and *how* it is played, a sensibility that is both subject and object oriented.

Alperson states that 'technological changes change music and musical practice' (41). To some extent, *Guitar Hero* questions this assumption, as it seems to reaffirm and stabilise already existing patterns of somatic, cultural and political hierarchies and sensibilities – constraining the somatic in music. In a similar way to that found in all other computer games, mastering the guitar-shaped controller still requires the following of the tight script/score of the game. In some sense, the performative musical 'now' of the game has already happened. And, in the statement that 'Guitar Hero gives you all the excitement and thrill of being a rock star without leaving your home' (Activision), it seems that this new interactive 'freedom' still confines me to a closed feedback loop between me and the game console, within the safe confines of my home. Moreover, because I have no real impact on the songs (*real* in the sense that the digital structure of the songs stays the same), and just 'play' them, *Guitar Hero* (at least so far) is a working business model for selling music, while still upholding copyright laws in the age of software piracy, sampling and mash-ups. A testament to this is *The Beatles: Rock Band* (2009) game, EMI and The Beatles being notoriously reluctant to digitise and sell

the band's music online, allegedly owing to software piracy concerns.[59] Moreover, the number of downloadable songs sold through the online services, Xbox live, PlayStation Network and *Wii* Music Store, make it difficult, from a business perspective, to argue against this way of introducing the consumer's body into the music.[60] All in all, players have embraced *Guitar Hero* and similar music games as a new way of appreciating and consuming music within already existing economic and power structures. As Svec correctly notes: 'The player can either conform to the game's logic by reproducing the requisite hits, which are presented as measurable, stable, complete, and eternal (structural), or not play at all' (n. pag.).

On the other hand, the technological changes that have been made popular through *Guitar Hero* also destabilise the notion of music as *works* (as an 'object' at a distance to the somatic). In addition to the previously mentioned schizophonic condition introduced by recording technology, another and more recent music technology further enforced the split between source and sound, treating a song still as something malleable, although it has left the hands of the artist/performer. The introduction of multi-track recording (mid 1950's) took the objectification of the musical performance to a new level, and gave the recording status as a work of art, as Eno notes in a description of the studio as a compositional tool: 'Now this is a significant step, I think; it's the first time it was acknowledged that the performance isn't the finished item, and that the work can

[59] Despite ongoing negotiations and rumours, Apple (leading online music sales with its iTunes Store) and EMI have not yet reached an agreement making The Beatles (legally) available for download via the internet (Newman 'The Beatles on iTunes: Don't Hold Your Breath'). However, EMI are making The Beatles' music catalogue digitally available (December 2009) through a limited edition USB stick (apple shaped, but having nothing to do with the Apple Corporation) (Ionescu).

[60] Two months after its release, *Rock Band* had sold over 2.5 million additional songs; *Guitar Hero III: Legends of Rock* topped this with 5 million, in roughly three months (Bruno).

be added in the control room or in the studio itself' (128-129). The introduction of a 'consumable' music technology such as *Guitar Hero* may in some ways slow, or perhaps reverse the, allegedly, ongoing separation of sound and source, listener and work, body and music. The experiential, representational and performative dimensions of the handling of the guitar-shaped controller in *Guitar Hero* destabilise the status of the recorded work. As the player participates in the temporal flow of the song, it ceases to exist in its own autonomous time. In other words, *Guitar Hero* reintroduces the performance (another musical 'now' than that of the recording). The work is no longer the recording itself, but instead, the player's 'unfolding' of the music – i.e. the somatic is set free in the music.

Similarly, to me, playing *Guitar Hero* was also somewhat an experience of setting my own somatic experience of music free – learning the visual rhythm of the game and 'playing' songs I would never dream of playing in 'real-life'. Maus discusses how, in relation to a possible somaesthetics of music (through Shusterman's reading of Wittgenstein), embodiment plays a certain role in the appreciation and understanding of music: 'Someone who understands a musical phrase has learned a new gesture: not, obviously, a specific physical gesture that one could demonstrate, but something like a bodily gesture' (Maus 15). Consequently, the hand–controller junction of *Guitar Hero* may be conceived as the conduit for such *bodily* gestures. Not in the sense that I, as a player, now know how to play or transcribe the musical phrase I have 'understood' while playing the game, but rather that I have somatically internalised it. That is, transforming and displacing the experiential, representational and performative dimensions that are usually privileged in my somatic experience and experience of the somatic in music, by playing the guitar-shaped controller, and not only the game, resulted in a new appreciation of music.

THE CONTROLLER IN NON-MIMETIC INTERFACES

An imposing question is now: how does the grasp on the traditional controller (a controller that does not mimic elements in the game) manifest itself as an experience with experiential, representational and performative dimensions? Recalling my description of *Call of Duty 4*, the controller, evidently, serves as the experiential conduit (as it does in any game) allowing me to unfold the game-world, experientially displacing my somatic self into a quasi-I. And, even though the controller's representational and performative dimensions at first hand seem less prominent this does not entail that representational and performative dimensions of the traditional controller do not deserve attention in future work on the somaesthetics of computer game experience, on the contrary.

My exploration of the *Guitar Hero* controller has demonstrated that the controller does not exist as a thing in itself; it reveals its (experiential, representational and performative) potential in the hands of someone playing a game. Consequently, future research on the controller's importance in the experience playing computer games may benefit from a more explicit attention to the hand and its position in somatic experience. Whether intentional or not, the hand produces and conveys shapes and forms of immediately experienced meaning: A limp or a strong handshake, the touch of someone else's hand, a clenched fist, or the unique features of a person's handwriting reveals the non-neutrality of the hand and how it manifests itself as more than one-way sense receptor. The appearance, the touch, the gesture or the mere presence of a hand draws with it an embodied subject, as the hand reveals intentions and dispositions. All in all, the hand is a five fingered manifestation of the intentional *Being* of someone. This also works in reverse, in the sense that I not only experience the embodiment of someone other through their hands, I also experience the integrity of my own somatic self through my hands. Touching something hot, cold, soft, wet, coarse, etc resonates

throughout my entire soma. Holding a wriggling earthworm in my hand might send shivers down my spine, making my soma turn away in disgust, or the ticklish sensation might focus and gather my soma in a curious attention around the creature in my hand. In this sense, the controller becomes a way to feel the game-world and also activate one's soma as a whole.

I find the *rumble* feature of the traditional controller particularly interesting in relation to future explorations of the hand–controller junction, as it is a feature that thrives on this inherent meaning-making of the hand (although it is somewhat overlooked within game research – mentioned by Klevjer (2006) and Lahti (2003)). Briefly stated, the rumble feature makes the controller vibrate at certain points in a computer game, executed via small electronic motors inside the controller. Introduced along with the *Star Fox 64* (1997) game for the Nintendo 64, the rumble feature makes the player '… feel each shot you take and obstacle you bump into' (Rubenstein). Although the rumble controller's functionality may seem trivial, the fact that it was sedimented as an industry standard within a single generation of consoles, and was reintroduced by Sony (in the shape of the *Dualshock3* controller) after the 'outrage' caused by the sudden absence of the feature in the Sixaxis controller bundled with the PlayStation3 console in its initial release (Buchanan) testifies to its importance and its tacit power that in some sense first is duly appreciated when its is *not* there.[61] The vibration of the controller manifests itself in a variety of different ways: as the heartbeat of a character, recoil of a weapon, the way a car skids on a race track or a button roll-over using the Nintendo *Wii-remote*. I see its ability

[61] In 2006, Klevjer also comments on Sony's decision on not including the rumble feature in the Sixaxis controller for the PlayStation3, arguing for the merits the rumble feature, he suspects that Sony might later reintroduce it (*What is the Avatar?* 166).

to distribute and make a variety of immediate somatic meanings[62] experienced, as a reflection of the hand as a powerful ways to experience the world. Moreover, understanding the aesthetics of the rumble feature may help unfold the role of the regular controller in non-mimetic interfaces. Because similar to the rumble feature, the controller transforms during game-play and across genres – it allows you to control: cars, jetfighters, avatars, Tetris blocks and so forth. In game-play, the traditional controller is always more than an object. More malleable than the guitar controller, the traditional controller is always on the way to become more and something else than it is. But similar to the guitar-shaped controller it never really succeeds, and remains an unfulfilled sensibility, which could be worth pursuing in future research.

[62] *Immediate* and *meaningful* in the sense that I instantly understand the movement of the controller, despite of narrative/logic inconsistencies, for example the changing role of vibration, from heart beat to car crash or explosion within the same game.

Chapter 5 – The Ear

APPROACHING GAME SOUND SOMAESTHETICALLY

Feld argues that in addition to motility and action, sound is essential in our sense of place, 'places are as potentially reverberant as they are reflective, and one's embodied experiences and memories of them may draw significantly on the interplay of that resounding-ness and reflectiveness' (185). In relation to the experience of computer games, it is evident that sound is important to one's sense of place and being placed in various game-worlds. It only takes the first few notes from the soundtrack of *Super Mario Bros.* before the 2D, 8-bit space and the sensation of moving through it becomes present. And, not only music retains this 'place defining' potential, the sound of something as trivial as a game-play action (e.g. the sound of jumping) or an object in the game-environment (e.g. the chainsaw or shotgun in *Doom*) similarly outlines the game-world before one's ears. The reverberant potential of sound is of course not restricted to a remembering of game-play experiences, instead the game-world, as a reverberant and reflective place, is constructed via the experiences the player carries with him as a listening and sounding Being-in-the-world.

Existing research in computer game sound has emphasised various aspects of how the game/game-world as a reverberant place comes to the forefront of the player's experience. Whalen argues that 'videogame music encourages and enhances the narrative experience of game play' (n. pag.) by pointing out how a game character's 'kinesthetic [*sic*]' relation to the game-world is emphasised through

a 'mickey mousing' effect,[63] how music may reflect the physical or psychological state of a player character and how shifts in musical tempo and character provide motivation for taking action in the game. Other approaches focus more explicitly on sound and not music, for example, in an exploration of first-person-shooter games, Grimshaw and Schott use the concept of *acoustic ecology* to describe how the reverberant space of the game-world is a 'space that is neither fixed nor static, but constantly changing as players respond to sounds from other players (or computer-generated characters) with their own actions, thereby contributing additional sounds to the acoustic ecology and potentially providing new meaning to, and eliciting further responses from, other players' (475). Subsequently, Grimshaw and Schott relate the player's engagement in this auditory environment to an experience of 'immersion' (478-479). Jørgensen's focus on sound as something that shapes 'player actions and reactions' (*What are those grunts and growls over there?* 4) emphasises the game-world as a reverberant place that 'merges the usability features of a game with those features that support the sense of presence in the virtual world' (*What are those grunts and growls over there?* 176), consequently identifying this as the *transdiegetic function* of sound.

As many of the approaches to sound (also in a broader media perspective), Jørgensen's attention to the functional aspects of sound in computer games is based on the concept of *listening modes*. Listening modes denote the difference between *hearing* and *listening* – defining *hearing* as the unintentional (pre-reflective) perception of sound, while *listening* may be distinguished as different (reflective) modes or strategies concerning particular aspects of sounds and the listener's relation to them. Discussing the listening modes utilised when playing computer games, through Chion and Smalley,

[63] Quoting Neumeyer and Buhler, 'Mickey mousing, or "mickey mousing," occurs in both animated and live-action cinema when the music provides a synchronized, aural imitation of what is happening on the screen' (Whalen n. pag.).

Jørgensen argues: 'computer games very rarely utilize what Chion calls reduced listening, and Smalley's idea of the interactive relationship therefore covers semantic listening which is the only important active listening type where the perceiver listens to the content of the sound' (*What are those grunts and growls over there?* 61). Stockburger emphasises, supporting Jørgensen's argument, that computer games rely on our tendency to be 'drawn to construct relations between the visual and auditory information we are receiving' (Stockburger 5),[64] and similarly finds Chion's (originally Schaeffer's)[65] concept of reduced listening (listening for the sounding characteristics of sound) problematic in relation to computer games. On the one hand, I agree, playing computer games is about doing things: coordinating hands, eyes and ears, an activity that rarely offers the player time to listen for the *sounds themselves*, as Grimshaw and Schott also note in their discussion (477). On the other hand, as I will argue in the following sections, there is a sense in which the immediate characteristics of sound (the *sounds themselves*) are always part of my experience. It is this aspect – that sound always reverberates somatically[66] – which has a tendency to go unnoticed once sound is conceived to be in the service of narrative, immersive or usability purposes, or perhaps in a more general perspective, when the distinction between hearing and listening is too sharply drawn. In this chapter, I wish to focus on how the reverberant characteristics of sound in computer games facilitate a somatic experience, not favouring narrative, immersive or functional

[64] Stockburger develops a typology of sound objects 'to identify the inherent qualities of different types of sound objects present in the game environment' (5). Please note, that Stockburger's use of the term *sound object* reflects how sounds are structured in the coded architecture of computer games, and has nothing do with the way Schaeffer uses the term (see the following footnote).

[65] Reduced listening is a mode Schaeffer relates to his term *sound object* where the listener is attentive to the perceptual characteristics of a given sound and not concerned with its semantic meaning (Chion, *Guide to Sound Objects: Pierre Schaeffer and Musical Research*).

[66] 'reverberate, v. 4. c. To cause (a sound or noise) to resound or re-echo.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

features of sound (although, I will return to the concept of acoustic ecology, but not specifically relate it to the notion of immersion). I wish to underscore my area of interest by asking the question, if there is not always a sense in which we experience the perceptual characteristics of sound without 'listening' intently for them?

Filimowicz and Stockholm suggest how sound – with regard to the experiential specificity of sight and hearing, and the pleasure that these modes of experience manifest – makes the interiority of objects immediately experienced, 'When we look at something, we are seeing it from the outside … But when an object sounds, it approaches us from the inside out' (5). In my experience of sound in computer games, I would argue that something similar is in evidence. The visual aspects let me approach the game-world from the outside, while the auditory elements of the game present me with the interiority of the game-world. In other words, through sound, I experience weight, density, speed and other material and visceral qualities of the game-world that never reach me if I turn off the sound.[67] In consequence, it is not only places and environments in which sounds reverberate, but also in ourselves as somas – i.e. I listen not merely with my ears, semantically and causally, but my entire soma, as Feld describes, emphasising the phenomenological interdependence between *Being* and *world*: 'as places are sensed, senses are placed' (163). This way of listening with our somas and having our listening somas transformed reciprocally with the surrounding environment, is intertwined with our somas as sounding subjects, if we, as Feld, acknowledge the epistemological potential of producing sound and conceive 'sounding as a condition of and for knowing, of sonic presence and awareness as potent shaping forces in how people make sense of experiences' (185). Put differently, my auditory experiences are not

[67] In her empirical study of the experience of playing with sound turned off, Jørgensen also concludes that, in addition to the 'usability of the system' decreasing, the other main consequence was that 'the mood, sense of presence and the feeling of a lifelike world disappeared' (*Left in the Dark* 175).

merely shaped by listening, but also through myself as a sounding soma in the environment. It is these somaesthetic qualities of sound that I intend to pursue in this chapter. That is, the interplay between how I listen as a soma (sound as a somatic experience) and how I become present as a sounding soma (an experience of the somatic in sound). Recalling the above discussion concerning listening modes, my auditory exploration of somatic experience is not based on a distinction between hearing and listening. Conversely, we might say that my exploration is based on *not* making this distinction, or rather bracketing it (not taking it for granted), by framing myself as a sounding soma (as someone who makes sound), who only know and experience hearing and listening as intertwined.

Metal Gear Solid 4: Guns of the Patriots (2008) (*MGS4*) is going to be at the centre of my auditory exploration of how senses are being placed, sensing auditory places in game-worlds. In *MGS4*, I set out to 'Travel the globe and infiltrate dangerous new battlefields as Solid Snake in the final chapter of this legendary hero's life. Team-up with old friends and battle timeless foes in a world where war has become purely business, driven by mercenaries and machines' (Konami, *MGS4* game package). The first *Metal Gear* game was released in 1987, and with a narrative that spans over one hundred years, *MGS4* (actually being the tenth release in the *Metal Gear* series – not including expansion packs) has an extensive cast of characters linked together in a variety of fictional and historical events. And, being a series that favour conspiracies, top secret experiments, double and triple agents and complex technological systems, the *Metal Gear* series has become renowned for its complexity. On one hand, *MGS4* privileges the logo-centric potential of sound as dialogue, lengthy cut-scenes and a filmic score become a way into the complex narrative of the game. Moreover, the semantic and causal aspects of listening are also important, as being able to handle and decode an array of 'sound objects' (in Stockburger's conception of the term) is essential if one strives to master the game's *stealth game-play* elements (as Stockburger also

argues in his discussion of *Metal Gear Solid 2: Sons of Liberty* (2001)).[68] However, in the following sections, I will try a different approach and address my auditory experience through a description of how the sound of *MGS4* shapes the experiential, representational and performative dimensions of my somatic encounter with the game.

SOUND AS EXPERIENTIALLY REVERBERANT

Recalling Grimshaw and Schott's introduction of *acoustic ecology* to the study of computer game sound, stating that 'the function and role of sound within FPS [first-person-shooter] games is best expressed as an acoustic ecology in which the player is an integral and contributing component' (475), one might argue that an exploration of the experiential dimension of my *MGS4* experience, addressing and describing its subjective/internal characteristics, should adopt this starting point. That is, although *MGS4* is played through a visual third-person perspective (with the possibility of going into a first-person view), I am still positioned as a listening and sounding player that relates and contributes to the auditory environment/ecology of the game-world. Nevertheless, I find it counter productive for my interest in the *somatic experience*, to uncritically adopt the vocabulary of Grimshaw and Schott, because their aim, explaining 'how sound functions as an acoustic ecology' (480), favour semantic and causal listening modes (as the chapter develops, I will return to and discuss these issues in relation to my somatic perspective).

The Voice of a Quasi-other

The introductory cut-scene to *MGS4* sets the tone of the game's overarching auditory landscape – an extensive use of voices coupled

[68] The *Metal Gear* series has also been addressed elsewhere, see: Andersen, Christian Ulrik. "Mellem illusion og virkelighed – Metal Gear Solid 2 som særegen æstetisk form." *Spillets Verden*. Ed. Walther, Bo Kampmann & Jessen, Carsten. Danmarks Pædagogiske Universitets Forlag (2005): 11-28.

with generic action game soundscapes such as: jungles, battlefields and urban environments. What instantly came to the fore of my experience, was Snake's voice (the protagonist of the *Metal Gear* series), and throughout the game, I was in the company him and a variety of other voices that were given central positions in the game's auditory landscape: *Mission briefings* and *cut-scenes* were centred on lengthy conversations that unfolded what had happened earlier in the game (and the game series) and what awaited ahead; while *codec calls* ('video-phone' conversations between Snake and other characters) emerged and could be pursued at my will (during game-play). As our ears are tuned for hearing human voices, dialogue becomes an obvious 'channel' for the distribution of information and instructions (not least with regard to computer games). With his description of *speech sound objects*, Stockburger also notes how the voices in *Metal Gear Solid 2: Sons of Liberty* unfold the narrative, inform game-play elements and, through the colouration of audio interfaces (the hizz and crackles of phones, videos, etc.), map out different locations in the game-world, and set up fictional spatial relations among characters and locations (5-6). My experience of the voices in *MGS4* could, no doubt, be described in the same manner: although I on occasion felt somewhat pacified as 'merely' a listener during these conversations, they still revealed important game-play aspects and informed my understanding of the game's diegesis. However, my experience of voices, especially Snake's, also had an additional, experiential dimensions, in the sense that voices are sounds that I have a privileged relationship to. The voice of Snake was experientially characteristic, not because he actually spoke that much, or because what he said was more important than what I learned from other characters. Instead, Snake's voice became important because the sound of it gave me a visceral feel of the game, and of Snake as a character that I had a special relationship to. Owing to the fact that sound – recalling Filimowicz and Stockholm – approaches us from the *inside out*, as well as the human voice being a sound we have an intimate somatic ('inside') understanding of (as I will argue in the next section), the

coarse and whispering character of Snake's voice did not only reflect the narrative or confirm his visual on-screen representation.

As the game developed, it became clear that Snake as a secret agent was soon at the end of his career – being a heavy smoker, having a body filled with nano-machines and carrying a virus that causes prematurely aging, obviously, take its toll. However, before I learned this through the game's on-screen narrative, the sound of his voice gave me an experiential feel of his deteriorating state. Apart from implying secrecy, the whispering character of Snake's voice facilitated an experience of physical proximity in the sense that I had to be close to someone whispering in order to hear what was being said. At the same time, the roughness of Snake's voice emphasised the process of its production: with clenched teeth, reducing the sonorous potential of the mouth, I could hear how the throat and vocal cords were strained in order to make his voice audible – giving me the feel of a tense and agitated body. Approaching this visceral feel further, I suggest that we, as Ihde does in his phenomenology of sound, conceive it as a *grammar* of the sounding voice: 'There is a doubled "grammar" in the sounding, with its "inflections," "accent," and "stress," which is the singing of the tongue in its full expressivity' (*Listening and Voice* 169). Furthermore, I wish to argue that this, in general, is a *grammar* I understand as a soma, and consequently, that the articulation and tone of Snake's voice was 'silently' understood by me as a soma. I know micro-perceptually (from the inside) what it means to make similar voiced expressions, for example clenching my teeth and whispering – that is, through the 'intersubjectivity of voice', I experienced the state of Snake's physical corpus. I understood how, without ever having consciously articulated it, that the 'awwws', 'hmms' and 'aarrwws' that animated Snake's movements and responses to his surroundings during cut-scenes and game-play, were an outward expression and objectification of a somatic condition, and simultaneous a inward perception of subjectively lived experience. The grammar of Snake's voice activated the tacit knowledge accumulated inside me as a living and voiced soma (I experienced the interoceptive qualities of the voice).

The somatic grammar of Snake's voice brought his physicality to the fore on the auditory horizon of my *MGS4* experience, and positioned me in an intimate relation to his voice. This does not mean that I mistook Snake's body for my own, furthermore, it did not lead to an '*imaginative immersion* where players identify with the game's story and characters' (120-121), as Grimshaw found to be the case with regard to first-person-shooters. My auditory experience of Snake's voice did not result in a mental act or conscious taking up of a specific position, instead, its somatic grammar had an unspoken and experiential (interoceptive) quality. I did not project or imagine myself into the shoes of Snake, instead the grammar of his voice manifested him as a quasi-other before any imaginative immersion of identification.

The Soundscape – Places Being Sensed, and Senses Being Placed

My characterisation of Snake as an auditory quasi-other does not mean that he was experienced as an 'obstacle' when playing *MGS4*. Analogous to Ihde's description of the spinning top (*Technology and the Lifeworld* 100), Snake manifested precisely as a quasi-other because he required my animation. Put differently, as a quasi-other, Snake was experienced as someone *other* as well as being my way to make sounds in the game-world and become a part of its auditory environment. A brief detour into acoustic ecology, centred on the concept of the *soundscape*, will assist me in describing the experiential characteristics of navigating Snake as a quasi-other through the game-world.

Acoustic ecology revolves around the idea that we should 'hear the acoustic environment as a musical composition and further, that we own responsibility for its composition' (Wrightson 10), naming this incessant and ever changing composition of the sounds, the *soundscape*. In addition, it is also worth noting, as Breitsameter argues in *Acoustic Ecology and the New Electroacoustic Space of Digital Networks*, that the area of interest for soundscape theory is not limited

to 'natural' environments (25). The auditory environment I heard, as I played *MGS4*, was rightfully an environment of a compositional nature; the game-world being a designed auditory space presented through a 5.1 surround speaker system. Furthermore, as a player (an acting agent), I became an explicit component of this sounding environment (what should be defined as the key aspect that makes the electro acoustic soundscapes of computer games differ from other electro acoustic soundscapes, e.g. the soundscape of a film, chronologically fixed to the actions on-screen). In consequence, using the term soundscape to describe my auditory experience of *MGS4*, I am not only referring to the ambient sounds of the 3D environments (the jungle, the urban environment, etc.), but to the totality of sounds in a game-play situation: in-game sounds, interface sounds, diegetic and non-diegetic music (and potentially also sounds that blend in from the 'natural' surroundings of the game-play situation – for example, the sound of one's next door neighbour or a car passing on the street). Grimshaw and Schott have previously referred to the concept of soundscape (in relation to first-person-shooter games) taking the concepts of *keynote sounds*, *sound signals* and *soundmarks* as a point of departure (477-478), however, I choose a different approach to the concept of soundscape as I am not aiming to dissect the soundscape of *MGS4*, but instead asses it in its experiential totality. As I will argue in the following paragraphs, being present in the soundscapes of *MGS4* was meaningful not only in terms of objectively identifying the source of a sound or the meaning of a sound, nor did it rely on my ability to categorise sounds. Being present in the soundscapes was first and foremost a subjective sensation of somatic space – in the sense that sounds became meaningful to me as a living, feeling, sentient, purposive soma, and not merely as an interpretive cogito. I will refer to the concepts of *hi-fi soundscape* and *lo-fi soundscape* to sketch two experiential dimensions that were defining for my auditory experience.

In soundscape theory, sound is described as a mediator of information between the individual and the environment. Through acoustic colouration (e.g. the amount and characteristics of reverb), of sounds, caused by my own actions as well as other occurrences in the environment, I am able to hear aspects such as: position, distance and movement of sounds and their interrelations. In consequence, I learn something about the properties of the environment and my own position in it as I move through it as a sounding and perceiving subject. This initial description of sound as a 'mediator of information' should be understood as something that develops in the *integrity* of the soma, and not the soma as a 'thinking thing'. What I am trying to emphasise becomes more evident if we recall Feld's description of *places being sensed and senses being placed*. Against the background of this phenomenological observation it is evident that the soundscape not only lets me sense places, but it also places my senses – the soundscape shapes my perceiving soma and consequently also my own experience of my soma. In our average everyday environment it takes a great amount of conscious effort to discern how soundscapes transform one's senses,[69] but in my *MGS4* experience, this transformation seemed more obvious as it was somewhat amplified through the immediating and mediating structure of technology – as Breitsameter argues 'different media require different ears' (26).

Auditory Agoraphobia

Near the end of Act 2 in *MGS4*, I was tracking down a scientist that had been kidnapped and forced to work for Liquid (the villain of the game). As I ventured into the South American jungle to pursue a possible trail, I received codec calls from Raiden and Otacon (two of Snake's friends/allies), who encouraged Snake, to *listen* to the surrounding environment, and also advised him to be cautious in his

[69] Feld's ideas are based on his own micro- and macro-perceptual displacement as a sounding/listening subject, during his field study of the Kaluli people of Bosavi, Papua New Guinea.

use of the *Solid Eye*[70] as its subtle static noise could reveal his position to enemy soldiers. The advice was useful and not only for my mission in the South American jungle, because, in most of the environments of *MGS4*, I had an experience of hearing enemies via their movement, chatter or actions in the game-world and only secondarily see them (represented as tiny dots), through the radar of the *Solid Eye*. Moreover, throughout *MGS4*, I was navigating environments where gunfire, hand grenades, loud footsteps and movement attracted unwanted attention and put Snake in a dangerous position, while I had remarkably better odds of surviving if I tiptoed past guards or sedated them with a silenced tranquiliser gun. Through a concept of *stealth game-play*, also printed on the game package, I was encouraged to use the auditory environment of the game to stay of sight and sound. And on some occasions, the South American jungle being one example, the game seemed to provide me with the perfect auditory environment for engaging in stealth game-play – in soundscape terms, stealth game-play may be conceived to be centred on navigating and preserving a *hi-fi soundscape*. Soundscape theory describes the optimal condition for the mediating character of sound as a *hi-fi soundscape*. The hi-fi soundscape is experienced as spacious, as the frequency, volume and occurrence of sounds in such an environment are diverse, allowing the listener to distinguish and identify specific sounds, their sources and position. Schafer provides an approximation of the ideal hi-fi soundscape alluding to a pre-modern and somewhat romantic ideal, 'The country is generally more hi-fi than the city; night more than day; ancient times more than modern' (24).

Positioned in the South American jungle, the subtle jungle ambience (bird calls, crickets, rustling leaves, etc.), allowed me to hear the

[70] The *Solid Eye* is an electronic eye patch that enhances Snake's (and the player's) perception of the 3D environment by adding layers of information about enemies and items encountered. Likewise, the *Solid Eye*'s night-vision mode allows the player to see in the dark, and binoculars enable the player to zoom in on locations faraway. In addition, once Snake is equipped with the *Solid Eye*, a small radar in the upper right corner of the screen is turned on, registering moving object once they are within a certain radius of Snake.

details of Snake's movements (how his feet touched different surfaces as he ran, walked, crouched or crawled), the movements of other characters in his surroundings and distant gunfire. In other words, the space that I heard was vast and deep, with a clearly identifiable fore, middle and background, never in doubt where Snake as a quasi-other was positioned in this environment. Moving through this hi-fi space, I had an experience of listening as a soma and having my listening soma shaped by these environments. First, my listening was spatially oriented in terms of depth, location and movement of Snake as a sounding quasi-other that I had to position in an auditory environment, delicately, without making any noises. I was in a somatic auditory state, which positioned me *here*, Snake at an always static near-distance *right in front of me*, it made something happen *over there*, and gave me a sense of how objects and entities at certain distance and speed *moved* past or around the privileged relation between me and Snake. I exercised a spherical attentiveness directed into the vastness of the hi-fi soundscape and its spatial relations, not emerging from the auditory point of view of Snake, but including him as a quasi-other that I had a certain interest in. Second, using the game's auditory environment to my game-play advantage required a sensibility towards Snake that made him transform from a quasi-other to a quasi-object, from a sounding other to a sounding object. That is, I started to notice Snake's body and its relationship to the environment I my focus on not contaminating the hi-fi soundscape and giving away his position – paying attention not to move too fast, step on surfaces that made more noise than others and so forth. This process, where Snake began to form as an auditory quasi-object, was pushed further as I became aware of how certain sounds that accompanied Snake (e.g. the sound of his camouflage suit adapting to the environment) did not seem to affect my efforts to be quiet. Although louder than other sounds coming from Snake's body and encounter with the environment, the sound of Snake's camouflage did not give away his position as the sound of his footsteps would have – it was only audible to me, emphasising my privileged relation to him as a sounding object. The transformation from quasi-other

to quasi-object did not compromise the experiential dimension of my game experience, instead, being in control over Snake as a quasi-object created a new opening for me to experientially enter the game. That is, handling Snake as a sounding object, waiting for openings that would allow him safe passage, I started to notice how I transfixed my own soma in front of screen, I became tense, leaned my head slightly towards the screen and made an effort to *listen*. Put differently, handling Snake as a sounding object in an auditory obstacle course, navigating through the hi-fi soundscape, placed my senses in a certain way, somewhat as Schafer describes: in the hi-fi soundscape 'The human ear is alert, like that of an animal' (24). At times, I even listened so 'intently' (and animal-like) that I mistook sounds from my immediate surrounding (cars passing on the street outside, the sound of my neighbours etc.) for potentially important game-play sounds, and reacted to these as such.

My experience of *MGS4*'s hi-fi soundscapes may best be characterised, somewhat insipidly, as *spacious* – a sense of 'headroom' that arose from the diversity in volume, frequency and occurrence of sounds in the auditory environment and the subsequent potential to hear my own 'presence' handling Snake as a sounding quasi-object. Paradoxically, I was positioned at the experiential centre of a comfortably large and detailed space, but continuously I made an effort move around at the outer edge of this auditory environment and exercise the stealth game-play it afforded – i.e. not being auditorily present. The flipside of this spaciousness and the advantages I drew from it in terms of being able to hear the details of the auditory landscape of the game manifested itself as an experience of 'auditory' agoraphobia.[71] In the open space of the hi-fi soundscape, there was always the risk of attracting unwanted attention without any immediate escape (in the levels of *MGS4* there is regularly only one predefined exit), hence, the fear of open spaces or the feeling of uneasiness, being 'not-at-home' in

[71] 'Agoraphobia, med. … the fear of squares or open places.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

an unknown environment, was also part of the experiential dimension of my experience. Being at the outer edge, exercising stealth gameplay, I simultaneously had an experience of always being close to exposure at the centre stage of the game's auditory scene – I had an experience of being able to hear and listen as well as an experience of someone or something always listening to me.

Auditory Claustrophobia

On other occasions while playing *MGS4*, navigating Snake as a quasi-object through the soundscapes, made me listen differently and placed my senses differently. Moving through the basement of a house, in a city that was under artillery fire presented me with a soundscape dominated by continuous explosions, the sound of the interior of the house shaking and debris falling down from the ceiling. At their most intense, these environment sounds masked the sounds that I made with Snake as a sounding object, the sounds of the other characters, occupying the basement, and the score of the game. The explosions were experienced as compromising my auditory space. The headroom that characterised some of the other levels in the game was replaced by an immediate *presence* in a more confining auditory space, where I had trouble distinguishing between the fore-, middle- and background of the soundscape. Handling Snake as a sounding object in this compromised soundscape was more 'uneasy' or not as 'fluent' as in the hi-fi soundscapes described above. I stopped up and listened, moving in the cover of explosions, always with the risk that I would walk right into some of my enemies as I could not hear other characters during the auditory bombardments (just as my reasoning was that they could not hear me). Eventually, as I was spotted by an enemy, the music changed character and became more dominating in the soundscape – facilitated by a faster and more pronounced beat

while abrupt, atonal melody lines added a sense of 'chaos'.[72] The music did not manifest as an unambiguous shift from auditory background to foreground, instead, the likeness of ambient sounds (e.g. explosions and gunfire), interface sounds and the synthetic character of the music, produced a dense presence of sound. Consequently, it now seemed more difficult than ever to hear the subtleties of position and movement around me (what had been characteristic to the hi-fi soundscape). In other words, I suddenly found myself in an auditory environment that covered up how I was handling, as well as where I could safely position, Snake as a sounding object. To describe this experience of compromised auditory space further, I will briefly turn to the concept of *lo-fi soundscape*.

Contrary to the hi-fi soundscape, the lo-fi soundscape mediates little or no information. The lo-fi soundscape is characterised by *noise*, it is incessant and monotonous, sounds mask each other and block out any depth in auditory experience. To Schafer, the industrial landscape of machines, factories, cars, trains and so forth, bound together in a network of production, is the epitome of the lo-fi soundscape, 'In a lo-fi soundscape individual acoustic signals are obscured in an over-dense population of sounds' (25). In my experience described above, the lo-fi masking, blending of sound, music, background and foreground (sound loosing its clearly delineable objectness) did not entail that the sounds lost their function as mediator between me and game-world. The lo-fi soundscape in the basement was not devoid of information, rather, it mediated *too much* information, as Schafer rightly describes, in a lo-fi soundscape, 'it is no longer possible to know what, if anything, is to be listened to' (25). The first few times

[72] In *MGS4* the music of an enemy encounter has three possible states: *alert*, *evasion*, and *caution* that reflect the level of attention the enemies put into locating and attacking Snake. The *alert* state is the highest level of attention, and means that the enemies engage in direct combat and alert others nearby of Snake's position. *Evasion* means that the enemies are looking for Snake, and *caution* means that they are alert and highly suspicious of what goes on their immediate surroundings.

I encountered these lo-fi soundscapes, the result was an experience of auditory 'perplexity', not knowing how to handle Snake as a sounding object in this new situation, and consequently, it was also an experience of loosing the tight grasp that I had on Snake in the hi-fi soundscapes, where he came to the forefront as a detailed sounding object that I had in my safe possession. As my stealth abilities often were often insufficient, I soon became accustomed to these auditory transformations, and in turn, the lo-fi soundscape seemed to tighten my grasp on Snake. The accumulation of sounds, repeating the same over and over again resulted in 'noise' that I somatically understood: *you have been spotted, take action, now!* In consequence, I became highly alert, tense (with some degree of panic) and focused on either engaging in combat or going into hiding. Still, it was a sense of getting 'caught up in sound', where the *presence* of too many sounds converged on my auditory perspective, and consequently, not being able to hear what happened around me, robbing me of the sense of headroom, facilitated an experience of *auditory claustrophobia*.

Throughout *MGS4*, the hi-fi and lo-fi soundscapes, and the transformation from one to the other, defined the experiential dimension of my experience – presenting me with new game-world places to sense as well as placing my senses. Navigating this continuum, or experientially, being present on this continuum, experiencing nuanced and vast spatial relations as well as a confined action-oriented emphasis on a particular direction and event, relied on my somatic capability to make sense of sonic presence and the reverberant qualities of sound. The hi-fi and lo-fi soundscapes placed my senses, transformed my visceral experience of the game, turning the perception of Snake as a quasi-other (facilitated through the interoceptive qualities of his voice), into experiences of auditory agora- and claustrophobia as I was forced to handle him as a sounding quasi-object in stealth game-play.

HEARING SOMATIC REFLECTIONS

My auditory experience of *MGS4* was also shaped by sounds that existed on, or related to, the exterior or surface form of Snake and the game-world, in the sense that the sound of Snake meeting the game-world was always present, whether Snake was running, crouching, crawling, picking up objects or handling weapons. This was the main way in which I contributed to and positioned myself experientially in the game, as argued in the discussion concerning soundscapes. These sounds of 'movement' (not in themselves, but in the integrity of being part of the soundscape) allowed me to experience the shape of Snake as a sounding quasi-object. Recalling the discussion of voice, revolving around how I could not avoid hearing it from the inside out, the sound of Snake moving along the surface of the game-world also had a material quality. That is, as I navigated through the game-world and heard the varieties of the sounds from Snake, I not only heard actions and responses to my actions, I heard material surfaces brushing against each other, reverberating and giving the sounding object I handled, Snake, as well as the game-world, a certain density. Chion's concept of *materialising sound indices* offers a way to describe this felt materiality of sound. Materialising sound indices are sound details of a voice, sound, or a piece of music 'that cause us to "feel" the material conditions of the sound source, and refer to the concrete process of the sound's production' (Chion, *Audio-Vision* 114). As Chion further describes, often, materialising details consist of an 'unevenness', 'a resistance' or 'breach' (*Audio-Vision* 115) in the production of the sound. In *MGS4* the resistance of surfaces brushing against each other and the unevenness in the shifts between Snake's different movements outlined the shape of the quasi-object I was handling – the consistency of minute variations in frequency and volume gave the sounding object a proprioceptive form (of different parts working together as an auditory whole). These materialising details positioned me in a tight relationship with Snake as a sounding quasi-object, as well as they provided me with the sensation of being able to touch the materiality of the game-world through this handling. The sound

of Snake's movements against the environment and its experienced material quality manifests in what I call the experiential dimension of my game experience – as a visceral quality. Moreover, such sounds could also be discussed as Grimshaw does, through a concept of 'sonification' and related to something which 'immerses' me in the acoustic ecology of the game (121-122). However, I have included these sounds in this section of my analysis, and introduced Chion's concept of materialising sound indices as there is an important way in which the sounds also returned me to the surface of the game, and therefore should not merely be described as sounds that facilitated a sense materiality, or 'immersed' me in the game.

In the course of playing *MGS4*, having walked, crouched and crawled through several environments, the sound of Snake's footsteps and movement started to come to the fore as somewhat trivial, and at times, I no longer experientially heard the materiality of the game-world or Snake, but rather the surface of the game as a game. What I heard was the sound of footsteps as a representation of the on-screen movement, and the invariant nature of the sound loop that worked somewhere below the flat surface of the screen. As with the experiential dimensions of my experience, these moments of listening to *the game* were precisely *moments* in the flux of the game-play and not experiences that prevented me from playing (and not least enjoying the game). Recalling the previous chapters, concerning the eye and the hand, and how I described that these experiences where shaped through self-reflection, I also consider the ear-related instances of self-reflection (listening to the game as a game) to be an inherent (and necessary) part of the computer game experience – and my auditory experience of *MGS4* is no exception. A similar conception of sound, as also always being reflective, is not only implied in my idea of sound as something that reverberates somatically, but also in the concept of materialising sound indices. Chion describes that the material sounds have a tendency to 'return the sound to the sender … accentuating the work of the sound's emitter' (*Audio-Vision* 115-116), and there is a sense in which this was

the kind of reflection I heard in Snake's body sounds, as 'accentuating the work of the sound's emitter' ultimately pointed back to *my work* on the controller's buttons.

Playing *MGS4*, I not only listened to voices, body sounds or sounds from the game's 3D environments. In a great deal of the game-play time, I also listened to the sound of navigating diegetic and non-diegetic interfaces. Similar to the sounds of Snake's movements, my experience of these interface sounds had a certain reversibility to them. On the one hand, these sounds emphasised the surface of the game and me as someone playing the game, owing to the fact that they, compared to the sound of Snake's voice and his grunts, did not have the same inherent somatic quality. For the most part they were synthetic sounds (e.g. clicks and beeps) that I did not have a 'voiced' understanding of. Second, these interface sounds were not tied to any visually animated bodies in game (i.e. zooming via the *Solid Eye*, I do not see Snake pushing any buttons, *I* just zoomed, and navigating the menus, it is just *me* who is navigating them). Hence, against the background of my experience of Snake's voice and body sounds, the interface sounds more directly moved along the surface of the game and reflected that I was playing the game. But, on the other hand, this inherent reflectiveness did not entail that the sounds lost their material and experiential quality. With regard to the diegetic interface sounds, I, comparable to the sound of Snake's movements, experienced these as having a materialising quality. Zooming in on a distant location using the *Solid Eye* was accompanied by a buzzing sound, not only making the distance traversed audible, the subtle differences in the frequency and volume of the buzz when stopping, starting, zooming in and out, also emphasised the material resistance and unevenness of the technology in the game-world – making the in-tangible, tangible. Similarly, switching to night-vision mode manifested as a hizzing sound that allowed me to hear the 'insideness' and materiality of an otherwise for me, visual representation that operated at the surface of the game-world. And, with regard to navigating the game-menu, being dry, sharp, and non-reverberated,

the interface sounds emphasise the nearness and materiality of the interface. Chion argues 'The more reverberant the sound, the more it tends to express the space that contains it. The deader it is, the more it tends to refer to its material source' (*Audio-Vision* 79). Whether there actually is a material source is here beside the point, the important thing is that the deadness of the sound not only binds it to a push of a button on the controller, it also makes the materiality of the game interface light up. In other words, navigating the interface I heard sounds that reverberated deep inside my soma as well as reflected its surface.

PERFORMING STEALTH ACTION

The *MGS4* game package and the official game guide emphasise *stealth action* as an essential game-play element, 'If you want to succeed, you must remember the golden rule of MGS [Metal Gear Solid]: a smart Snake is a stealthy Snake' (Price & Sutton 16), and encourage the player to play (perform) the game in a certain way – *performance*, as a way of demonstrating specific somatic skill when handling the game. It is possible to play *MGS4*, 'all guns blazing', without abiding to the premise of stealth game-play, but whatever game-play strategy the player chooses, the game 'measures' one's performance in relation to a certain 'stealth standard' – i.e. the player should stay out of sight and sound, not only in order to have better odds of surviving, but also because this way of playing *MGS4* will lead to the best post-game awards.[73] A 'perfect' play-through affords: no kills, no alert phases, no continues and no use of health items (Price & Sutton 26), hence, the stealth performance actually revolves around a demonstration of one's ability to 'not be present' in the game-world, or slip unnoticed through it. As implied in the previous sections, an

[73] Completing *MGS4*, the player is awarded one or more emblems that reflect the player's performance (there is a total of 40 emblems (Price & Sutton 157-163)). In addition to the emblem itself, the player is also awarded special weapons or gadgets that may be used in future game-play sessions.

important part of my experience was to perform stealth game-play by handling Snake, delicately, as a sounding object. Recalling the description of the experiential dimension, I navigated and preserved the hi-fi soundscape that allowed me to listen to the game and the game to 'listen' to me. Moreover, sound was not only something that would reveal Snake's position and compromise my auditory performance, at certain instances in the game it was also necessary to manipulate the hi-fi soundscape, that is, colour the soundscape with noises in order to erase my presence in it – for example, knocking on a wall or throwing an empty magazine, attracting or diverting attention to, or away from Snake's position. Playing *MGS4* became a performance, demonstrating my auditory skills, exercising a soundscape listening mode where I performed, as if, I was inside the game-world.

The performative dimension of my *MGS4* experience also involved instances of self-reflection, where the characteristics of my auditory relation to the game came to my attention – an awareness of how my sounding/listening presence in the game-world was shaped. Throughout the levels of the game, for example hidden behind crates or in ventilation shafts, I came across music files, and subsequently, by equipping Snake with an iPod through the items-menu, I was able to hear these files and add a personal soundscape to the game. As the songs from the iPod positioned themselves as a new background for the 'natural' soundscape of the game, my experience of the game-world, as well as how I experienced my own perception of the game-world, was transformed. Depending on the music I listened to, the iPod may be described as instating a discrepancy between what I saw and what I heard, for example, a blues-rock track in a tense situation facilitated a 'jag' in the game-world's time and space, and also in my auditory performance – 'headphones define a very different acoustic reality to that of our physical position, creating a soundscape of the mind' (LaBelle 225). That is, shooting enemies or going into hiding while the music kept on playing sharply contrasted the regular experience of background music synchronised with the actions

on-screen. Thus, apart form feeling 'noisy' and somewhat as if I was disrupting the hi-fi soundscape in the game, I experienced 'instability' in my auditory presence in the game. The point of reference I had built up through the game's auditory elements (first encountering Snake as a sounding quasi-other, handling him as a quasi-object and navigating the game's hi-fi and lo-fi soundscapes) was transformed. Unable to hear the details of the game-environment with the same clarity and calm as previously (without the iPod), resulted in a sense of being 'out of sync', and dealing with this new auditory experience, my performance of soundscape and hi-fi listening somewhat collapsed. Equipped with the iPod, which positioned me in a lo-fi soundscape, all it took was a little practice (and more attention to the *Solid Eye*), and I was still able to perform the stealth game-play and navigate the hi-fi soundscapes without compromising them. This transformation of my relation to Snake and the game-world underlined the artificiality of my previous stealth game-play performance and sensation of auditory skill. As I slowly surrendered to the new soundscapes of the iPod, a reverse movement occurred and a new auditory reality in the game-world arose, in other words, as my senses where being placed anew, I also had the experience of sensing new places. First, on occasion, the music served as a reasonable painkiller to mask the 'natural' soundscape of the game (for example, incessant battlefield noises, and later, I also learned that listening to the iPod could improve one's chances of surviving in the game-world).[74] Secondly, as the playlist for the iPod also consisted of songs and soundtrack bits from previous *Metal Gear* games, the auditory displacement that the virtual earphones facilitated was also a meta-fictional re-insertion back into the *Metal Gear* universe. Although the songs were out of sync with the events of a specific game-play

[74] Playing specific songs on the iPod have explicit impact on the game-play, for example: decreasing the time it takes for Snake's life gauge to recover (Price and Sutton 174-175).

situation, and somewhat in conflict with the diegesis of the game,[75] they nevertheless existed somewhere inside my own experiential, representational and performative horizon of the previous *Metal Gear* games, allowing me to 'relive' past game-play experiences.

AN AUDITORY ILLUSION

Exploring my auditory experience of *MGS4* through a somaesthetic perspective, I used the distinction between the experiential, representational and performative dimensions to describe how the unfolding of the game manifested as an intertwined somatic experience and experience of the somatic. I proposed this as an approach to game sound that should be sensitive how sound reverberates somatically and not only functions as narrative, immersive and functional cues. First, I described how the voice of Snake had a visceral impact on me, positioning him as an always near-distant quasi-other. Second, I described how my navigation in the game's hi-fi and lo-fi soundscapes transformed Snake from quasi-other to quasi-object, a process that both placed my senses and allowed me to sense the places of the game-world, with a pronounced sensation of auditory agoraphobia and auditory claustrophobia (transforming my experience of auditory space, either through its vastness or its limitations). Put differently, from an auditory perspective my *MGS4* experience relied on my somatic abilities to listen to and make sense of sound – a mode of sounding/listening Being-in-the-game-world that actualised what happened in-game and on-screen against the background of my intimate somatic relation with the world as a voiced and sounding soma. Then, I engaged in a discussion concerning how this experiential placing of

[75] The notion of 'somewhat in conflict with the diegesis of the game' is actually indicate in relation to the *Metal Gear* universe. *MGS4* is no exception when it comes to the series' tradition for explicitly emphasising the fictional status of the game, for example, by having characters in the game discuss technical issue of the platform the game is played on. Hence, finding music files from previous games is one of the more 'subtle' instances that may not 'disturb' the player's experience.

senses and sensing of places also had a representational and surface dimension, in the sense that handling Snake as a sounding object and navigating various sounding interfaces, as well as having a material quality and positioning me in the acoustic ecology of the game, also forced me to constantly return to the surface of the game. Lastly, I addressed a performative dimension of my experience and described how it facilitated a displacement of my auditory perspective by compromising how I had handled the hi-fi and lo-fi soundscapes previously. In this displacement it was revealed that the listening modes afforded by the game revolved around an illusion of listening rather than a game-play mechanic necessity.

Recalling Jørgensen's identification of the *transdiegetic* function of sound (computer game sound as something that supports both the fictional character of the game and the usability features of the interface), my descriptions have been centred on a similar reversibility, but at a different level. To use Jørgensen's jargon, we might say that I have identified the 'trans-somatic' nature of game sound – that is, as sound reverberates somatically, it facilitates (or supports) an instant sense of presence in the game (a sense that does not distinguish between diegetic and non-diegetic aspects of the game), but at the same time, this resoundingness also reflects the surface of the soma as a soma engaged in playing the game. To outline, and somewhat simplify this reversibility or 'trans-somatic' experience of sound we may turn to *MGS4*, and say that: the voice of Snake activated my soma from the 'inside out', against the background of my Being-in-the-world as a voiced soma, while the interface sounds worked from 'without' through the controller as the conduit that emphasised my physical and material relation to the game-world, and made me listen to my own embodiment in the game. Meanwhile, experiencing the trivial or mechanic aspects of Snake's movements reminded me of the reversibility of listening *through* and listening *to* the game, moreover, that it is at this intersection between somatic experience and the experience of the somatic that the experience of the game arises.

From an auditory perspective, the somaesthetics of *MGS4* revolves around an *illusion* of sound and listening modes. First, the illusion I became part of was 'fascinating' owing to the fact that, positioned as a sounding/listening soma, the sound of the game immediately facilitated a visceral experience, where diegetic as well as non-diegetic sounds manifested themselves from the inside out – i.e. sound caused me to feel the game-world as a vibrant place (a somatic experience).[76] Secondly, experiencing this auditory illusion also had self-reflective dimensions, revealing its aesthetic strategy which, analogous to the first-person perspective of chapter 3, and the controller in chapter 4, relied on the *transformation* of my average everyday somatic Being into a specific performance. Put differently, it was the illusion of a *pure* somatic experience that turned out to be just as much an experience of the somatic (a technologically and culturally immediated/mediated experience). Consequently, the *MGS4* game-world as a reverberant place manifested as experientially rich, and was savoured as such, although its somatic resoundingness also positioned me outside the game and facilitates an awareness of my awareness of my auditory perception of the game.

Approaching sound in games from a phenomenological and somaesthetic perspective may not only reveal how a stealth action game like *MGS4* shapes the game experience through an illusion of sound, our understanding of the aesthetics of music games, such as the *Guitar Hero* (2005 -), *DJ Hero* (2009 -) or *Rock Band* (2007 -) series, *Rez* (2001), *Electroplankton* (2005) or the *Bit.Trip* (2009 -) series, could also benefit from perspectives sensitive to how music arises as somatic sensations. Addressing the experience of a game like *Papa Sangre* (2011), understanding its aesthetic form, more explicitly

[76] As a more general observation, concerning game sound, we could even argue that since playing back 'real' recorded sound was made possible in the computer game, the sound inside and outside games has ideally been indistinguishable, making the auditory spectacle (the reproduction of sound waves through speakers) accurate in a way that the visual spectacle of the computer game has not been.

requires a vocabulary tuned for the somatic aspects of sound. In *Papa Sangre*, the player is positioned in the land of the dead, and given the quest to help someone he cannot see, but only hear. That is, developed for iPhone, iPod, iPad, the entirety of touch-screen is dedicated to the controls of the game and in turn becomes the only thing the player will ever *see* of the game-world. By pressing the feet, alternating between left and right, choosing direction by turning the wheel in the upper area of the screen, the player either walks or runs through the land of the dead, avoiding monsters, picking up objects, while completely 'blind', only relying on the sound coming from the headphones or the speakers of the mobile device. In consequence, if we are to discuss this experience, as more than frustrating and difficult, then we need to be sensitive to how, we as players, are placed as a sounding and listening soma in the game-world, and how sound reverberates somatically.

Chapter 6 – The 'Body'

YOU ARE THE CONTROLLER!

> You are the controller. No gadgets, no gizmos, just you! *Kinect* brings games and entertainment to life in extraordinary new ways without using a controller. Imagine controlling movies and music with the wave of a hand or the sound of your voice. With *Kinect*, technology evaporates, letting the natural magic in all of us shine. (Microsoft, *Introducing Kinect*)

The above text is Microsoft's presentation of the game interface that supplements the standard controller for the Xbox 360. *Kinect* is a game interface (released in the autumn of 2010) that inscribes itself in a tradition of interfaces that strive to accommodate full body motion as a part of the game-play experience. How can we understand such an interface and its relation to the player's body? As the games for the *Kinect* require explicit and continuous physical movement, it is an interface that creates potential for games that 'combine play and exercise' (Bogost), in other words, *Kinect* may be seen in relation to a tradition of *exergames*. Using Juul's term, we might also characterise *Kinect* as a 'mimetic interface' (*A Casual Revolution*). I find this latter approach more interesting. First, *Kinect Adventures*, the *Kinect* game on which I focus on in the sections to come, is not concerned with combining exercise and games. As I will argue, the experience of *Kinect Adventures* (and *Kinect* in general) is better characterised as an experience shaped by mimetic issues related to embodiment as a player, and not an experience of exercising through game-play. In other words, the experience of playing *Kinect*

Adventures has not only an experiential, but also a representational and a performative dimension. As Microsoft's text above suggests – perhaps unintentionally – the player–game relation of *Kinect* involves an *imagining* of the soma and its potential in computer games, rather than facilitating a combination of games and exercise. This does not interfere with the possibility of getting some exercise while playing, but in the experience of the game, the sensations of being and having a body caught between the on- and off-screen dimensions in experiential, representational and performative terms are more pronounced than the sensations of developing, improving or strengthening one's physical abilities. So, let us return to these mimetic issues.

Arcade machines with steering wheels and pedals, the NES light gun, the *Guitar Hero* guitar-controller, dance-mats, the PlayStation *Move*-controller or the Nintendo *Wii*-remote may all be regarded as examples of mimetic game interfaces that (at first hand) facilitate a correspondence between the on- and off-screen dimensions, which go beyond the traditional push of a button on the controller and an in-game and on-screen reaction. Ideally, the mimetic interface allows 'players to play from the perspective of their physical presence in the real world' (Juul, *A Casual Revolution* 103). But whereas the first-mentioned interfaces pursue this ideal through material fidelity, equipping arcade machines with actual race-car seats, or shaping and sizing the controller like a gun or a guitar, the *Wii*-remote and *Move*-controller are more preoccupied with the fidelity of 'doing' – of physical movement and gesture. That is, if I (as a player) am presented with an in-game challenge that requires jumping, catching or throwing, then I should jump, reach out to catch, or swing my arm to throw, in the real world. To be able to play from a real-world perspective is exactly what the above introduction promises, as the disappearance of the controller frees the player to navigate games (and other media content) with the natural gestures of the soma and

the sound of the player's voice.[77] The interfacing with the game-world is suddenly exercised through one's accustomed and most natural interface with the world, the soma. This raises the question of whether I am not *always* the controller when I play computer games, and, consequently and more critically, whether removing the controller or the keyboard entails radical changes with regard to the experiential, representational and performative dimensions of the experience of playing the game.[78] The commercial discourse surrounding the *Kinect* interface emphasises its 'revolutionary' potential for setting free the interaction of the player through natural embodiment. As I hinted above, I will argue that a certain *imagining* of ideal embodiment is also present in the experience of the *Kinect Adventures* game. I will explore this issue by returning to my previous descriptions of computer game experiences that rely on traditional physical controllers.

At first glance, *Kinect* raises questions regarding some of the points made in the previous chapters of this dissertation. To be more specific, a game technology such as that of *Kinect* challenges the somaesthetic value of embodying material objects (which I have favoured – first, at a theoretical level, through Merleau-Ponty, Ihde and Verbeek, and secondly, through my exploration of the games, *Call of Duty 4:*

[77] I will refer to the *Wii*, *Move* and *Kinect* interfaces as 'gesture based mimetic interfaces' in an effort to emphasise their focus on full body movement. Although not unproblematic, in the sense that pushing a button could also be conceived as a gesture, I find 'gesture' more indicative than terms like 'movement' or 'physical' – 'gesture, n. 4. a. A movement of the body or any part of it. Now only in the restricted sense: A movement expressive of thought or feeling.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

[78] Already in 2003, with the introduction of the *EyeToy* camera peripheral for the PlayStation2, the player was offered the role as explicit 'controller'. Apart from Gregersen and Grodal's brief analysis of its mapping and technological inefficiency that lead to 'problems of both agency and ownership of the screen body' (78), the experiential characteristics of the *EyeToy* interface have received little attention in game research. Nevertheless, the *EyeToy* could be the starting point for future research on the somaesthetics of 'gesture based mimetic interfaces'.

Modern Warfare, *Guitar Hero: World Tour* and *Metal Gear Solid 4: Guns of the Patriots*). Throughout my work with these games, I have argued for the reversibility (the technologically mediated Merleau-Pontian double touch – somatic experience and experiencing my own somatic experience) that, in various ways, manifested itself in the visual, auditory and tactile relationship between player and game (having the somaesthetic potential to bring forward and somewhat transform my visceral and cultural embodiment in computer game experiences). Characterising the material controller as a conduit, I have emphasised the embodied *fun* of being a quasi-I, encountering and handling quasi-objects and quasi-others (a composition of human intentionality and technological directedness): So, what happens when the *Kinect* insists that *I am the controller*, eliminating the embodied technological link between player and game? Am I no longer a quasi-I and just an 'I'?

Pushing the envelope of some of my previous arguments, I am tempted to say that the *Kinect* does not really change anything fundamental in relation to the question of embodiment in computer games. One of the key points from my preceding analysis is that the question of somatic experience is not a question of whether the player is simply embodied or not, just as it is not a question of physical movement or stillness – somatic Being-in-the-world is always present as the ultimate reference point. As an interface that requires physical movement, the *Kinect* does not facilitate a *more* somatic experience than traditional game interfaces. However, it does facilitate a *different* somatic experience. To anticipate what I will highlight in this chapter as some of the essential *differences*, I will initially describe the somatic experience of *Kinect* as a state in which I am simultaneously positioned closer to, and further away from the game (in the following sections, I will address this somatic presence in detail). As a 'gesture based mimetic interface', *Kinect* does not dissolve the reversibility of perception (somatic experience and the experience of the somatic), the presence, shape and form of a technologically composed quasi-I or the reflection inherent in these experiential,

representational and performative relations, which I have so far characterised as an essential part of any game interface. The important question is, in what ways are the experiential, representational and performative relations with the game-world affected and transformed by the disappearance of material technology? Given the apparent disappearance of the controller, and the emphasis on the player's physical presence in front of the screen, the following analysis of *Kinect* Adventure revolves around how the disappearance of the controller and the appearance of the player's body manifest themselves in the experiential, representational and performative dimensions of playing the game.

KINECT ADVENTURES

Kinect Adventures is an action/sport game introduced along with the release of the *Kinect* interface in the autumn of 2010. On its website and on the back of the game package, the game presents itself, and the impact it has on the player's body, as follow:

> **Explore the world – and beyond!**
> *Kinect Adventures* will get you off the couch and into the game in a whole new way. You and your friends and family will jump, dodge, and kick your way through 20 pulse-pounding adventures set in exotic locations. Work together as you navigate through roaring rapids, challenge obstacle courses or save a leaky underwater laboratory. Show off and share your accomplishments online with Photo Moments and Living Statues. The spirit of adventure awaits! (Microsoft, *Kinect Adventures*)

The overall emphasis on 'you', the player, and how 'you' should play the game, may be seen, as Young argues in his article on video game advertising, as a way of educating the player about this new type of interface. In other words, discourses (e.g. advertisements in magazines,

websites and video trailers) surrounding consoles and games are a 'way of modeling the intended use as well as the intended users' (Young 241). Young further argues that over the lifetime of a given console, there is a shift from a player/audience-centric focus towards a more product-oriented focus in advertisements. That is, once the audience has been established, and the patterns of interaction between player and console have been defined, 'the advertisements excise the players and focus on the game' (Young 241). I find Young's argument persuasive, however I insist that the presence of the player in game discourses plays additional roles, not least with regard to *Kinect* and *Kinect Adventures*. Moreover, I doubt that the player will ever be excised from the *Kinect* discourses. Young bases his case on two instances: the initial introduction of home consoles in the nineteen seventies, and the later introduction of the Nintendo *Wii*. As I have outlined above, *Kinect* inscribes itself in an ongoing tradition of games and game technology that require physical movement and gestures (not least owing credit to the *Wii* and the path it cleared for gesture based mimetic interfaces on the consumer console market). Hence, without the same extensive need for player 'education' that the initial introduction of the video game console and the *Wii* required, the player focus we find in *Kinect* and *Kinect Adventures* is directed at other aspects related to game-play. I do not deny that the *Kinect* advertisements make an effort to change both consumption and game-play structures 'selling both the medium as well as the device used to engaging with the medium' (Young 241). I merely note that the player's physical presence in discourses surrounding the game (including blogs, YouTube videos, etc., as well as advertisements) serve as more than functional game-play instruction. In addition to the fact that, thanks to the internet, players have become a more integral part of the discourses (to which I will return later), Young overlooks the fact that the advertisements sell a certain mode of experience, as well as the *device* and the *medium*, or to be more precise, embodied experiences and somatic desires.

As I have argued previously, through my analysis of the visual relation between player and game, technical specifications related to the medium and the device (e.g. in the description of: virtual reality, 256 colours, and photorealistic graphics found on the *Wolfenstein 3D* game package) work as cues that promise the player certain somatic sensations while simultaneously feeding in to a cultural desire concerning the potential of technology and virtual reality as something that liberates players/users. In relation to *Kinect Adventures* an implicit player presence is also in evidence. The description of *Kinect Adventures*, compared to that of *Wolfenstein 3D* (see chapter 3 *The Eye*) includes more aspects of what it means to be an embodied subject in-the-world – it is a description that promises the player the possibility of playing from his own perspective in the world, precisely as Juul describes the mimetic interface. This focus on the player as a body in front of the screen may be discerned through my analytical distinctions in the following way: While *Wolfenstein 3D* emphasised the experiential dimension, mainly concerning itself with placing the player in the boots of Blazkowicz via an on-screen graphical representation and an innovative (at the time) first-person-perspective, *Kinect Adventures* emphasises that the game, and in consequence my experience, will have an experiential, as well as representational and performative dimensions. First, my soma will be activated experientially, as jumping, dodging and kicking (full body motion) 'will get you off the couch and into the game in a whole new way' (Microsoft, *Kinect Adventures*). In the representational dimension, two features in the game are essential: *Photo Moments* and *Living Statues*. During game-play, the *Kinect* sensor bar takes pictures of the player, and displays them in the post-game event, *Photo Moments*, as a stack of Polaroid pictures accompanied by descriptive and humorous texts, such as 'Ten for style!' or 'Whirligig'. Having completed a *challenge* (one of the game's play modes) I earn a *Living Statue*, meaning that the game via the sensor bar records my movements and voice for a short period of time, and map these to animated characters in the game (e.g. an overweight gopher). In addition to giving me a view of my own playing soma from

the outside, both from a 'documentary' snapshot perspective and a cartoonish 'fun' perspective, these pictures and animations allow me to engage in a performative practice, as I can 'show off and share these' (Microsoft, *Kinect Adventures*) representations and performances online, via e-mail and social networks. Finally, the emphasis on friends, family and an activity that implies 'working together' also reveals an immediate performative and representational relationship to other players and spectators in front of the TV.

Overall, sustaining the statements found in the initial presentation of *Kinect*, *Kinect Adventures* emphasises how the player becomes present in the game-world through the integrity of embodiment. But even though *Kinect Adventures* makes an effort to distance itself from the visual embodiment discourses found in other computer games, for example, *Wolfenstein 3D*, my subsequent exploration of *Kinect Adventures* demonstrates that the game cannot deny a similar visual orientation, combined with an adherence to a 'new' immersion discourse centred on physical action. Before I turn to my experience of *Kinect Adventures*, and explore it as experiential, representational and performative, I would like to conclude with a brief description of the game and how it is played. More detailed information on the game will emerge at relevant points in the following sections.

The game consists of five mini-games, entitled *20,000 Leaks*, *River Rush*, *Rally Ball*, *Reflex Ridge* and *Space Pop*. The mini-games may be played in single- and two player-modes (both on- and off-line). In two-player mode, all the games (apart from *Reflex Ridge*, which is a competitive game) are cooperative games (meaning that players work together towards a common goal). Whether the game-play is single- or two-player, co-operative or competitive, the object is to earn *adventure pins*, either by collecting them in the level, or by performing tasks that award you pins. Each mini game lasts about three minutes, providing breaks at regular intervals, while you watch *Photo Moments* and your score is being registered. Via the *adventure pins* you earn a bronze, silver, gold or platinum medal (unlocking new challenges and

play modes). The following sections are based on my experience of single- and two-player modes during off-line game-play.

FRAMING THE EXPERIENTIAL DIMENSION

Owing to the physical movement required in *Kinect Adventures*, the relation between player and game has an explicit experiential dimension. Once the three minute game-play is over, my soma comes to the fore, as I notice a raised pulse and shortness of breath from the sudden burst of physical movement. In this rhythm of movement and stillness, I also notice the throbbing pain in my hand, which I bumped into the living room table during game-play.

However, I do not consider these physical sensations as fundamentally different from the adrenaline rush and increased heart rate caused by a first-person shooter or any other action game, or the aches that the sharp-edged, rectangular NES controller caused my fingers as a child, following hours of intense game-play. Each of these instances, in its way (exteroceptively, proprioceptively and interoceptively), let me experience the concrete limits of my embodiment when playing the game. And, as I argued in my previous analysis, the complexity of the somatic experience of computer games should not be reduced to these immediate physical efforts. In the following sections I will argue that the experiential dimension of *Kinect Adventures* entails additional embodied subtleties, centred on the experiential transformation of my quasi-I. But first I wish to attend how the experiential discourses surrounding mimetic computer game interfaces skew my perspective of the experience, for example, by informing me that playing these games alienates and impedes my somatic Being, while the discourse of *Kinect Adventures* and other gesture based game interfaces tell me that playing will do my soma good. Common to both perspectives is the retention of a reductive stance, when addressing the question of embodiment in games.

Beyond emphasising the player's presence in the game (immersion), the commercial branch of the discourses surrounding traditional computer game interfaces has done little to draw attention to the physical presence of the player in front of the screen. From my perspective, this lack of attention originates in a much older conception of technology as something alien to the body, a conception that seems to prevail in the general public's understanding of media technology. Mirroring Crogan and Kennedy's diagnosis of how technology has been considered either neutral or conditioning in game research (see chapter 4 *The Hand*), overall, the proliferation of media machines such as radios, TVs and, not least, computers, has similarly been simultaneously related to both an optimism of enlightenment and a certain technological angst; computer games with traditional controller and keyboard interfaces are most often associated with the latter. In general, there is the fear that these technological advances will lead to 'problems of social isolation and alienation' (Simon n. pag.), and, we might add, obesity and physical fatigue, especially with children. A recurring cultural image that links (controller based) computer game-play with inactivity and bad health, for example, evident in campaigns urging children to get more exercise and eat more healthy.[79]

It has been easier for the experiential discourses surrounding *Kinect* and similar gesture based mimetic interfaces to present a positive or even attractive image of the player's physical presence in front of the screen. If we accept the experiential possibilities suggested by interfaces such as the Nintendo *Wii* and Microsoft *Kinect*, centred on shared physical activity in front of the TVs in people's homes, a new

[79] With a firm grip on the controller, the player-soma shaped by traditional controller-based game-play, is depicted as an isolated, sedentary, bleak looking and overweight child – for example in the British *Change4Life* campaign (British Heart Foundation): http://pcformat.techradar.com/blog-entry/risk-early-death-just-do-nothing-10-03-09 – last retrieved 24 Feb. 2011 – or with the American HSC Foundation: http://www.hscfoundation.org/aboutus/publications/killer_sofa_english_508.pdf – last retrieved 24 Feb. 2011.

hope for the otherwise doomed youth emerges. Nevertheless, this conception is just as naïve and reductive as the one presented above, concerning the soma in player–game relations based on a 'traditional' controller interface. Simon argues that the physical movements and gestures that are the cornerstone of the *Wii* nurture a fantasy about the console as a 'family-making machine' or a 'sociability-making machine' (n. pag.). As an intimate technology, the *Wii* brings together the basic unit of Western society, the family, rather than being an alien force that challenges it and the structures of society in general. In addition, the gesture based mimetic interface potentially keeps you and your family fit and in good health. It is obvious that *Kinect* positions itself in the slipstream of this edifying ideal of active, instead of sedentary somas in the living room.[80]

Kinect takes the experiential fantasy of computer game interfaces a step further, as it erases the material aspect of the gaming technology, as the *Kinect* website explains: 'You are the controller. No gadgets, no gizmos, just you!' (Microsoft, *Introducing Kinect*). Referring negatively to technological objects as somewhat alien and cumbersome 'With *Kinect*, technology evaporates, letting the natural magic in all of us shine' (Microsoft, *Introducing Kinect*). In this sense, *Kinect* brushes aside the technological angst, not by arguing against it, but agreeing with its premise by emphasising the importance (or necessity) of making material technology 'evaporate'. Beyond allegedly liberating the player from the hegemony of material devices, *Kinect* also fosters the fantasy of a natural physical body that serves as the immediate interface with the world, and more importantly, to the game-world: 'You're Ready to Play', 'If you have to jump, then jump. You already know how to play' (Microsoft, *Introducing Kinect*). In the *Kinect* discourse, being 'ready to play' is about exercising effortless control

[80] In the images from the Microsoft *Kinect* website, the children are not isolated from other players or the rest of the family. Instead, they, and their explicit physical movements, are at the centre of attention, making everyone smile: http://www.xbox.com/da-DK/Kinect?xr=shellnav – last retrieved 24 Feb. 2011.

that makes my physical abilities shine, as performance playfully meets intention in the game-world. In other words, the experience revolves around being immersed in a pool of natural embodiment that immediately gives access to the world beyond the screen. So, am I ready to play?

Having a non-encounter with technological devices, being 'ready to play', making the magic in me shine, is, in my somaesthetic and post-phenomenological framework, related to what I call the experiential dimension of the game (experiencing my soma from within as being in contact with or present in the game-world as a quasi-I). Except, in the case of *Kinect*, the commercial discourses surrounding it promise the disappearance of technology as there is no material controller to embody, leaving me in direct contact with the game-world. In other words, there is no quasi-I, just my natural self. Evidently an idealised conception of technology as 'neutral' and 'transparent', as it disregards the player's relation to the screen, the speakers, and not least, the *Kinect* sensor bar. In the following sections, *The Reappearance of Technology*, *Being a Visual Quasi-I* and *The Living Room as the New Interface*, I will explore these inconsistencies by addressing how my 'immediate' experience of the *Kinect Adventures* game-world manifested itself. As the headings indicate, the experience was not as 'simple' as promised.

The Reappearance of Technology

Throughout the un-packing and initial set-up of the *Kinect*, it became increasingly difficult to maintain the conviction that what I was about to experience was an immediate and 'natural' relation to the game-world. The calibration of the sensor bar, which involved moving furniture, holding a calibration card at specific distances from the sensor, turning lights on and off in the room in an effort to give the sensor bar a good view of myself, standing in the right position while learning specific gestures and so on, gave me an indication of how much of my living room space this 'transparent' technology, which

would allegedly allow me to play from my own perspective, actually occupied, and moreover, how conditioning and confining this invisible technological structuring of space potentially was. In a sense, recalling the post-phenomenological description of an embodiment relation, (*I–technology*)→*game-world*, I had an experience of actually setting up a (*game-world–technology*)→*I* relation, as the structuring revolved around setting up the optimal conditions for the technology to see me, and not the other way around.

Once I started up the game, the experience of technological mediation persisted. In other words, I found that the experiential dimension of the game, being embodied in the game-world, like any other computer game, consisted of different phases of embodiment, forming a quasi-I, rather than being a natural plunge into something I always already knew. For example, when moving through the game menu in order to start the game, I became attentive to the positions and movements of my arm/hand/torso and its relation to the cursor on screen. In other words, it did not seem particularly natural that my movements and gestures in empty space suddenly meant something in the virtual world on the screen. It was quite a novel experience, and not necessarily alienating, but certainly not one of falling back into some familiar, somatic world. Instead, the translucent representation of the avatar, mirroring my presence and gestures, positioned in the background while the cursor was illuminated in the foreground of the screen, served as fairly accurate representation of my experiential soma in the initial encounter with the game. That is, any kind of 'natural' somatic presence stayed somewhat in the background, while I was focused on the interface, concentrating on controlling the cursor on screen – proprioceptively getting acquainted with my new quasi-I.

Overall, the initial experience of my own soma serving as the controller of the game was not directed towards the subtleties of embodiment, but rather towards the activity of doing something in front of the screen. The direct and non-quasi-I experience that *Kinect* and *Kinect Adventures* promised was only achievable through a

technological step by step structuring of the space in front of my TV, and my own somatic space. Subsequently, I struggled to establish a consistent relationship between movement on and off screen. There was a distinct sensation of technological mediation, an effort that may be described as the sense that I was freed from the restrictions of the controller, but also the safe confines with which it previously presented me (confines that, over the years, have come to feel quite natural). It was an experience of separating myself from the usual embodied relation I have with the screen, discarding one quasi-I and rebuilding a new one. In conclusion, the natural magic that shone in me was the plasticity of the Merleau-Pontian body-schema, and not the sensation of being in control and already knowing how to act within the *Kinect Adventures* game-world.

A Visual Quasi-I

As I found my way into the games and began to play them, my soma slowly started to come to the forefront of my experience in an occasional 'flash' of embodiment – nevertheless, the experience of being a technological quasi-I displaced from, rather than in control of, a 'natural' soma persisted. This section will describe this experiential dimension as a sense of visual quasi-I.

Despite the presence of my moving soma before the screen, and the experiential discourses encouraging this physical movement, I would continue to characterise my computer game experience as being under the hegemony of the screen. As Simon rightly argues, with regard to the *Wii*: 'for the most part gamers are screen watchers' (n. pag.). The *Wii*'s emphasis on the moving soma cannot hide the fact that the games rely on a screen, and the player's intent focus on it – put differently, the games become unplayable, if the player does not pay attention to what happens on-screen. Something similar is evident in relation to *Kinect* and *Kinect Adventures* – the screen is the constant point of reference for game-play. Simon nevertheless still insists that something *has changed*, if we compare a gesture based mimetic

interface like the *Wii* to games played with a standard controller: 'your orientation to the screen is no longer just visual, it is kinaesthetic' (n. pag.). I both agree and disagree. Certainly, something has changed, but, as I noted previously, in my analysis, the player's orientation to the screen has never been *just visual*. Instead of repeating my arguments (see *Introduction*, the section *A Phenomenology of Computer Games?* in chapter 1 and the section *The Representational Dimension* in chapter 2), and maintaining a focus on the issue at hand in this chapter, gesture based mimetic interface games (*Kinect* and *Kinect Adventures*, in particular), I will focus on what Simon and I seem to agree on: that something has changed. In this context, the interesting question is: What characterises the somatic orientation (what Simon calls the 'kinaesthetic orientation') towards *Kinect Adventures*? Before I explore a few examples from the game in an effort to answer this question, let me return to Juul's initial characterisation of the mimetic interface, to suggest that the somatic orientation of *Kinect Adventures* is centred on one's vision and relation to the screen. That is, in *Kinect Adventures* I never played *from my* perspective, as Juul suggests is characteristic of mimetic interfaces: instead, the game let me play *with my* perspective.

When playing the *Breakout*-inspired ball and paddle game, *Rally Ball*, I gestured as a life-size paddle to bounce back oncoming balls, and thereby smash blocks at the end of a tunnel. The experience is best characterised as that of being a life-size paddle, not a 'natural' soma. That is, most of the time, I experienced myself as an object standing in the way of the oncoming balls, and not a proprioceptively competent soma aiming, hitting and flinging them back towards the boxes, deeper within the game-world. I fought, somewhat clumsily, to position my soma as if it were an object, and block the balls. In this case, the game let me play *with my* perspective, as my accustomed sense of touch and perception of impact were displaced, consequently also challenging my accustomed somatic orientation towards the screen of game-interfaces that rely on material controllers. I will address this through a description of the perceptual impact between

the game-world and me – the exteroceptive dimension of my quasi-I. When I hit the ball (blocked its trajectory), auditory and visual cues were (in the context of the *Kinect* interface) the only way to exteroceptively 'feel' the impact: the hand of my translucent avatar lit up, a thumping sound was heard, and the ball subsequently flew back in the direction from which it came (I felt no material resistance from controllers or buttons). And as my eyes and ears were fixed on the screen, searching for these cues, the rest of my soma in front of the screen became transparent, but not transparent in the sense that I was in control of it and experienced the on-screen character as an efficient extension of what I aimed for in the game-world. As I was directed towards the auditory and visual cues on-screen, the rest of my soma gestured wildly in empty space, to meet the visual feedback on-screen. Perhaps the experience is best compared to the sensation of moving about in a dark room. That is, in both cases, the context being navigated obscures one's habitual perceptual hierarchy. In the dark room, my habitual navigation is robbed of its visual dimension, leaving the soma fumbling behind. In *Rally Ball*, the accustomed sensations of impact and coordination founded in material resistance were displaced onto the flat screen before me, again leaving my soma fumbling behind, reaching for the blurry outlines of my technological quasi-I. This sense of chasing after my quasi-I may also be described through the *Reflex Ridge* game. In an obstacle course on rails, I competed against the clock or another player (simultaneously collecting as many adventure pins as possible). Dodging obstacles by jumping, ducking and stepping sideways, while stretching out arms and legs in order to reach adventure pins positioned along the course, *Reflex Ridge* is by far the most physically demanding of the games. The latency of the interface (the time it takes for player movement to be registered by the sensor bar and converted into representations and movements on the screen) meant that to a certain extent, my physical gestures were distorted, as I performed them ahead of time (e.g. jumping and ducking before I actually wanted my avatar to jump or duck), and exaggerated them, in order to make sure that the sensor correctly registered what I did (as the trolley on which the

avatar is positioned continuously moves forward, there is no time for mistakes) – i.e. a proprioceptively lagging quasi-I. Additionally, the gestures (jumping or ducking) were empty (like the gestures in *Rally Ball*). Or, perhaps more accurately, they seemed like animations of the movements they represented as there was nothing to jump over or duck from. I did not experience a soma freed from all constraints, but instead a 'stupid' soma, always ahead of or behind its optimal performance and the quasi-I.

My embodiment in the game through the screen and the general emptiness of my movements was also manifest in the other mini-games. In *20,000 Leaks*, the translucent avatar is positioned inside a glass tank, under water. Outside, in the under-water landscape, fish approach the tank and break holes in the glass, causing water to pour in. The objective is to stop the leaks as quickly as possible. By positioning arms and legs (and body in general) over the holes, the glass is repaired. As soon as the water stops pouring in, a new swarm of fish comes along, and creates a new set of holes in the glass tank. Similarly to the *Rally Ball* game, the experiential dimension of *20,000 Leaks* is characterised by a somewhat fumbling soma that gestures blindly in empty space, reaching for visual cues on the screen to inform a sensation of embodiment. My eyes were fixed on the screen, and it was when I saw the avatar's hands and feet light up in bright yellow flash that I momentarily felt the confinement of the glass tank and the shape of my quasi-I. Until I received these cues, I was fumbling for something that was not there – a 'funny' sensation of feeling my way forward through my eyes, not my hands. Overall, it was an experience of visual cues shaping my movements, rather than physical resistance (a distortion of my regular perceptual hierarchy). If we take a step back and look at the act of performing gestures in a broader perspective, there are somatic practices that use these conditions (of challenging our habitual perceptual hierarchy) to give the one exercising them a strong somaesthetic sense of embodiment, examples that include dance, mime, martial arts and yoga. However, the game elements of *20,000 Leaks* and the other games in *Kinect*

Adventures inhibited sustained focus on the sensation and control of my movements in empty space (stretch, gestures, position etc.), as a time-limit forced me to seek out the visual feedback provided by the game as quickly as possible. This is not to state that the practices of yoga, martial arts and similar, are better or *more* embodied. I merely emphasise that *Kinect Adventures*, when compared to these, is a more visually oriented practice. I aimed/looked for the avatar to light up, as the visual flash that made me present as a quasi-I. In other words, the visual cues were what made the integrity of my soma come together and momentarily form a distinctly felt quasi-I. I remained a screen watcher. So, even though all the mini-games in *Kinect Adventures* are characterised by many physical gestures, they were channelled through my visual apparatus and the screen.

Nevertheless, the just-described visual relation that facilitated my quasi-I in the game occasionally let my somatic movements and gestures come to the fore as 'somatic' in their own right. That is, my experience was not only a visually oriented somatic experience, struggling to become a competent quasi-I, it was also an experience of my somatic experience of the game. For example, if I reached towards one of the corners of the tunnel in *Rally Ball*, using an arm or a leg to block a ball heading that way, I, paradoxically, experienced the integrity of my soma if I missed the ball and did not receive any visual cues. Whether I failed to get my limb into the right position, or simply did not do so in time, the overall experience of the ball passing by me, disappearing off-screen, foregrounded the stretching and somatic effort I exerted. I merely felt the presence of my outstretched arm or leg in empty space, as there was no immediate feedback for my perceptual apparatus to attend to. The experience of 'not hitting' the ball actually gave more 'somatic' feedback than my hitting it (in the sense that the not-hitting allowed me to focus and exercise an awareness on my soma in physical space, foregrounding it), as in this instance I seemed to 'catch up' with my accustomed soma and not my quasi-I. Hence, I would not characterise the experiential somaesthetics of *Kinect Adventures* as something that relies on an

embodied sensation of hitting a ball or fixing holes in *Rally Ball* or *20,000 Leaks*. Instead, owing to the interface's reliance on visual cues that only in momentary flashes would reveal the experiential shape of my quasi-I, both my soma and the game-world was out of focus. So, in an experiential somaesthetic of displacement, most of the time, I reached for both my soma just as much as I reached for what I was supposed to, the holes in the glass tank and the oncoming balls, my quasi-I in the game. I had a feeling of constantly chasing the quasi-I, rather than being it. The experience of chasing after some ideal embodiment is not reserved for the experiential dimension of the game. However, before I further pursue this in the section on the representational dimension of the game experience, I will turn to one last aspect that I consider essential to the experiential dimension of *Kinect Adventures*.

The Living Room as the New Interface

Although I have not addressed *Kinect Adventures* from an exergame perspective, I still think Bogost is correct in his diagnosis of the context of playing computer games: the material and cultural structures of the living room, and Western culture's relationship to work and leisure time significantly condition the possibilities of combining exercise and gaming, and the potential for physical movement in front of the TV. Bogost ends his article on exergaming by saying, 'Thus no matter the efficacy of any of the rhetorics of exergaming, the most important one may reside in the complex social, political, and material structures that determine the spaces we occupy' (n. pag.). An aspect of the experiential dimension of my *Kinect Adventures* experience ties in to this point. I will argue that the experiential dimension of *Kinect Adventures* is characterised by the experience of being a soma positioned in the context of the living room, in front of the TV. As I am not specifically focusing on exergames, and furthermore would not characterise *Kinect Adventures* as such, I will approach the condition that Bogost describes in a less ominous tone. That is to say, I find the micro- and macro-perceptual

confines of the living-room setting to be important aspects of my experience of *Kinect Adventures* (and, possibly, also aspects that make the game fun to play). Let me briefly return to two of the mini-games in order to show how the structures of the living room are an intrinsic part of the experiential dimension of the *Kinect Adventures* experience. Owing to the physical intensity of *Reflex Ridge*, and the fact that I somewhat exaggerated my gestures and movements, I rather quickly found myself outside the sensor bar's range. The same went for the game *River Rush*. In *River Rush*, I steered a river raft/dinghy down a rushing stream. Stepping sideways and jumping permitted me to evade obstacles and collect the adventure pins encountered floating in midair along the ride. Although the impreciseness of the interface and the consequent inclination to over-steer the boat fit the sluggishness of an out-of-control boat ride, it also made me steer myself outside the game interface in the living room. In other words, in a similar way to what occurred in *Reflex Ridge*, I had a tendency to accidentally move outside the designated play area. On-screen messages instruct me to re-enter the camera's range: failure to follow these instructions caused the game to eventually remove my avatar from the screen. Common to these two examples is the way in which visual aspects of the game restricted and informed my gestures and movements (just as was the case in *Rally Ball* and *20,000 Leaks*). However, meeting the limits of the interface and my own capabilities as a controller also had potential implications that went beyond a sense of visual disembodiment from the screen. In the initial set-up of the *Kinect* sensor bar, and the calibration of *Kinect Adventures*, I cleared a play-area or space (moving furniture, etc.) in my living room to meet the instructions provided by the game. And as exaggerating my movements and gestures in *Reflex Ridge*, and over-steering myself in *River Rush* pushed me to the limits of this play-space, I also began bumping into the furniture that I had moved beforehand. So, besides becoming aware of the limits and the strict computational nature of the interface (either the sensor sees me, or it does not) and the technological nature of game-play, transgressing the interface's limits (it is not form- or limitless as the *Kinect* website, through its notion of

technology evaporating, would like us to think) also made my soma felt, in a very literal way. First of all, bumping into things or other players during game-play may be somewhat painful. Moreover, I became proprioceptively aware of how far my arms reached, the position and placement of my feet, and so forth.

Overall, there are several things in evidence in the above description of experiencing the limits of the interface. Comparable to what I found in *Rally Ball* and *20,000 Leaks*, the experience of missing the interface, or the inadequacies of the interface, bring the accustomed soma to the fore. Moreover, it is important to note that when transgressing the limits of the *Kinect* interface, I am not only stepping *out of* the sensor bar's viewpoint, I am also stepping *into* the living room – from somatic experience to an experience of the somatic. And apart from foregrounding the interface as the technology that it is, this stepping *into* also reveals a component that defines the experiential dimension of *Kinect* and *Kinect Adventures*: the context of playing as something that is part of the interface – experiencing the living room as an interface. It seems accurate to say that the game puts my soma not only in a new relation to the game-world, but also in a new relation to my immediate surroundings: my living room, the space and relationship between TV, sofa, chairs, table and so on. This fosters an experiential awareness simultaneously directed at my embodiment in the game, and in the world. And in this sense, playing *Kinect Adventures* gets me into my living room in a whole new way, as I jump, kick and dodge my way through it, just as I jump, kick and dodge my way through the game-world. The experiential dimension of *Kinect* is shaped by an awareness of the 'novelty' of this way of playing games, and the restrictions of the living room. Another way to put it, to return to the way I began this section, the question of *being ready to play* is related to a double awareness of simultaneous in-game and in-world embodiment.

A REPRESENTATION OF IMMERSION

As I argued above, in the introduction to the *Kinect Adventures* game, the representation of bodies within and outside the games relies on certain somatic ideals. In short, the representation of bodies (both body images that market the game, and the diegetic bodies in the game) informed my experience of playing the game. Simon presents a similar thesis, as he discusses how the revolution of the Nintendo *Wii* was primarily a revolution in marketing terms explicitly focused on the body. What the *Wii* did was to introduce us to a new image of the player's body, which enabled a new understanding of the game-world and the experience of reaching it. Simon argues that in and around the middle of the first decade of the twenty-first century, the desired object of consumption in console games shifted from the visual spectacle of the on-screen game, to being the 'players' corporeal engagement and kinaesthetic involvement in that spectacle' (n. pag.). This tendency is evident in the presentation of people playing, rather than in-game footage, in game advertisements. A shift in the advertisements' representations, from 'eye-candy' images to 'body-candy' images (Simon n. pag.). *Kinect* builds on this representational emphasis of what happens *in front of*, and not on-screen.

To Simon, what made *Wii* advertisements different from the advertisement for traditional games was that it sold 'the fantasy of a specific kinaesthetic experience rather than the fantasy of disembodied immersion portrayed in most conventional video game advertising' (n. pag.). Simon also argues that the *Wii* reintroduces the enlightenment paradigm of the 1980s' virtual reality, 'with its promises of freedom through the sensation of displacement and escape' (n. pag.) striving to 'dissolve the boundary of the screen as the limit point of immersion in a represented space' (n. pag.). The *Wii* uses somatic movements and gestures to turn the living room into a virtual world. And focusing on 'what the body will experience rather than what the eye will see' (Simon n. pag.) within this space, the *Wii* makes an effort to break with a VR fantasy that puts its faith

in graphical representations on screen. The screen as a screen moves into the experiential background, and directs attention towards what is happening *before* it, instead. Although in general, the *Kinect* is similarly preoccupied with portraying players in motion, I will argue that *Kinect Adventures* nevertheless extends a conventional video game discourse (for example related to that of *Wolfenstein 3D* and other first-person shooters, mentioned in my analysis of *Call of Duty 4: Modern Warfare*), a discourse that presents a somewhat naïve ideal of the player's immersive experience within the game, that is, getting the players off the couch and into the game in a new way is, with *Kinect*, an *embodied*, and not a disembodied *immersion*. Nevertheless, this is still an *immersion* in the game-world as a place 'different' from where the player actually is. Whereas *Wolfenstein 3D* relied on 'realistic' graphics to immerse the player, *Kinect Adventures* foregrounds the full body interface and camera sensor technology as *the* new way into the game. Overall, this recurring immersion ideal, and the different ways of cueing it, indicate two things. First, despite the shift that Simon identifies, and the subsequent focus on kinaesthetic experience, there is still an ideal of *immersion* related to playing computer games. It is a desire that the industry recurrently appeals to, through the representational discourses in advertisements and game descriptions. Second, the shifting discourses surrounding this ideal of immersion emphasise my point (also outlined in the previous section) that the experiential dimension of playing games is not a return to a pre-cultural embodiment. Instead, satisfying the soma experientially goes beyond its immediate senses and sensations (in part, it is about fulfilling a prevailing cultural fantasy or occasionally going against it – also (occasionally) found on a commercial level, e.g. in the *Wii*'s consequent focus on the body and disregard for graphical fidelity and photo-realism). Put differently, I find that the double awareness with which I characterised the experiential somaesthetic dimension of the game also has a role to play in the representational dimension (transformation of somatic experience and the experience of the somatic). I will try to dissect this reversibility of the representational dimension of my *Kinect Adventures* experience in the next paragraph

(an experience of seeing my own experiencing and experiencing my own seeing).

With regard to the *Wii*, Simon argues that because of the advertisements' focus on moving bodies, as 'body-candy', they turn out to be 'body-candy as eye-candy' (n. pag.), and not actual body-candy, as the advertisements can only represent these bodily sensations from a third-person perspective that stops at the exterior surface form and shape of these experiencing bodies. The intent focus on physical movement objectifies the soma and its movements in a new ideal of immersion, creating a new object of desire. Consequently, I will argue that in *Kinect Adventures*, the visual representation of these ideals not only sell, in advertisements, but also in actual game-play, spark the fantasy of an optimal somatic sensation and relationship to the game. Despite the shift to the soma, *Kinect Adventures* still uses representational bodily cues (body-candy) to shape the experience of the game. What makes *Kinect Adventures* distinct is that the representational cues originate in the embodiment – in the experiential dimension of my game experience, and not through the exterior or surface form of *other* bodies. In order to demonstrate the reversibility of the representational dimension, and how I may experience the game-world through the representation of game-bodies I will return to the abovementioned *Photo Moments* feature of *Kinect Adventures*.

Photo Moments

Photo Moments is a feature that, at specific points during each three-minute mini-game, uses the camera in the *Kinect* sensor-bar to capture my playing soma, my quasi-I. For example, as I am about to jump in *River Rush*, in order to collect a cloud of adventure pins or avoid a floating tree trunk, a camera icon appears in the top-left corner of the screen and the sensor-bar snaps a picture of me hanging in mid air in my living room. Common to the snapshots is their focus on extreme gestures and positions, as they always seemed

to catch me with outstretched arms or legs, jumping, ducking and so on. These *Photo Moments* are subsequently shown at the end of each mini-game, after adventure pins and points have been counted. On the one hand, the pictures I see of myself (of my quasi-I and its relation to the game-world) are coarse, out of focus and blurred. Even though the mirroring of my soma in the game works at an accurate one-to-one level, compared to my embodiment in traditional avatars, the representation still falls short. Owing to the low resolution of the camera in the sensor bar, and the lighting conditions in my living room, my moving limbs are somewhat obscured or distorted. I can immediately see that it is I in the pictures. However, it still seems to be a distorted or alien image of my embodiment – perhaps because during game-play I was too visually caught up in the game to notice my gestures and movements. However, this argument may also be reversed, as the representation actually succeeds in its obscurity, in the sense that I experience an embodiment as out of focus, owing to the game's dependence on my relationship to the screen (described in the previous section on the experiential dimension of my *Kinect Adventures* experience). So, on the other hand, the pictures may also be characterised as giving me a very clear image of my quasi-I and its relation to the game-world, unlike any of the other computer games I have discussed in this dissertation, in the sense that the representational dimension of *Kinect Adventures* makes an effort to objectify the experiential dimension not by gender or popular cultural stereotypes, like many other games, for example *Tomb Raider* or *Duke Nukem*, as discussed previously, but by catching *my* somatic presence in mid-air. That is, besides being a 'fun' view of my own game-play session, *Photo Moments* testify to, document, remind me, and also dictate how much embodied fun I had – that the game was in fact somatically engaging. *Photo Moments* reify or represent the physical fantasy of the game, simultaneously instating me as part of this body-candy as eye-candy reversibility. As the game automatically flicks through the snapshots, I witness the ideal, active, moving, outstretched body to which I failed to give much conscious attention during game-play. Put differently, we might also say that it is a

cultural and embodied interpretation of the Polaroid aesthetic of the pictures that transform the coarse, out of focus and blurred picture into a clear image of the kind of body I am supposed to experience during the game.

Whichever of the above descriptions I find best characterises my representational experience of *Kinect Adventures*, the common denominator is that it is the technological transformation of the quasi-I–game-world relation, which tells me something about, or lets me interpret my experience of the game in a certain way. Mirroring the *Kinect* advertisements, through the *Photo Moments* I now see (and potentially share) my own experience as taking part in a 'my-body as eye-candy' practice, and contributing to, and becoming part of, a larger cultural fantasy that supports the immersive, natural and somatic potential of these games. In the representational practice of playing *Kinect Adventures*, I perceive my own embodied perception of the game. In other words, the *Photo Moments* are valuable, not because I see a correspondence between them and my experience, but because there is a discrepancy (a somaesthetic self-reflection). The representational transformation of my relation to my quasi-I brings my experience to the fore as a somatic experience and an experience of the somatic, and makes *Kinect Adventures* interesting or fun in representational terms. This reversibility facilitates a double awareness that, similar to the experiential, is bound up with a certain visual sensibility. In a sense, the *Photo Moments* also reveal the illusory aspect of the overall *Kinect* discourse. By representing and staging my somatic movements in *Photo Moments*, the game agrees to the premise that the disappearance of the controller is not sufficient to facilitate an embodied experience, although this is what the *Kinect* website persistently contends, by insisting that 'you are the controller' (Microsoft, *Introducing Kinect*).

A NON-CONTROLLER PERFORMANCE?

Even though the *Kinect* is utterly dependent on a special form of performativity (the *act* of playing the game, and the demonstration of an acquired set of skills, is an explicit part of the game-play experience), in both single- and two-player modes, its continuous emphasis on the *transparent* interface and the immediacy of the *natural* soma downplays the importance of a performative relationship between player and game. That is, if I am always ready to jump in and play, not forced to pick up the controller and 'train' myself into becoming a quasi-I, I will hardly notice the act of playing, as it does not stand out from my average everyday embodiment – I just play the game. With *Kinect*, the distance dictated by the sensor bar (and its camera), impedes any physical contact between the game technology and me, in turn creating a space where 'the natural magic in all of us shine' (Microsoft, *Introducing Kinect*). However, as I discussed in the previous sections, just because the controller disappears does not mean that my interaction with the game in all its *naturalness* becomes indistinguishable from my average everyday embodiment. Consequently, playing in front of the *Kinect* sensor bar is just as much a performance as it was when I had the controller firmly in my hands. Put differently, in a game played with controllers, the action on-screen is a condensation of an activity, and the player's interaction with the controller is a condensation of that activity. For example, a fighting game (such as the *Mortal Kombat* (1993 -) or *Street Fighter* (1988 -) series) centres on *fighting*, and not the training, sleeping, eating and recovery that are essential aspects of real-life martial arts. Moreover, the punches, kicks and combinations of the fights themselves are reduced to button pushes on the controller. Similarly, a game like *Kinect Adventures* is a condensation of 'real-life' activities – for example, in *River Rush* the rubber dinghy never capsizes or deflates – a condensation (or animation) that includes the player's movement in front of the screen, as it reduces the balance, dexterity and strength required for real river rafting to simple jumps, and effortless left and right movements. In other words, as this condensation shows, and as

I will elaborate on in the following section, the act of playing is easily recognised and objectified as a performance.

In addition, Microsoft's recurring use of the term, *magic*, implicitly indicates the importance of the performative aspects of my game-play experience. Because, if we define magic as having something to do with the production or 'art' of performing 'illusions' and 'apparently inexplicable phenomena',[81] the player–game relation of *Kinect Adventures* (and *Kinect* in general) reveals its illusory nature. Simultaneously, the use of the term also demonstrates the difference in the performance of *Kinect Adventures*, if we compare it to *Guitar Hero*. That is, it is a performance that relies on technological myths, rather than those of rock 'n' culture. In other words, the embodiment the *Kinect* promises is still bound up with a certain performance involving the player. And engaging in this performance, demonstrating one's skills, becoming part of the technological illusion (that any computer game is), exercising an *embodied suspension of disbelief*, is the only way for me to play the game and let *the natural magic* in me shine. Let us take a closer look at this performance.

Traditionally, sitting down in front of the screen and grasping the controller has been the way to exercise the necessary physical suspension of disbelief related to playing computer games. Put differently, I will argue that holding the controller and manipulating it serves as an embodied acceptance of the fictional nature of the game, agreeing to its inconsistencies, illogic and constraints, just as putting the controller down, or throwing it across the floor serves as a way of expressing my dissatisfaction with, and eventually breaking the fictional contract – in other words, suspension of disbelief is a somatic act or gesture. Hence, the performance I engage in when playing computer games takes the controller as its point of origin. Moreover,

[81] 'magic, n. 3. The art of producing (by sleight of hand, optical illusion, etc.) apparently inexplicable phenomena; conjuring.' (*Oxford English Dictionary*, Second edition, 1989; online version June 2011).

grasping the controller, I also subject my performance to an evaluation (testing how my skills measure up to a certain standard), whether it is conducted by the computer, other players/spectators, or both. So, what happens when there is no controller? How do I agree to the contract, and (no less important) how do I break it, and how is my performance evaluated? It is evident that stepping into and out of the invisible play-area in front of the TV is one aspect of a somatic suspension of disbelief in *Kinect*. In the following sections, I will argue that there is more to it than this. Briefly stated, at both micro- and macro-perceptual levels, the performance of *Kinect Adventures* revolves around grasping (not the controller but) the 'hand' of the *technological other*, and *other* players in the *act* of playing the game.

The Technological Other

Besides shaping the experiential and representational dimensions of my game experience, the discourses surrounding *Kinect* and *Kinect Adventures* also dictate how I should engage in the game as a performance. While the advertisements described in the previous sections give a general impression of how I should relate to the games – position myself in front of the TV, jump, gesture and so on – other *Kinect* projects underline an aspect of the performance that is just as essential, as it gives me an understanding how the interface technology and the games 'ideally' relate to, and evaluate my performance in front of the screen, a relation founded on a fantasy concerning the relations between human and machine: more specifically, that I as a player am not merely recognised by the game as an input device (via the controller), but rather that a *technological other* truly sees me. One such instance is the *Milo* project. At the E3[82] expo in 2009 Microsoft tapped into the fantasy of the technological other

[82] E3 is an abbreviation of 'Electronic Entertainment Expo', an annual exhibition of current and future electronic entertainment devices.

in their presentation of the Milo character.[83] In this presentation, renowned game-creator Peter Molyneaux narrates and comments on a demonstration of a female player (Claire) interacting with a virtual boy (Milo) through the *Kinect* interface. Milo is able to recognise, understand, interact with, and 'intelligently' respond to Claire's voice and movements (both form- and content-wise). Given the number of views (2,890,621), comments (13,642), and the generally infamous status that the presentation achieved (including satirical videos speculating on the further life of Milo),[84] Microsoft evidently hit upon something, what I would describe as something that concerns a widespread fascination with technology as an *other*, not least, our expectations, hopes and disbeliefs concerning computer game technology. Precisely because this virtual-boy project was never finished or released, and the interaction between Claire and Milo in all probability was staged (in itself a performance), Milo is left behind as a ghost inside the digital and analogue aspects of the *Kinect* game technology. The video demonstrates the *Kinect*'s potential to not only recognise and respond to the player as a person and not a controller, but also the player's potential to have an impact on the game-world, and be in immediate contact with it. With Milo haunting the potential of this game interface, the technological-other is implicitly still present, with the *Kinect* asking me to perform *as if* the technology truly understood me as an embodied being.

Besides Milo, the sensor technology also fosters the idea of the technological other (and, consequently, that I should act as if I were truly recognised as *me*). The camera and the sensor as technologies that objectively watch the world not only receive a clear image of me, standing in front of the TV, they also support the fantasy that I am somatically set free in a valueless space, just waiting to be captured by

[83] The Milo-demonstration is available on YouTube: http://www.youtube.com/watch?v=CPIbGnBQcJY – last retrieved 24 Mar. 2011. At this time the working name for the *Kinect* interface was still *Natal*.
[84] Gaming site IGN's version of the Milo-demonstration: http://www.youtube.com/watch?v=Ji_1UQU--ig&feature=fvst – last retrieved 25 Mar. 2011.

these 'sensing' technologies. That is, an objective reading of the world through the lens allows for an accurate representation of myself in the game, making the player–game relation transparent and immediate (from both the machine's perspective and mine). However, where the camera technology succeeds is also where it fails, so to speak, because, even though the camera and the sensor, and their perspectives imply an *other* – someone sensing my movements, recognising me – it nevertheless remains a *technological other* that exercises technological *directness*, rather than intentionality. From a functional perspective, the sensor bar consists of one RGB camera, 3D depth sensors and four microphones (Carmody). One of the features that makes the *Kinect* differ from previous camera-based game interfaces is the sensor bar's ability to register depth. A laser is shot out from the sensor-bar, to create a speckled pattern that covers the living room. An infra-red camera picks up this depth image, and sends the image data to the software. Processed through algorithms that recognise the body in discrete objects, the software dissects the body, and tracks it as an array of objects in mathematical space (I-programmer). So, from its stationary perspective under my TV, I was recognised through the 3D surface of my soma turned towards the TV, which, through the software, was turned into a skeletal matrix mapped on to the avatars in *Kinect Adventures* (Bunker). In its objective view of the world, the camera and the sensor see objects, and not *Being* – reducing my soma to a set of continuously changing coordinates. My concrete encounter with the technology revealed these tensions. The sensor-bar did not see my living room or me; it saw objects in empty space. When playing the game, this becomes evident, as I accidentally moved outside the camera-sensor's field of vision, if my avatar started to twitch in strange movements as other players blocked the camera-sensor's view of my body, or if the software (in two-player mode) accidentally mistook me for the other player and reassigned me to his character (or vice versa). Common to these instances is the experience of being recognised as an object in the play-area, from the sensor's limited point of view, rather than being a subject recognised as an individual. The game manifests itself as software, and

not an intersubjective relation. Consequently, I become aware that I perform for the *technological other*, silently abiding by its limitations, and that my skills are evaluated through this machine directedness, like any other computer game. In other words, playing the game as a technological performance was brought to my attention – an experience of my own experience of the game. Additionally, it was an experience with the potential to make me act more like an object – more on this, in the next section.

The Other

The experience of subjectively lived space in front of the TV, described in the section on the experiential dimension of my *Kinect Adventures* experience, quickly transformed into an experience of intersubjective, social and cultural space, yet an experience that does not coincide with the image of the *other* that the commercial *Kinect* discourse presents, which is an experience of playing and performing together in a communal space. This dimension, related to an awareness of being a soma in this common space, manifested itself most vividly in *River Rush* and *Reflex Ridge*. First, the exaggerated movements required for these mini-games resulted in collisions between me and the player beside me (regardless of whether we were playing with or against each other). Along with the experience of my own subjectively lived space, these encounters also foregrounded the somatic space and presence of other players. Bumping into a player and a table is not the same thing. While the collision between my hand and the edge of a table primarily delineates the limits of my subjective space, the meeting between my hand and the soma of another player resonates intersubjectively in a shared space – I get a first-hand perspective and feel for the embodiment of the other, and his/her performance. At the same time, I also notice that I do not really perform *with* the other. Rather, each of us is *isolated* in our own visual relation to the game, only occasionally becoming entangled in a common relation, as we bump into each other by accident. The encounter between the other and me also worked at a greater distance, so to speak. If someone

walked between us, and obstructed both the sensor bar's view of me and my view of the game, I exerted my sense of ownership of the space in front of the TV through a disgruntled 'Get out of my way!' This sensation of being a soma positioned in a social context – an awareness of myself as playing the game – also had a scope beyond the immediate context of playing in my living room. Accidentally knocking things over, making a chair screech across the floor, not to mention jumping up and down, also had me wondering when my neighbours would start complaining, come to ask whether I was okay or at least wonder what was going on in my apartment. Moreover, the YouTube videos of people accidentally hitting each other demonstrate how the game's reduction of the soma and its surroundings to mere objects entails a certain reversibility, as it desensitises players to their immediate environment and others inhabiting it, unintentionally treating them as objects, too.

To sum up, my performative experience of *Kinect* and *Kinect Adventures* was characterised by a discrepancy. On one hand, a technological fantasy of 'free' and collaborative space, where I am recognised for who I am by both the *technological other* and *other players*. I am encouraged to engage in a somatic suspension of disbelief by stepping into the play-area in front of the TV. However, the concrete practice of playing facilitated a different relation between player and game. As I stepped into this play-area, I also stepped into my living room, and it quickly became evident that my soma did not exist as an object in such an ideal vacuum, owing to the fact that my soma constantly absorbs and creates meaning in and around everyday life. So, on the other hand, I was confronted with a technological object-view of my soma and the space in front of the TV. And, in this experienced reduction of my relation to both the other and the technological other, the somatic suspension of disbelief is challenged. It is important to note that this challenge is not something that disrupts the experience of playing – instead, I see it as a condition/part of the performance of playing. I find it related to what I described previously: Once the soma is given the role as the controller,

it must exercise a double awareness and (more radically than in relation to traditional controller-based games) simultaneously adapt to on-screen and off-screen conditions. Something similar may be said to apply to the performative dimension of my *Kinect Adventures* experience. The double awareness creates a playful attitude, as there is something fun about pretending to occupy only the on- or the off-screen (to be totally immersed in the game or focus on your presence in front of the TV) world, and possibly also a value in demonstrating mastery over both.

I also see the tensions arising from the discrepancy between the technological other and the other, at the ideal and concrete levels, as related to the notion of transformation. This is a transformation that exposes the player–game relation in its entirety, and its components, as a technological performance. I see this as an exposure that enabled me to navigate in the illusion, and have/display the performative skill required in game-play, to sustain the player–game relation: It was necessary to relate to the technology and the other players with a certain playfulness. With regard to *Kinect Adventures*, this playfulness manifested itself as an exploration of how the technology performed as an 'other', and how other players and I became entangled in the technology. The performative dimension of my *Kinect Adventures* experience was a place where I played with the tensions between imagined and actual technological embodiment, particularly in relation to the notion of the *other*. This was technological play that became intriguing, because I failed to handle (or restrain or release) the tensions successfully. It was fun to play the game (from a performative perspective), because the tensions between the actual and the possible were not resolved. The tensions that I experienced, and the effort put into this *handling* were felt by me, other players, and spectators as a certain excess, to which the technological interface was blind. This was a somatic excess that was exercised 'simply for the pleasure of moving one's body' (n. pag.) as Simon correctly argues. However, as my analysis has suggested, it is possible to further nuance our understanding of this 'excess' through the concept of the

experiential, representational and performative dimensions of the game experience. That is, the excess was experienced from within, through the displacement of my habitual embodiment towards a visually oriented quasi-I, and an experience of transgressing the technological interface of the game and return to the interface of the living room. Moreover, it was an excess that came to the fore representationally, as I saw myself and other players playing, explicitly moving our somatic selves – discovering my moving soma from without, or giving it the attention that I failed to, in the experiential dimension of my experience. This is similar to the satisfying sensation experienced in traditional games, where the players' characters perform sequences of physically impossible moves (for example, explicit in the fighting games mentioned earlier). Finally, it was an excess that was noticeable in the performative relations between player and game, as the discrepancy between the ideal and the actual technological relations challenged my soma to engage in, and play the game, to participate in the cultural fantasy of these physical game interfaces as particularly liberating to the physical gestures and movements of the player, exercising an awareness related to the simultaneous presence in the game and in the world.

A SOMAESTHETIC OF TECHNOLOGICAL DISPLACEMENT

I began this chapter with the *Kinect* catchphrase 'You are the controller!', to highlight how the disappearance of the controller challenged my previous conceptions of how the relation between player and game somaesthetically becomes valuable. On one hand, the *Kinect* is (in the current state of affairs of the console market) the 'ultimate' somatic interface, simply because the disappearance of the controller affords explicit physical movement and gestures in front of the screen. By supporting the mimetic illusion of letting the player play from his own perspective, the physical body in computer games is freed to an extent not previously experienced. On the other hand, the *Kinect* is no more a somatic interface than

any of the previously-existing computer game interfaces, because, as the analysis has demonstrated, when playing *Kinect Adventures*, the game interface does not simply disappear. In the embodiment of the allegedly *natural* game, a new controller interface *appears*, while the player's habitual controller-based quasi-I *disappears*. Moreover, the embodied player–game relation in *Kinect* is as tied to a fantasy or an ideal of the natural body as previous computer games and computer game interfaces. Whereas a graphical disembodiment leading into the virtual space of the game has dominated (and to some extent still dominates) commercial computer game discourse, the *Kinect* relies on the embodied immersion of the moving body. Although the *Kinect* makes an effort to reduce the question of embodiment (and any potential immersion) to a simple technological matter (the disappearance of the controller), attending the representational and performative dimensions of the experience revealed how much *Kinect Adventures* and the *Kinect* depend on a certain fantasy of embodiment: that I, as a player, am informed of my embodied experience through the representational dimension, and moreover, I agree to certain performative terms, in order to play the game and exercise an awareness of my role in the game experience in its entirety, by filling out the performative space between the ideal and the actual somatic possibilities of the *Kinect* interface.

Overall, my experience of *Kinect* is best characterised as a transformation of experiential, representational and performative embodiment, and not a return to a natural state of transparent immediacy. Explaining Microsoft's initial promise of 'letting the natural magic in all of us shine', we may say that it is the plasticity of our Being-in-the-world, which is *the* natural or as close as we are able to come to *the natural* – the somatic constant is *transformation*. In a sense, the injuries (and their documentation) that have followed the introduction of the *Kinect* (and *Wii* and *Move*) may accurately characterise the somaesthetics of the gesture based mimetic

interface as they appear today.[85] First, the injuries demonstrate the concrete (and potentially painful) experiential transformation of shedding one body-schema and habituating oneself to a new one that is characterised by a sense of quasi-I displacement, as it relies on the player's visual relation to the screen, and neglects to encompass objects and others in the immediate surroundings. In other words, abandoning the controller and stepping into the living room as a controller comes at a certain experiential cost. However, the representational showing off and sharing of these experiential breakdowns may testify to the value of being, not a transparent soma that is effortlessly integrated into the virtual world of the game, but instead, a living and material quasi-I whose encounters with the game become valuable through their inability to conform to the living room interface with which these games challenge the player (although the commercial discourse tell you otherwise). Similarly, in performative terms, it is the 'displaced' that seems to be hailed. Even if we disregard the images and YouTube videos that present explicit injuries, the practice of being a controller is foregrounded precisely because it does not conform to what we usually regard as 'natural' gesture and movement. The *Kinect* videos never feature players because they are 'good' at playing (which may be the case with games that rely on the traditional controller, or a game like *Guitar Hero*). Rather, the *Kinect* videos feature people that act as if they were put out of proper or usual place. In other words, the performative dimension of the player–game relation in *Kinect* games displays a technological performance exploring the micro- and macro-perceptual relations between player and game – an awareness of the players playing, of the player–game relation and its inconsistencies. The gestures and their significance both within and outside the game-world, are used, by the player and the others watching, as a playground for exploring the (apparently) ever-fascinating relations between humans and technology. Overall,

[85] See for example Wii injury photo gallery: http://wii.mmgn.com/Gallery/wii-injuries – last retrieved 24 Mar. 2011 – or one of many YouTube videos of players accidentally hitting other players, or objects in their surroundings: http://www.youtube.com/watch?v=Ux1FZpPKh20 – last retrieved 24 Mar. 2011.

I regard the somaesthetic strategies of the *Kinect* to revolve around experimentation with the form of the player–game relation – playing with limitations and possibilities of technological immediation/mediation in the pursuit of new quasi-Is, quasi-objects and quasi-others. As the interface of *Kinect Adventures* transforms and displaces, in experiential, representational and performative terms, it demands, affords and creates alternate modes of somatic experience and experiences of the somatic. In consequence, *I am the controller*, as long as I play or navigate this complex field of embodying technology at a micro- and macro-perceptual level.

Chapter 7

RESEARCH CONTRIBUTIONS AND POSSIBILITIES

The domain of lived experience and our possibility to approach, describe and discuss it has been the fix point for this dissertation. The motivation for venturing into this domain had two main causes. First, my curiosity was aroused by the somatic pleasures and somatic paradoxes of my own game-play experiences – what was the alluring bodily 'now' that the computer game seemed to facilitate? Second, I was surprised (and somewhat confused) by the (implicit and explicit) dualisms of the game research and game industry discourses, separating mind/body and player/game, reducing, and to some extent trivialising, the complex nature of the computer game experience. In consequence, I found that there was a need for an analytical perspective sensitive to the fact, that *every* game-play experience (and not just those that rely on gesture based interfaces), not only had a somatic foundation (the perceiving body's ability to incorporate the digital and analogue aspects of the game interface), but also was somatically savoured (the visceral feel of playing games). In other words, I missed a vocabulary that would enable a discussion of the somatic qualities of playing computer games, without reducing it to a matter of addressing the formal structure or features of the game.

As I began to explore the existing research that did not take the perceiving body of the player for granted, I positioned myself among approaches that focused on the living, feeling, sentient, purposive body (the soma), at a distance to research that reduced the body to a functional structure stimulated by pure sensations, a physical corpus. However, even in this inclusive domain, centred on the soma

as a qualitative and living site for experience, the potential for a dualistic conception of the somatic still seemed to be present in the focus on either somatic experience or the experience of the somatic, favouring either the pre-reflective or the reflective dimension of experience. Hence, although I seemed to have escaped a naïve mind/body dualism, there was still something very 'fundamental' at stake as there seemed to be a need to discuss (not dissolve) two conceptions of the soma in computer games. On one hand, the thinking reasoning subject that reflects on the experiences of the somatic positioned in a cultural context, and on the other hand, a sensing soma that silently grasps the game-world, savours this pre-reflective grasping, but cannot articulate its qualities reflectively. Consequently, I identified my position within the somatic field of computer game research as one that against the background of my own computer game experience, which was never just pre-reflective or reflective, should discuss the continuities and similarities between somatic experience and the experience of the somatic, emphasising the transforming and displacing characteristics of the flux of lived experience that is always pre-reflective and reflective.

One of the main challenges of the dissertation has been to navigate the complex field, where the somatic experience always consists of both *being* and *having* a body in-the-world, without falling into old (or creating new) dualisms. Consequently, my work has not produced *conclusive* (and *excluding*) *explanations* regarding the somatic experience of neither the 'new' bodily computer games (e.g. *Wii* or *Kinect*) nor the 'old' (traditional controller-based) computer games. Instead, I have *complimented* game research with an *inclusive* perspective and discussed the lived experience of playing computer games (in its somatic and somaesthetic manifestations). My research contributions may be identified in relation to the three main components of the dissertation, and will be addressed in the following, under the headlines: *A New Perspective on Computer Games*, *The Somaesthetic Discipline*, *Phenomenology/Post-phenomenology* and *New Somatic Research Areas*.

A NEW PERSPECTIVE ON COMPUTER GAMES

As the number of research approaches to the bodily aspects of the computer game are gradually increasing – and have been since Sudnow's initial observations of how the computer game unfolds as a bodily practice – the importance of my research agenda is, obviously, up for debate. I find that the novelty of my agenda is to be found, not so much in its subject matter, but instead, in the rigorous focus on *experience*, and the efforts put into un-trivialising the reflective and pre-reflective aspects of the experience, the interdependence of somatic experience and the experience of the somatic. The analytical takes on game-play experiences have (in each their own way – in chapter 3 to 6) demonstrated that the transformation and displacement of somatic experience and the experience of the somatic is neither a theoretical construction nor a trivial condition of experience (in a general sense). Instead, the transformation and displacement has shown itself as a aesthetic/somaesthetic form that computer games rely on as well as play with. In other words, common to four games was that they facilitated not only an experience of the game-worlds, but also an experience of my experience of the game-worlds and my act of playing, and it was in this transformation and displacement of the pre-reflective and reflective that the unique somatic form of each game was experienced.

Recalling the dissertation's first two chapters, my perspective clearly benefits from one of the strengths of 'classical' phenomenology (not taking the experience for granted), as it precisely is *inclusive*, approaching the world through our *experiencing of things* and not the *things of experience*. Meanwhile, the post-phenomenological attention to the constituting character of technology (simultaneous amplification/reduction of micro- and macro-perception) framed the experience of the computer game as something I could address as transformational and displacing – shaping *what* we experience as well as *how* we experience. Lastly, as a phenomenological way of thinking (concerned with the nature of somatic experience), somaesthetics

has been productive as a dynamic discipline that makes an effort to handle the complexity of this *experiencing of things*. Somaesthetics allowed me to focus on the *continuities* and *similarities* of somatic experience and experience of the somatic, addressing it as intertwined experiential, representational and performative dimensions, not reverting back into a dualism that either favours the mind (reflective) or the body (pre-reflective) in experience. Put differently, the 'newness' of my perspective is that it highlights and discloses somatic aspects of the computer game experience that we usually take for granted: what I described in the introduction through the trivial observation that we always play as (pre-reflective and reflective) somas, whether tensed up and sedentary in front the screen or jumping around, gesturing with arms and legs.

I find it important to emphasise that the 'circular' movement of my perspective on the computer game experience (constantly trying to address experience *as* experience) amounts to more than an ego-centred introspection. First, despite the fact that I have taken my subjective everyday experience of playing computer games as the starting point, the exploration of *Call of Duty 4*, *Guitar Hero: World Tour*, *Metal Gear Solid 4* and *Kinect Adventures* demonstrated how the experiential, representational and performative dimensions of experience always manifested themselves implicitly or explicitly as social and cultural practices, for example, in the encounter with the other and quasi-other in *Kinect Adventures*, in the embodiment of rock culture via the guitar-shaped controller in *Guitar Hero: World Tour* or in the experience of auditory performance in *Metal Gear Solid 4*. Second, my phenomenological and somaesthetic perspective on experience is not caught up in itself, for the *simple* reason that, a subjective awareness is what enables us to relate to others, our surroundings and look beyond ourselves – the *other* is always implied in my subjective perspective and vice versa, as Shusterman argues, 'To focus on feeling one's body is to foreground it against its environmental background, which must be somehow felt in order to constitute that experienced background' (*Body Consciousness* 8).

Put differently, if I did not intimately know my own somatic Being-in-the-world or, if I was unable to reflect upon its importance (and not least savour it), then, how would I be able to recognise the *other*, and generally understand and be sympathetic for the *other's* lived experience? Hence, with regard to game research in a broader perspective, I would argue, in the melioristic spirit of somaesthetics, that intimately knowing and exercising awareness towards one's own somatic experience, widens one's ability to comprehend the experience of other players and may grant more informed choices when approaching the issue of computer game experiences (in both observation and discussion).

Screen, Controller and Speaker

My analytical focus on the eye, hand and ear, suggested an approach to the experience of controller-based computer games that moves beyond merely attending the formal aspects of what happens on-screen or in the game as a rule-system. First, through a discussion of different game experience discourses, for example the ones favouring graphical realism in the first-person-shooter genre, musicianship in *Guitar Hero: World Tour* or stealth game-play in *Metal Gear Solid 4*, it became evident that game designers and the game industry are designing, fabricating and selling 'sensational' *perceptual experiences*, just as much as they are fabricating and selling 'games', 'stories', 'social relations' and so forth. Second, throughout my analysis of *Call of Duty 4*, *Guitar Hero: World Tour* and *Metal Gear Solid 4*, I described the experiences as perceptual somatic practices, revolving around a transformation and displacement of one's experiential, representational and performative relations to quasi-Is, quasi-objects and quasi-others – and not as experiences I engaged in, to 'play a with rule structures', 'play a role' or 'tell or be told a story'. As previously stated, my arguments do not entail that these games may also have competitive, storytelling or role-playing elements, but my analytical perspective revealed and discussed the somatic dimensions that often goes unnoticed as the game experience is approached

through its formal features. In other words, the distinction between the experiential, representational and performative dimensions of experience served as a set of analytical guidelines for addressing the perceptual spectacle of the game (and its self-reflective potential). This was a distinction that questioned the conception that the experiential flow of the computer game is a 'mindless' perceptual activity.

Recalling the specific games: The first-person-shooter, *Call of Duty 4*, was described as facilitating 'a transformation and displacement of one's somatic self' (see chapter 3, the section *A Somaesthetic of Visual Displacement*), centred on the first-person perspective that experientially through its 'visual skin', proprioceptive forwardness of the weapon, and perspective on and off quasi-others shaped a somatic quasi-I as well as an experience of the 'oxymoronic' character of this quasi-I. In *Guitar Hero: World Tour*, the visceral feeling of moving through the various songs, the representational tension between the controller and instrument and the performative demonstration of micro- and macro-perceptual 'musical' skills facilitated a somaesthetic experience of Being-in-the-music. The intersection of these pre-reflective and reflective experiential, representational and performative dimensions shaped a guitar hero quasi-I that made me 'experience the musical works from the inside out, while allowing me the opportunity to perform the music, and my own understanding of it, through somatic efforts' (see chapter 4, the section *A Somaesthetic Being-in-the-music*). Last, turning to *Metal Gear Solid 4*, I described how the materiality of the game-world and a sense of auditory agoraphobia and auditory claustrophobia emerged 'against the background of my intimate somatic relation with the world as a voiced and sounding soma' (see chapter 5, the section *An Auditory Illusion*). Moreover, I described how this somatic experience of sound was transformed into an experience of the somatic as it was revealed that my listening modes were structured through the illusion of the game-world as a reverberant place. What unites the exploration of the different games is that they demonstrate, in each their unique way, how the transformation/displacements of somatic experience and experience

of the somatic is essential if we seek to understand what kind of experiences computer games facilitate – i.e. the play between the pre-reflective and the reflective was by no means an experiential triviality, instead it was an explicit part of the aesthetic strategies of these games.

Gesture Based Game Interfaces

Apart from presenting an alternative perspective on the somatic dimension of controller-based computer game experiences, my phenomenological and somaesthetic approach also provided a critique of the aesthetics of the gesture based mimetic game interfaces that pervade the contemporary commercial market of computer games.

In 2006, the Nintendo *Wii* presented its audience with images that changed *how* computer games were to be played and *who* could play them. Hence, we might argue that the turn towards gesture based gaming initially had an explicit somaesthetic agenda or potential. That is, directing attention to the subject's experiential, representational and performative presence *in front of* the screen has an explicit potential to reshape how the player somatically experiences computer games, providing new and imaginative forms of somatic self-reflection. However, have these gesture based games actually demonstrated their somaesthetic worth? On one hand, the introduction of the PlayStation *Move* and Microsoft *Kinect* interfaces is a testament to the arrival of a new hegemonic design standard that emphasises the moving body. Similar to the *Wii*, the games played through these interfaces are mostly sport/action games with 'transparent' one-to-one mappings between movement in front of and on-screen – a trend that overshadows the potential for somatic diversity that these new interfaces have. In my exploration of *Kinect Adventures*, I identified an 'anti-aesthetic' (or somaesthetically formless) ideal, in the sense that the game (and the *Kinect* interface in general) insists on somatic immediacy in the game-world through the evaporation of technology. Similar to the earlier paradigms of effortless immersion, for example

found in the emphasis on graphical realism, *Kinect* offered me a realism of body movement and gesture that would position me *in-the-game-world*. Moreover, the commercial game industry has often been accused of aiming for the lowest common denominator in the shape of lewd and unreflective content, glorifying violence, fast cars and the like. And, in the pursuit of the immediacy of 'the body in motion' and the 'natural interface', the current trend of gesture based gaming may be seen as once again promoting the lowest denominator to attract its audience: no longer 'patronising' players at an 'intellectual' level through the easy thrills of stereotyped representations and actions, but also in somatic terms as the body is sought satisfied through trivial one-to-one movements and gestures between what happens on- an off-screen. On the other hand, as the exploration of my *Kinect Adventures* experience also demonstrated, the soma is not that easily satisfied. Instead, the experiential, representational and performative resistance that emerges in the transformation and displacement of becoming a *Kinect Adventures* quasi-I, playing with *others* and *technological others*, facilitated a somatic experience as well as an experience of the somatic, 'between the ideal and the actual somatic possibilities of the *Kinect* interface' (see chapter 6, the section *A Somaesthetic of Technological Displacement*).

My somaesthetic approach to gesture based games, such as *Kinect Adventures*, leaves the subject open to further investigation as the aesthetic form of these 'new' interfaces continuously seem to transgress the discourse of technological fidelity that commercially promotes them. Broadening the discussion, I find that critical or satirical perspectives on our gestural and physical interaction with computer games and computers in more general terms testify to the current development of new aesthetic interface forms. Demonstrating the immersion and realism ideals inherent in our perception of computer games, as well as the impossibility of these ideals, the news satire website *Onion News Network* report of game developer Infinity Ward's upcoming *Call of Duty* sequel, which in its Nintendo *Wii* edition will include 'a 17 pound controller, shaped like an

M-249 machine gun that you must carry at all times, but cannot fire without explicit orders'.[86] As an Aprils Fool's Day joke, Google launched the *Gmail Motion* website, promising a motion/gesture based interface for *Gmail*, and later *Google Docs*, grounding the project in the communicative potential of body language and a fantasy of the natural and unrestrained body stripped of any technology – not unlike the ideals and arguments that introduced the *Kinect* interface. As 'Lorraine Klayman', environmental movement specialist, promises, 'The way you will now communicate with the world at large, through your computer, is with the beauty and physicality of your own body. No longer, will you be subjugated to the constraints of the technology in the way we have been used to'.[87]

With Huhtamo's idea of *counter-machines* in mind (as a way to characterise the paradoxes of the human–machine relationships of the amusement machines of the industrial revolution (see the section *The Somatic Dimension of Human-Machine Relationship* in the Introduction)), the absurdity of a 17 pound computer game controller or the argument that writing an e-mail by gesturing in front of the screen is *more* natural and *less* technologically constraining than using keyboard and mouse, demonstrate how our contemporary use of, and fantasy about, the computer interface not merely revolves around our *automatic* and *proto-interactive* relationships to the machine. Our relationship to the computer also encompasses a somatic consciousness concerning the limits of our automatic and proto-interactive relationship to computer and its spectacle. Hence, future research could pursue this potentially new aesthetic form of the gesture based mimetic interface. A form that seems to have as one of its defining characteristics, an explicit thematisation of its own limits, perhaps most explicitly exemplified in the touch-screen, where one's

[86] *Onion News Network*: http://www.theonion.com/video/ultrarealistic-modern-warfare-game-features-awaiti,14382/ – last retrieved 19 Jul. 2011.

[87] *Gmail Motion* website: http://gmail.com/motion – last retrieved 19 Jul. 2011.

fingers not only blocks one's view but also leaves a noticeable material trace after each swipe, or in *Kinect Adventures*, where noticing oneself as playing and getting in one's own way is an explicit part of the game experience. In other words, a phenomenological and somaesthetic approach to these new interfaces is sensitive to what the commercial and popular rhetoric often forget, that our soma's are not only transparent, but always 'get in our way' and that this 'getting in the way' is an essential aspect of their aesthetic form.

THE SOMAESTHETIC DISCIPLINE

As Shusterman emphasises on several occasions, somaesthetics is not a finished system of thought (*Somaesthetics* 307-309, *Soma, Self, and Society* 322). Therefore, the exploration of computer game experiences found in this dissertation has contributed to the variety of the somaesthetic discipline as well as tested its analytical potentials. Positioning myself as both a 'practitioner' and a 'thinker', my work, describing and analysing the different game experiences, was in itself, tentatively shaped as a somaesthetic practice (of perception and self-reflection). That is, what started out as a silent somatic appreciation of the perceptual flux of playing *Call of Duty 4*, *Guitar Hero: World Tour*, *Metal Gear Solid 4* and *Kinect Adventures* momentarily transformed into outspoken experiential, representational and performative 'flashes' of self-reflection as my perceptual relationship with the analogue and digital aspects of the specific game was shaped into unique somatic forms. I am not arguing that approaching these computer game experiences, as somaesthetic practices, has given me 'better' experiences, or directed me towards a more 'effectively willed' and 'somatically acute' life in general (as Shusterman argues that somaesthetic practices do, discussed in chapter 2). As I introduced the somaesthetic discipline, I did not define computer games as somaesthetic *practices*, but merely implied the potential for somaesthetic perception and self-reflection. Based on my findings, in chapter 3 to 6, using the somaesthetic concepts to address what was going on in the flux of game-play, I would prefer that computer games

are described as somaesthetic *experiences*, not *practices*. That is, as suspected in chapter 2, and as my explorations of the different games have demonstrated, the somaesthetic mindfulness that took me into the realms of culture and society often emerged without an explicit intention or consciously willed somaesthetic action. In other words, the somaesthetic potential of computer games is not necessarily something I need to 'train' for, or 'properly' pursue, as is characteristic to the somaesthetic practices that Shusterman emphasise (e.g. the Feldenkrais method or the Alexander Technique). It may, very well, be possible to consciously engage oneself in computer games explicitly as somaesthetic practices, but at my current level of 'skill' as a somatic 'practitioner' in the discipline of computer games, I cannot confirm nor deny this – however, I will suggest that future somaesthetic studies of computer games could consist of gaining a higher level of skill as well as investigating the experiences of players that have spent years perfecting certain games (e.g. professional e-sport players). Moreover, to make the argument for somaesthetic self-awareness stronger, I wish to suggest that the somaesthetic discipline should embrace the concept of *somaesthetic experience* more explicitly in order to emphasise how somaesthetic perception and self-reflection are not exclusively willed action informed by conscious attention; they also emerge spontaneously in the flux of non-somaesthetic practices. This emphasis on experience does not compromise the idea of *somaesthetic practices* but instead, explicitly frame such practices as methods that focus on the ability to 'catch' such experiences as they arise.

The Potential of Perceptual Extremism

Based on my current work, I still identify the sensational aspects of the computer game experiences as where the somaesthetic potential most evidently shows itself. That is, as I micro- and macro-perceptually exercised an experiential, representational and performative intentionality in the game-worlds, feeling quasi-I, quasi-other, quasi-object relationships form, be challenged or break down (whether they had a visual, tactile, auditory or full-body shape),

occasionally a sense of somatic self-awareness emerged through this sensational *transformation* and *displacement*. As outlined in chapter 2, in the section *Somaesthetics and Computer Games*, an aesthetic of sensational perceptual displacement stands in contrast to one of Shusterman's main arguments for engaging in somaesthetic practices. This discussion may be taken a step further in the light of the intermediate analytical work I have performed.

Shusterman's scepticism of perceptual extremism is linked to his identification of a general anhedonia within Western culture. Shusterman argues that a 'perceptual extremism' (for example manifested in the hyper-stimulation provided by our media saturated environment) may both be the symptom and the cause to the anhedonic state: 'The persistent demand for extreme intensities threatens not merely to reduce the range of our felt pleasures but even to dull our affective acuity, our very capacity to feel our bodies with real clarity, precision, and power' (*Body Consciousness* 38). The variety of experiences that computer games produce prevents the simple conclusion that they in general should be categorised as 'dulling' our somatic senses. I admit that a genre like the first-person-shooter, in its continuous quest for immersion, better graphics, more realism and not least its violent/sensational content exercises a certain aesthetic of 'perceptual extremism', but whether the genre's love for 'limit-experiences' automatically reduces our somatic range of pleasures is more questionable. In my own experiences it was more often than not the extreme intensities of perceptual displacement that lead to a somaesthetic self-reflection. The various relationships with quasi-Is, quasi-objects and quasi-others did not corrupt my capacity to feel my body, instead, I would argue that my body was enriched by these new relationships, a testament of my body's power, precision and clarity as a living, plastic soma to continuously widen my range of possible pleasures.

The link between perceptual extremism and anhedonia mirrors a common concern regarding the dangers of violent or extreme

computer games – that they dull our capacity to engage in the world and reduce our pleasures to revolve around acting violently against (virtual) others. We may even historically identify this, as a concern that has accompanied many (if not all) media experiences that have relied on perceptual extremism or limit-experiences in one way or the other, for example, rock/heavy-metal music, comic books and movies. Common to these concerns is that things are never as simple as would be convenient, which is also evident when looking specifically at the perceptual extremism found in computer games. First, it is essential for me to point out that Shusterman's view on 'pleasure' is by no means trivial. He emphasises a diversity of somaesthetic methods (Shusterman, *Body Consciousness* 30, 37) and acknowledges the somaesthetic potential of transgressive perceptual displacement and transformation, but still the extreme is considered 'the easy way out' that eventually will dull one's senses. Moreover, Shusterman in no way condemns neither computers nor computer games, and besides a critical stance towards the representation of 'oppressive norms of external body form through advertising' (*Somaesthetics and the Body/Media Issue* 45), he is neither pessimist nor optimist when it comes to our media and informational saturated environment in general. Instead, in the melioristic nature of somaesthetics, Shusterman suggests 'sensorial moderation' (*Body Consciousness* 38) as a way to prevent any possible anhedonia. He bases his argument on the Weber-Fencher law, which states: 'a smaller stimulus can be noticed more clearly and easily if the already preexisting stimulation experienced by the stimulated organ is small. Conversely, the threshold for noticing a sensation will be so much the larger, the greater the preexisting stimulation is' (*Body Consciousness* 39). As I will suggest in the following paragraph, my analytical activation of the somaesthetic discipline and consequent findings favour sensorial 'diversification' rather than 'moderation'.

In my work describing the different game experiences, the distinction between the eye, the hand, the ear and the 'full body' continuously dissolved. That is, playing the games, my senses informed each other,

the context I was in, my previous experiences (and vice verse) in a complex network. Shusterman's exemplification of the Weber-Fencher law demonstrate how perceptions work in background-foreground relationship, 'The light of a cigarette, for instance, while barely visible from a short distance in blazing sunlight can be seen from afar in the dark of the night' (*Body Consciousness* 39), but the example to some extent also isolates the different senses and de-contextualises the perceptual act. That is, the light of the cigarette may stand out if I have a certain interest in it or if the smell of smoke directs my attention towards it. Hence, noticing, addressing and savouring perceptual subtleties is not merely a matter of foreground-background relationship. Second, I would argue that pleasure of the extreme lies not only in the contrast to subtle stimulations, as a sense of getting lost in a formless morass, the extreme perceptual experience also has minute subtleties that manifest themselves as one devotes attention to them, or has the patience and endurance to return to them again and again. Recalling my analysis of the first-person-shooter game *Call of Duty 4*, a certain sensationalism and extremism is evident (reflecting Shusterman's concern with regard to a perceptual extremism, and a more general concern regarding its depicted violence). Roaming the battlefields of *Call of Duty 4*, I was subjugated to a bombardment of my auditory and visual senses; however, navigating the perspective in the 3D game-world, aiming and shooting, shifting between weapons and so forth required distinct hand-eye-ear coordination and minute movements and combinations among my fingers on the controller that took time, effort and patience to acquire. Moreover, I also engaged in conscious effort to discern the audiovisual barrage of the game and not just dwell uncritically in its spectacle. And lastly, the displacing experience in the *Death From Above* level where I played via the video camera perspective of 'real' TV mediated war, also demonstrated how the extreme may be self-reflective and critical. Relating these phenomenological insights to the above discussion, they emphasise that when addressing the somaesthetic value, or pursuing the potential risks of computer games (whether one studies their content or perceptual character), one should address the variety

and combination of how we as somatic micro- and macro-perceptual somas unfold these games. In other words, although it may be the loud sounds, the flashing lights, the graphical realism or the virtual blood splattered across the game-world that catches the ears, eyes and critical sense of a bystander, the displacement, transformation and subsequent form experienced when the game is *played* facilitates an experiential integrity that should not be reduced to any of the above elements.

If 'sensorial moderation' entails turning down the sensationalism and extremism of computer games then I would rather call for a sensorial 'diversification'. Just as continuous perceptual over-stimulation may dull our somas, I would argue that only to engage in subtle stimulations will rob us of a variety of pleasures as well as reduce the elasticity of our perceiving somas – perhaps even make it problematic for us to navigate a world that always has been and always will be extreme and 'noisy'. At least, in the media and technology saturated environment that surrounds us, I not only encounter overstimulated people with no sense of self, other or somatic subtleties (myself included), I also encounter highly plastic somas that posses a wide variety relationships to quasi-Is, quasi-objects and quasi-others that allow them to navigate, savour and do good in the world. Consequently, I would argue that the perceptual extremism inherent in many computer games as well as having their own subtleties (that require acute somaesthetic awareness) also may strengthen and sharpen our perceptual abilities. To push the envelope, the perceptually extreme game experience provides a productive alternative to the 'subtle' experience of functional interfaces that often (at least when they work) escape our conscious attention. That is, in computer games we feel an experiential, representational and performative transformation and displacement that fosters a somatic awareness towards the non-transparency of technology, an awareness that is essential if one consequently is to be able to assume a critical position with regard to how technology shapes our Being-in-the-world.

PHENOMENOLOGY/POST-PHENOMENOLOGY

The dissertation's contribution to the phenomenological movement is to have testified to its importance and usefulness. That is, phenomenology proved not to be a philosophical curiosity or an ideal (or naïve) 'return to the things themselves', but a working analytical perspective able to critically address experience and what shapes experience. The continuous phenomenological effort to return to experience gave form to the trivial and often overlooked aspects of computer game-play – disclosing not only that playing computer games is a somatically founded practice, but just as importantly, that it is savoured reflectively as such.

My phenomenological 'return to the things themselves' of the computer game experience was not a return to simple facts, but rather a laying bare of a certain complexity. I did not immediately or introspectively grasp the somatic meaning of my computer game experiences. Instead, bracketing the flux perceptual of game-play (through the experiential, the representational, the performative and the eye, the ear, the hand, and the 'body') disclosed a complex network where the alluring 'now' of the game-play experience was never facilitated through a closed loop between player and game. The somatic 'now' presented itself as always already being full of previous game experiences, memories and discourses surrounding game experiences (reviews, pre-views, forums, trailers etc.). The subsequent insights developed through this phenomenological way of attending the 'experiencing of things' showed that just because we are positioned in a media and technological saturated world, where experiences seem to emerge from online networks, where less and less is private and kept to the self, exercising an attention towards one's immediate experience is just as crucial as it has always been – the null point of all experience is still the 'facticity' of our somatic Being-in-the-world. And the more aspects of the experience we are able to formalise and objectify (whether these aspects are found in the wildlife of the internet of formalised through empirical methods), the more pressing

it becomes to continuously question the aspects of experience that escapes objectification.

I–technology–game-world Relations

Through the focus on player and game, human and technology, the dissertation is part of an ongoing phenomenological interest in how objects/artefacts/tools transform and shape our Being-in-the-world. More specifically, recalling Merleau-Ponty's and Heidegger's interest in works of art as well as Verbeek's description of the *composite relation*[88] between human and technology, my interest has similarly circled the domain of aesthetic artefacts – how aesthetic artefacts facilitate possible worlds and provide new perspectives on our somatic situatedness. In relation to the post-phenomenological vocabulary of human–technology relations, my explorations of the different game experiences may explicitly contribute to its further development and sensitivity towards somaesthetic human–technology relations.

The experiential dimensions of my game-play experiences, becoming a quasi-I, explicated in Ihde's embodiment relation, (I–technology)→game-world, could become more indicative for the computer game experience by introducing two double-pointed arrows, **(I↔technology)↔game-world**. The double-pointed arrows explicitly demonstrate that my visual perspective, my grasp on the controller, my auditory perspective and my gestural shape in gesture-based games only become experiential (experienced viscerally from within) as the game-world (and its material artefacts – controller, screen etc.) constantly resists my visual, motile, auditory and gestural intentionality. It is only as the game-world *pushes back*, ↔, not merely amplifying but also reducing, that I come to experience the

[88] A relation that is pursued as it generates 'a new reality which can only exist for human intentionality when it is complemented with technological intentionality' (Verbeek, *Cyborg Intentionality* 394) (see chapter 1, the section From *Disengaged* to *Displaced* Somatic Experience).

visceral shape of the quasi-I, which the brackets **( )** represent, and in consequence have an experience of Being-in-the-game. In other words, the double-pointed arrows denote the *transformation* and *displacement* of the pre-reflective and the reflective, which I identified as essentially shaping the computer game experience. Moreover, as demonstrated through what I explored as the representational dimension of my game experiences, we may also specify how the exterior form or surface of auditory and visual bodies (as in *Call of Duty 4*, *Metal Gear Solid 4* and *Kinect Adventures*) shaped my quasi-I **(I↔game-bodies)↔game-world**, facilitated an experience of quasi-objects and quasi-others **I↔(game-bodies)↔game-world**, and how the controller in *Guitar Hero* transformed my visceral experience of the game's music, **(I↔controller/instrument)↔game-music**. The performative dimensions of my experiences, centred on the demonstration of my micro- and macro-perceptual skills as a quasi-I engaging with quasi-objects and quasi-others, could be illustrated by introducing a double pointed arrow in the alterity relation **I↔technology–(–game-world)**. In the performative dimensions, my handling of the technology came to the foreground, for example, in *Call of Duty 4*, my relationship to the black and white images from the camera of the gunship, **I↔real/mediated-war–(–game-world)**, facilitated a self-reflection concerning the cultural body I perform when playing games, bracketing my view on the game-world. In *Guitar Hero: World Tour*, the guitar-shaped controller **I↔controller/instrument–(–game-music)**, allowed me to engage in the music of the game, demonstrating my understanding of the game-music *as* game-music. With regard to *Kinect Adventures* (and to some extent also *Guitar Hero: World Tour*), it would be more appropriate to bracket the entire relation **(I↔technology↔game-world)** to emphasise how the performance with the technology as well as the playing situation was an integral part of the game experience and its transformation.

As demonstrated in the above paragraphs there is not one human–technology relation that sufficiently covers the game experience in its entirety, evidently, the transformation of the pre-reflective and

the reflective prevents any static relations. However, the human–technology relations (including the above suggestions) may be useful in further research if the game-play experience is addressed from a temporal perspective. That is, exploring the shifts and recurrences of the various relations in the process of playing could lead to a new understanding of the aesthetic form of the game-play experience.

NEW SOMATIC RESEARCH AREAS

Coming to an end, my research perspective and the process of having pursued it, has opened my eyes towards new somatic relationships between player and game, human and technology. Apart from the possible research areas that it have pointed out in the previous chapters (concerning the self-reflective potential of the first-person-shooter, chapter 3, the force feedback controller interface, chapter 4, and games that exclusively rely on sound to create a game-world, chapter 5) there are a variety of existing and emerging phenomena that potentially could benefit from a phenomenological and somaesthetic perspective. Allow me to suggest three areas of interest.

First, widening our perspective to include not only computer game-play experience, but also 'play' with computer games, an explicit somaesthetic potential may be found in the hacks of a gesture based mimetic interface like the *Kinect*.[89] Not long after the *Kinect* interface was introduced (in the autumn of 2010), videos started to emerge on the internet, documenting how people were manipulating and modifying the software and hardware aspects of this new interface.[90] These hacks could be conceived as forms of somaesthetic 'play' with computer game technology, *experimentation with* and *pursuit of* new

[89] The Nintendo *Wii* and PlayStation *Move* interfaces have also been subjected to similar hacks.

[90] For a short demonstration of various *Kinect* hacks, see for example: http://www.eurogamer.dk/articles/2011-01-05-hjemmebryg-videreudvikler-kinect – last retrieved 3 Aug. 2011.

forms of quasi-Is, quasi-object and quasi-others – practices that again demonstrate that computer game culture has a critical potential regarding how technologies shape our Being-in-the-world. But at the same time, I also find that these practices need to be critically addressed themselves – i.e. we should no be blinded by the YouTube spectacle that they produce. Based on the brief overview I have, many of the hacks seem to conform to the commercial paradigm that favours the moving body. That is, the hacks are modifications and manipulations that rely on 'simple' one-to-one relations between movement and action tied to the on-screen, adhering to a visual fantasy that hail images of moving bodies, rather than making an effort to refine our awareness to the living soma in front of the screen. In other words, the body may have been set free from the controller, but it is still under the hegemony of the the visual. Consequently, a further critical exploration of these hacks could potentially tell us something about the relationship between technology and the ongoing mimetic desire within Western culture.

Second, it would also be interesting to attend specific indie-games, and the indie-game scene in general, to explore how somatic experiences and experiences of the somatic are pursued in non-blockbuster games. Parallel to how I have addressed the phenomena of computer games in this dissertation, our understanding of what indie-games are, could potentially benefit from an approach that makes an effort to describe the characteristics of the indie-game experience and not its formal aspects (which clearly is problematic to define (Gnade)). First, it seems that one branch of the indie game scene distances itself from the visualism and interface fidelity of many blockbuster titles, favouring difficulty over experiential flow; 'Hard games are enjoying a revival right now' especially among 'indie developers who seem keenest to add liberal dollops of pain to your gaming experience' (Caldwell). Consequently, it would be fruitful for our understanding of the 'pain' associated with difficult games, its allegedly current revival (and previous absence), if such games where explored phenomenologically and somaesthetically – or put

differently, can such a descriptions of 'pain' be addressed other ways than phenomenologically? Other indie-games deserve attention as they explicitly experiment with somatic interfaces, for example *B.U.T.T.O.N.* (2010) or *PewPewPew PewPewPew PewPewPew* (2011). In both these games, it becomes obvious that we do not necessarily need to invent new technologies or make old ones disappear in order to change our experiential, representational and performative somatic possibilities with regard to playing computer games and inventing new quasi-Is for ourselves. P*ewPewPew PewPewPew PewPewPew* is a traditional side-scroller shooter where the goal is, as a spaceman, to navigate and shoot your way through obstacles. The game is a cooperative game that uses two microphones as game controls: One player controls the spaceman's jetpack by making 'whoosshhh' sounds into the microphone, while the other player fires the spaceman's laser by saying 'pew'.[91] *B.U.T.T.O.N. (Brutally Unfair Tactics Totally Ok Now)* is a competitive multiplayer game that involves struggling for controllers to prevent other players from pushing certain buttons (and vice versa), for example by protecting a controller or stealing it from one of the other players.[92]

A third possible research area for future somatic explorations is, literally, within our immediate grasp. That is, in our pockets and bags, many of us carry around smartphones and tablets that allow us to play games that afford our 'direct' manipulation of the on-screen content with our fingers – the smooth surface of the screen is no longer a no-go zone for our fingers; rather, screens have become something that attracts and demands our touch. Hence what is the somaesthetics of the touch screen or the 'swipe' sensation? Moreover, Wi-Fi, GPS and gyroscope in these portable devices situate us as locatable and navigational somas in a social and cultural context that constructs

[91] A demonstration of the game may be found on YouTube: http://www.youtube.com/watch?v=iUMIwYxtP38 – last retrieved 19 Jul. 2011.

[92] A demonstration of the game may be found on YouTube: http://www.youtube.com/watch?v=aAOplz5ri5k – last retrieved 19 Jul. 2011.

a play-space different from the safe confines of the home, creating new possible and impossible experiential, representational and performative transformations of our somatic selves. Needless to say, the need for perspectives that are sensitive to the relationship between soma and technology, and their contextual subtleties, has not become less important since I started my work on this dissertation.

Desexualising the Design of Computer Games

The phenomenological and somaesthetic perspective on computer games that I have suggested in the dissertation may not only have an analytical, but also a design purpose. We may outline a potential to inspire new design and critically address existing design by returning to Shusterman's discussion of the critical potential of Foucault's somaesthetic philosophy. Through practices of sadomasochism, Foucault advocates for a desexualisation of pleasure, the 'displacing of genital-centrism' (Shusterman, *Body Consciousness* 32). Consequently, I will argue that a similar 'desexualisation' of the perceptual 'genitals' of the computer game experience could be beneficial, and open our eyes to a variety of new pleasures of playing computer games (based on my work so far, I would identify the 'genitals' of the computer game experience as the eyes and the body as a moving physical thing). With its focus on 'difficult' game-play (as mentioned above), crude graphics and alternative means of interaction, the indie-game genre may be considered the necessary 'sadomasochistic game-play', restraining immediate satisfaction, and potentially revealing an even wider range of perceptual pleasures and fun that go beyond the visually oriented or physically moving body. However, as my analysis has shown, through the focus on the hand and ear, other pleasures apart from visual and gestural are dormant in the experience of commercial games and do not need to be pursued through 'sadomasochistic game-play'. And, conversely, the indie-genre's 'retro-fetish' may easily be turned into a conservatism that does not stimulate the heterogeneity of perceptual experiences in computer games.

I will argue that one way to stimulate the development of alternative perceptual interfaces, hopefully demonstrating the diversity of our somatic Being-in-the-world, could be to embrace concepts from the somaesthetic discipline. The potential of a somaesthetic approach, or perhaps more correctly, a mindset, a phenomenological way of looking at things for computer game design, will of course first be demonstrated in its concrete implementation (and clearly needs to be discussed more fully and not least by others than me – as design is not my area of research). Nevertheless, as the distinction between the experiential, representational and performative and the reversibility of somaesthetic perception and self-reflection neither positions the senses in hierarchy nor privileges specific parts of the soma as particularly suited for applying technology, but rather foreground how experiences first and foremost are shaped through the soma's subjective, reflective and social perceptions, I find that somaesthetics (and a phenomenological questioning of what computer games really are) may challenge commercial design paradigms that often favour a naïve soma and tries to satisfy it through increasing levels of technological fidelity centred on specific senses.

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The book investigates the bodily dimension of the computer game experience – based on the overarching thesis that computer game-play is a bodily founded and bodily savoured activity. Apart from the 'trivial' fact that the player needs a body in order to grasp the controller, the player also senses his body working through the visceral 'feel' of the game. Assuming a phenomenological and somaesthetic perspective, the book addresses the bodily experience of playing computer games, theoretically and analytically covering the spectrum from 'traditional' controller-based computer game experiences to ones that require 'full body' gestures. Simultaneously being bodily engaged in the game and reflectively aware of this engagement (a somatic experience and an experience of the somatic) is suggested as the aesthetic form that computer games rely on, as well as play with.

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