'Incremental speed increases excitement': Bodies, Space, Movement and Televisual Change

Seth Giddings & Helen W. Kennedy, University of the West of England

Abstract: The authors argue that both Pong in the mid 1970s and the Wii today have transformed the television set in dramatic ways that have captured the popular imagination. Through a series of case studies the authors pay close attention to the continuities and 'incremental' changes in everyday televisual culture. Informed by phenomenological approaches, they present a comparison between *Breakout* and *Wii Sports* to suggest that the short history of videogame "plesiovision" should be rethought. The Wii's genuine novelties are worthy of analysis in their own right, but also highlight the significance of kinaesthesia in popular technoculture, suggest ways of theorising and studying proprioceptive bodies (both human and nonhuman), across videogame culture and televisual history.

'Incremental speed increases excitement': Bodies, Space, Movement and Televisual Change

'incremental speed on volleys increases excitement … the screen actually becomes the playing field'
from a print advertisement for Atari's TV Pong system, c. 1976

1. Introduction

Both *Pong* in the mid 1970s and the Wii today have transformed the television set in dramatic ways that have captured the popular imagination. Even as the TV remote control unit continued to reshape the arrangement and activities of television viewing (viewers, the set, channels, choices, etc.) *Pong* was rearranging these bodies in more radical ways. To name but two simple, but significant, levels. Firstly these first domestic videogame consoles transformed television from tele-vision - the "far-seeing" of broadcast media - to an intense proximity of images and actions generated in the machine itself and the responses demanded of their players (plesiovision perhaps). Secondly, fingers and thumbs came into play, not through the intermittent pushing of buttons to change channels, but in a persistent, realtime flow of micromovements.

Pong promised the transformation of the television screen into a playing field, and delivered it: deceptively minimal but dynamic virtual physics generated across electronic and domestic space, across and between an assemblage of kinaesthetic bodies: the game code, the cathode ray screen, the swivelling buttons, fingers and feedback.

The physical gesture's relationship to virtual movement and action within Wii gameworlds is crucial of course and will be explored through case studies of participant observation of virtual and actual Wii play. The Wii promises a greater proximity, even a collapse, between virtual and actual movement; this essay will argue that we need to understand the underlying inseperability of these kinaesthetic worlds in the event of gameplay, whilst recognising the distinct and heterogenous character of the various bodies and dimensions that constitute it.

This essay will trace some of these transformations and will suggest some theoretical resources for their description. The physical gesture of parts of the human body is central to the Wii's appeal and its rearrangement of the everyday televisual world. So ideas from anthropology will be outlined to describe this embodied training and shaping of everyday movement.

From these beginnings, the article will move towards a phenomenological account of everyday digital technoculture that is attentive to the aesthetics and kinaesthetics of particular examples of Wii play. We hope that what follows will illuminate not only the Wii console but that which, we suggest, Wii play makes more visible, in the arrangements and deployments of bodies (human, software, media hardware, furniture) and therefore more available for analysis, elements relevant to gameplay more generally. This greater attention to the phenomenological experience of gameplay is not a reinscription of a humanist framework where the focus is the human 'playing subject' but will be worked 'at' in order to suggest a model that factors in both human and nonhuman bodies as both phenomenologically active and as 'playful objects'. In the examination of particular moments of gameplay we will be drawing attention to issues of spatiality in relation to the affordances of this particular console as well as raising issues that are concerned with corporeality of the ludoaesthetic *becomings* of Wii-play.

2. New and Old

To hold symposia on, and establish a special issue of a journal on, one particular consumer device, strongly suggests that we are interested in something new and distinct. Yet there are of course strong continuities as well as revolutions (the Wii was provisionally called the Nintendo Revolution in public during its development). Bart Simon notes the instrumental fantasies of the Wii as a family machine – and the connections with the marketing of early games consoles are clear. These systems were nearly always illustrated with smiling nuclear families or heterosexual couples – the suspect and delinquent video arcades brought home and made safe across the generations. In this sense the Wii, Pong, and other games consoles are thoroughly caught up in the historical-cultural trajectory of 'mobile privatisation' identified by Raymond Williams in relation to the increasingly domestic and private ways of life that attended the popularisation of the private car and the television set (Williams 1974).

More recently new media scholars have, as Lister et al point out, been quick 'to debunk excitement about new media technologies by pointing out how quickly these novelties become familiar to us and hence 'old'. Given the rapid adoption of, say, email or social networking sites, it could be argued that new media are already thoroughly assimilated into everday life and therefore no longer 'new', and therefore to attempt to analyse them as novel, revolutionary or transformational is mistaken' (Lister et al 2008). Drawing on Roger Silverstone's (1994) metaphor of television and everyday life as a fabric into which the new and the old, the established and the novel are woven, they suggest that this offers a challenge to the study of new media, not its forestalling: 'To pursue this textile metaphor, the fabric of everyday life is rapidly stitched back together after each new device or system tears it, and so to examine it we must unpick it again' (Lister et al 2008)

And yet there is a danger here of overlooking subtle and incremental changes in everyday televisual culture, of missing new pleasures and relationships that are no less significant for their mundanity and familiarity. Part of the concern of this article then to address the novelty of the Wii, or rather to address the notion of novelty itself within a digitally mediated everday life:

> it is important to note that being familiar with something does not necessarily mean that it is understood. Asserting the mundanity of television overlooks is the pervasive and

extremely influential hold the medium has had over the rhythms and spaces of everyday life, our knowledge of the world and the ways by which we interpret that knowledge. New media technologies lose their novelty but they don't disappear – it is perhaps precisely at the moment that they become banal and accepted that their full effects are realised [...] In debunking wild futurological claims, we should be careful not to miss the very real, ongoing, yet hard to grasp, transformations of everyday life. We might instead try to imagine everyday life *without* media change. For example, in a line from the television sitcom *Friends*, Joey exclaims "You don't have a TV? What do you point your furniture at?" (Lister et al 2008).

Domestic space was reorganised and lived differently with television, a now thoroughly quotidian and largely universal arrangement of communal domestic living space and furniture around the set and the ergonomics of relaxed bodies and lines of sight. At the very least videogame consoles have reorganised these arrangements perhaps sitting on the living room floor, and of course the Wii tells us every time we switch it on to move furniture back from the screen and away from the player's dimensions of movement (see also Flynn 2003).

The rhetoric of 'lean forward' media is very recent, but Pong players edged closer and closer to the plesiovision screen over thirty years ago, leaving the armchair and settee for floor cushions (see fig.x). In the intervening decades videogame consoles have continued to slightly, but significantly, rearrange domestic space around the TV set – furniture pulled forward to maximise the intense attention required of the videogame, or pushed back to make space for a more

suitable ergonomics of bean bags and cushions (Flynn 2003). With the Wii this rearrangement steps up a gear – the software itself warns the player to stand clear of furniture and objects, to anticipate the new dimensions of the playing field – an actualisation of the virtual space of the Wii games in the dimensions of movement demanded of the extension of the human body's limbs and joints.

3. Gesture

Bodies, parts of bodies, modes of attentions are being retrained. The Wii's central claim to novelty of course is in the embodied, gestural nature of play demanded of its players. Again, see Simon for the marketing campaigns that focus almost exclusively on players' movements rather than images of the gameworld itself. The nature, extent and significance of this kinaesthetic revolution in videogame play is discussed throughout the essays in this issue, but for now we want to raise two points about technology, bodies and change.

Firstly, the impact of media technological developments in both a popular technological imaginary and in their lived experience may be less to do with radically new media forms or experiences but may be as much to do with revisiting or rethinking established forms and practices. Claims for the Wii's difference from more established videogame technologies and modes of play, for instance, often centre on Wii-play's closeness to 'traditional', 'physical' play, thereby tapping into widespread anxieties about a contemporary media culture – particularly children's culture - that is seen to be increasingly lived indoors and in sedentary mediated spaces, rather than outdoors, unmediated and characterised by bodily movement and exercise. Thus the Wii might bring exercise and expression to the enclosed and mediated spaces of the home. At the time of writing it is impossible to buy the *Wii Fit* exercise software and hardware in the UK due to demand. Much has been made of the difference between the sitting position of the conventional gameplayers, their expressionless attention to the screen, and the micro-movements of thumbs on joysticks and buttons on the one hand and the exuberance and laughter of the flailing Wii player. To fully assess these claims for the Wii we would have to interrogate assumptions that there is such a phenomenon as unmediated play, a task that cannot be

undertaken in this article. However, we will offer some ways of rethinking firm distinctions between mediated and 'virtual' play with only ostensibly unmediated and 'actual' play.

Secondly then we might look to the human body and its everyday routine and unconscious actions and movements more generally. Writing in the 1930s, the anthropologist Marcel Mauss compared everyday and habitual movements and gestures from across the globe. Though his examples were often from pre-industrial societies, the language he used (of techniques, and the mechanics of the body) are suggestive for the study of the human-technological relationships of concern to us here in a digital technoculture. Mauss' object of study are 'physio-psycho-sociological assemblages of series of actions' (Mauss 1992: ??):

> Forceful movements: Pushing, pulling, lifting. Everyone knows what a back-heave is. It is an acquired technique, not just a series of movements.
> Throwing, upward or along the ground and so on; the way of holding the object to be thrown between the fingers is noteworthy and undergoes great variation.
> Holding. Holding between the teeth. Use of the toes, the armpit and so on.
> This study of mechanical movements has gotten off to a good start. It is the formation of mechanical "pairs of elements" with the body (Mauss 1992:??).

Mauss offers a mode of attention to technoculture as habitual, invisible, lived. He would not have used the term technoculture of course, but he is describing the cultural technics and techniques of everyday bodies and objects. A key difference between pre-industrial and post-industrial culture in this regard is perhaps only the variety and mutability of bodily techniques the latter demands of its denizens: in technologically complicated societies habits and embodied knowledges are often challenged and disrupted as we are faced with new devices and interfaces at home and work, learn to drive (then perhaps learn to drive a different car), as we gain competencies through experience and lose them through lack of practice or disease. Industrial and post-industrial cultures demand of their citizens gestures, movements, temporal and physical rhythms driven by nonhuman artefacts, from the honed efficiencies of the worker on the production line to the flying fingers of the typewriter and computer keyboard typist.

Videogame culture is a clear example of this; whilst over its three decades or so some conventions of buttons and stick movements, of interfaces and virtual camera angles, have sedimented, it demands that players perpetually upgrade their thumbs and reactions. David Sudnow's account of his fascination with, and acquisition of cognitive and motor competence in,

the 'microworlds' of domestic videogames in the early 1980s is a vivid document of the coming

together in play of body (parts), screen images and media technological change:

> Typewriter keys become infinitely multipurposed, the TV screen leaves behind the human drama it borrowed from our past to get into our homes, and biotechnical handicraft takes a giant step forward.
> The full sequencing, calibrating, caressing potentials of human hands now create sights, sounds and movements. And the eyes are free to watch, wonder, and direct from above, free to witness the spectacle and help the hands along without looking down (Sudnow 1983: 27).

Here again the question of technocultural newness arises. The novelty of the Wii interface and

the various modes with which the Wiimote and nunchuk must be wielded, the various techniques

players' bodies and perception must learn, assimilate and embody, whilst new now, will very

soon (and must already for early adopters and regular players) be second nature – their hands

will be calibrated and their eyes set free.

4. The proprioceptive gameplay event:

> [M]y body is not only an object among all objects, ... but an object which is sensitive to all the rest, which reverbates to all sounds, vibrates to all colours, and provides words with their primordial significance through the way in which it receives them' (Merleau Ponty)

Phenomenology offers conceptual resources for describing and theorising the relationships between bodily movement, cognition, perception, and cultural form. A phenomenological view of subjectivity understands the self to be formed proprioceptively, through daily, and mostly mundane, encounters with the world. Proprioception, particularly the model of proprioception used by Merleau-Ponty, is vital to an explication of bodily being in two ways: first, it shows that the relationship between the materiality of the body and our *knowledge* of the body is more complex than it might first appear. Second, understanding the body proprioceptively underscores the extent to which the body is an amalgam: not only matter and not wholly ideality, but found somewhere in the relation between the two.

> Proprioception is that process through which we apprehend and make sense of our own bodies; it is what enables the psyche to construct a unified and coherent body from the body's disparate parts. Proprioception creates a body from the fragmented, disjointed chaos of the body in bits and pieces. It is that *felt sense* that [we] have of [our] body, both as it relates to itself and to the world in which [our bodies are always] inescapably situated. At the level of the senses, proprioception is both a concatenation of the input that I receive from my sensory organs and something that exceeds my senses (Salamon, 2006).

In terms of everyday videogame culture, this allows us to consider the way in which the 'sense' we have of our corporeality in gameplay – I am 'being', I am 'doing', I am being done to – as well as the physical effects we experience during and after gameplay, are not insignificant or unimportant but are in central to understanding gameplay as an aesthetic and kinaesthetic event.

5. Diminished Amplification/Augmented Kinaesthesia

Before we explore some of these concepts and approaches through a case study of Wii play, we feel it is important to point out a key difference between the relationships of bodies in contemporary technoculture (particularly game culture) and those described and theorised by Mauss and Merleau-Ponty. We need to factor in the dynamic and animated nature of advanced technologies. These machines (both hardware and software) are also bodies in play and the human participants do not so much 'learn' or 'master' their techniques as collude with them. Here we take 'collusion' to mean the 'coming together in play' (see Giddings 2009). Movements, technics, and gestures are all experienced and effected by game hardware and software bodies as

well as human ones. The Wiimote is a kinaesthetic body, and more precisely, it is a proprioceptive body, in that to function it requires a sense of equilibrium and balance, of relationships between movement and rest, and (like other games controllers though to a greater degree) it has a sense of where various parts of the gameplay bodies are in relation to each other.

Let us illustrate this argument. One element of Wii gameplay that has already provoked much discussion amongst students and other participants in our play research has been the issue of what we might call diminished amplification. In previous collaborative research we argued that one of the most affective pleasures was the absurd amplification of tiny movements (of thumbs on analogue sticks) into vivid visual displays on the videogame screen (avatars spinning and leaping) (Giddings & Kennedy 2008). In *Wii Sports* however, the amplification is diminished in that in order to strike a tennis ball or bowl a ball or even 'tickle a nose' the human body is much more observably involved in the event, wildly gesticulating but triggering only a modest action on the screen.

There are two points to make here. The first is that whatever habitual and / or proprioceptive movements and experiences are in play here, they cannot be separated from the movements of the nonhuman players. A human arm traces a tennis swing, but in the virtual tennis of *Wii Sports* this movement is coded and processed, triggering algorhythmic operations that are by no means arbitrary but at the same time by no means a direct analogue in the virtual world of the actual movement. The human player must to some extent learn what movements and gestures the game might make. Thus the ostensible diminution of abitrariness of relationship between actual and virtual movement needs to be questioned (by any accomplished Wii player as well as by game scholars!). For instance in the Gamecube version of *Legend of Zelda: Twilight Princess*, Link's sword is swung by pressing the **A** button, whereas in the Wii version the remote is swung in a rough approximation to a sword swipe – and through experience the human player might work out whether a flick of the wrist will suffice. Early experience of playing *Wii Sports* often assumes some direct experience between sport experience and success in the game so an experienced golfer might expect to do well at *Wii golf* and might initially be quite successful when playing with other novices, yet very quickly the player most likely to win these games is not the experienced golfer, tennis player, bowler etc. but the adept Wii-player who has been inculcated

into the precise fine movements required to achieve a 'sweet stroke' which resemble only vaguely their actual world counterpart.

We will explore these observations through a case study. The account below is taken from a day-long informal research event in which members of the Play Research Group at the University of the West of England, postgraduate students and some family members played Wii games. The gameplay was recorded by two video cameras, one documenting the screen (the Wii was connected to a data projector) and one the movements of the players. The human players in this extract are Alex, aged 7, and Rune, a games researcher.

6. Case study: Wii Sports bowling

Alex crouches on the floor looking up at the screen, wiimote in hand. He works through the *WiiSports* menu for the ten-pin bowling game, selects a two-player configuration, then chooses a Mii for his avatar. Looking round to Rune, he asks 'Who do you want to be?'

> Rune: 'Who can I choose from? Can I be, er…, the guy with the moustache? He's Flipside yeah? He looks like a very nice man'.

Alex takes the first go. Using the direction pad on the wiimote he moves a red dotted line across the virtual bowling lane to establish the trajectory of his first ball. He swings his wiimote arm briskly high above his head, releasing the **B** button on the wiimote to send the virtual ball down the lane to knock over 8 pins. A second swing, undertaken with a similar efficiency, takes out one of the two remaining pins.

He passes the wiimote to Rune, with some instructions on its use:

> Alex: 'you press **A** and **B**, **A-B**. **B** is at the bottom. You press **A** and **B**. Then swing your arm, then let go…'

> Rune interjects: 'How do I change that red one? The line?'

> A: 'Ah, by using these'. He points to the direction pad.

> R: 'OK, so I can do *this*.

> A: 'Yeah'.

Alex runs through the button presses and movements again, swinging his arm swiftly up to a position around 11 o'clock, then describing an arc through to 3 o'clock as he speaks. His arm is almost straight throughout this movement but as it approaches the end he bends his elbow so that the end of the swing is marked by a nearly vertical forearm, index finger pointing upwards. The gesture (as measured on the timeline of the software used to edit the video footage), takes less than a second to perform. He repeats the gesture, but this time more to himself, rehearsing the movement, apparently thinking through his own technique.

Rune, limbering up with the wiimote, steps forward: 'OK, are you ready?' Alex steps back to give him room. Rune swings his wiimote arm, a slower and less pronounced swing, and he bends his knees, stooping and swinging his arm low in the manner of an experienced ten-pin bowler. It is immediately clear that this experienced, authentic movement is not wholly adequate for the virtual bowling alley. The ball glides in a gentle arc towards the left gutter, taking only three pins with it.

As he prepares for his next attempt, Alex leans over to offer suggestions on the use of the direction pad to improve Rune's bowling. As he points out 'It doesn't always go straight... it usually curves'. This latter observation is illustrated with a small hand gesture: Alex's hand and forearm are pushed forward and upward, describing a curve as if his hand were ascending a small hill or bump. This time Rune's ball follows a trajectory nearly identical to the last, heading towards the gap where the first three pins were knocked down. It is clear that it will hit none of the remaining pins.

Rune: 'Oh no…. oh no….'

His turn completed, Rune suggests that 'using curves' makes the ball travel more slowly.

Alex takes his turn, again employing his rapid arm swing that stops suddenly as the buttons / ball are released. The difference in movement of the two players is marked. Whereas Rune employs a

relatively slow, fluid movement in which his arm, legs and body are co-ordinated, Alex's torso and legs are fixed and only his arm moves, with a rapid and staccato gesture.

Alex dispatches his remaining two pins for a spare.

Rune seems more confident and determined for his next turn: 'Pay attention…. Are you ready?' Indeed, it looks promising as the ball heads down the centre of the lane. But at the last minute it again veers to the left, again just clipping a few outside pins.

Alex jumps down from his chair and again demonstrates *his* swing technique, again apparently as much to himself – he doesn't ask or look for Rune's attention. He seems to be analysing Rune's failure through his own embodied rather than strictly cognitive or strategic approach. This is clear as he offers advice to Rune: 'make it go more faster… and slower… is how you move it… how you move your arm, how fast you move your arm… like a real bowler'. As Alex is speaking Rune takes his turn, this time effecting a gesture somewhere between his initial movement and Alex's style. The ball moves more rapidly down the lane, initially at least heading straight.

Rune's ball again veers left, but much later this time, avoiding the gutter but unfortunately slipping through the gap in the pins left by his last bowl.

What can we take from this account? On replaying the video, many hand and body gestures are evident, not only in the players, but in the animated conversations taking place in the room behind them. The gestures that Alex and Rune deploy however have a more pressing and instrumental role than those inflect and emphasise conversation; everyday non-verbal communication. Alex's rehearsals of his gestures at times offer precise instruction to Rune, at times they help Alex himself to focus his attention on his own bodily techniques, to bring the unthought and embodied into conscious reflection – here for communicative and pedagogic purposes.

More importantly for this discussion though is the way in which lived corporeal experience of actual gestures and movements are articulated with, or challenged by, the gestures and movements anticipated and necessitated by the machines, and the virtual gestures and movements presented on screen that are generated by these virtual-actual bodily relationships. To illustrate this, let us compare Alex and Rune's Wii bowling techniques. As noted above, much is made of the proximity of the playing of *Wii sports* to the playing of the actual games they depict, but these two players demonstrate a level of mediation or simulation that belies such assumptions. Rune, who is familiar with actual ten-pin bowling, deploys this embodied experience in a smooth movement of his whole body, his arm swinging at one with a step and stoop forwards as if to release the ball close to the lane surface. When we first played *Wii Bowling* we found the swing very confusing as the game collapses the avatar's body's forward movement into the arm's swing. That is, the player swings his or her arm both to swing the avatar's arm and propel them forwards. An efficient and satisfying gameplay mechanic once accomplished, but quite different from actual bowling. Alex, unemcumbered by actual experience of a bowling alley, has learnt from the Wii game itself what types and range of movement are recognised as significant and is thus free from the redundant movements of actual bowling. This said, the realist claims of the game are compelling and cannot be simply disregarded – Alex for example states clearly that his technique is like 'real bowling', whereas once the arm-swing-step-forward maneouvre was accomplished, other players experimented with wrist movements to put virtual spin on the ball.

At other points in this day of play research the degrees of arbitrariness and redundancy of actual movements and gestures were explored and experimented with. Ben for instance tried standing with his back to the screen and sensor bar and 'bowled' by swinging his arm up and over his head, effectively turning the bowling movement upside down. This resulted in a successful launching of the ball, though unsurprisingly it proved difficult to control the direction and speed of the ball. Thus, whilst the Wii bodies (wiimote, sensor bar, console and software) evidently did not map space and movement as human bodies do (being unconcerned about the vertical orientation of the bowling gesture for example), they do, in their anthropomorphic anticipation

of particular preferred movements and gestures in space, couple with these preferred gestures to collude in a pleasurable gameplay event.

Thus, sporting imagery and interface aside, this is a technics of media engagement, and computer media at that. The player's body is trained by the computer hardware and software to provide the precise input that will trigger success, higher points, progression to the next level, etc. On this level there is no difference between Wii play and other forms of videogame play. All videogames train minds and bodies in how they must be played, whether these bodies are arms or thumbs.

7. The Virtual/Material of Bodies in Space

So far we have been careful not to talk in terms of clear and fixed distinctions between either the virtual and actual spaces of play or between clear and fixed objects and subjects in play. Phenomenology suggests some ways of thinking about how Wii games demand particular modes of bodily perception and proprioception that go beyond the limits of any idea of a contained 'subject' separate from a defined 'game object'. The playing body does not end at the skin but is extended into the space in front of and the space beyond the screen. The game itself is not contained by the edges of the screen but appears to spill out to fill an imagined but experientially real space between the screen and the player's body. This was demonstrated very vividly during early sessions playing Wii Bowling – as a participant walked across the space in front of the player about to bowl two things happened simultaneously; he felt it necessary to apologise for getting in the way of the ball and also felt at risk of being hit by the 'ball'. These momentary (and usually early) experiences of spatial and *boundary* confusions are arguably lost to us as players once we adjust to the expectations, demands and affordances of the apparatus and particular games.

It is important not to dismiss this as a mere mistake or as inexperience however. It indicates a profound inter-relationship between media technologies, images and human perception. Vivian Sobchack's phenomenological studies of cinema viewing offer an elegant theorisation of the sensuality of media events that at once provide rich concepts for videogame studies, and undermine commonsense distinctions between virtual and actual, media and viewer, onscreen and offscreen:

> The cinesthetic subject both touches and is touched by the screen – able to commute seeing to touching and back again without a thought and, through sensual and cross-modal activity, able to experience the movie as both here and there rather than clearly locating the site of cinematic experience as onscreen and offscreen.

For us, Sobchack's identification of 'the ambivalence and confusion ' of our sense at the movies of having both a 'real' (or literal) sensual experience and an 'as if real' (or figural) sensual experience (Sobchack 2004), resonates strongly with the embodied ambivalence of virtual and actual play in the Wii bowling alley.

The distribution of affect, agency and gestural and visceral response to and through gameplay is evident in many events of play. In research on children and Wii play we observed a kind of 'sympathetic kinaesthesia', where the children using the wiimotes were often joined in their arm-waving and jumping by their friends. Strictly speaking these movements were redundant, but they indicate a rippling out of kinaesthetic compulsion and pleasure from the game circuit to a ludically charged domestic space. Also drawing on phenomenological approaches, Melanie Swalwell calls this 'accentuated impulsion', and provides some examples from gameplay events. She writes of the players' and *viewers'* kinaethetic response to the movement of the avatars and game vehicles:

> At the start of *Grand Prix Legends*, John insisted I put his headphones on. Featuring classic vehicles from 1967, the sound of twelve Ferrari engines warming up (actually *screaming* is more accurate) on the grid was exhilarating and intensely visceral. I thought that I was beginning to appreciate some of the aesthetic pleasures of gaming. Then the race began and I found my body starting to move involuntarily in response to the fuel-rich sounds of 'my' car's engine, anticipating and responding to its gear changes. This was a surprise to me; I hadn't *meant* to do anything [...] watching him play I became aware of a tension in myself, a kind of holding-on feeling, a willing the avatar to make the next (unlikely looking) leap – which it usually did- an anticipation of this in my body' (Swalwell, 2008).

8. Purchase, Pressure & Pleasure in Kinaesthetic Experience

Whilst clearly signalling an increased repertoire of kinaesthetic experiences on the part of the player, our research so far has highlighted a number of issues that need further investigation. The clumsiness of the playing body is more visible as it struggles to adapt to the changing demands of the game. This is very much in evidence with *Wario Ware: Smooth Moves*, a game that

demands we regularly and quickly change our bodily orientation towards the game (this is indeed a key part of the challenge).

Earlier we noted the subtle shifting of relationships between furniture, human bodies, lines of sight and media technologies that have reshaped domestic media space as television vies with the plesiovision of the games console. The very necessity of standing for many of the Wii games puts human bodies and parts of bodies into different relationships with the screen. While seated, more of the body has purchase against other objects (the seat cushion, back, the back of the legs as they rest or press against the seat), the floor. What was apparent was how much these other surfaces matter in translating the movements on screen through the body and anchoring or steadying the body in response to giddy moments of intense participation. Our bodies felt more vulnerable (more 'in play' as well as 'at play') in relation to the demands of the game. On the one hand this rendered our bodies more 'visible' or perceptible in the moment of play, whilst on the other it closely implicated our bodies, and our perception of our bodies, in any particular gameplay successes or failures. At times we experienced embarassment, even shame at being clumsy, our clumsiness writ large through the play, and this recalled the pleasure of the sensation of tiny fine (if at times jerky) movements being translated into smooth amplified accelerations through space.

9. Plesiovisual kinaesthesia

Whilst the corporeal exuberance of some Wii play has been favourably compared to the apparent statis of conventional videogame play, we might – drawing on Mauss's insights above – instead think about what the mechanics and pleasures of such movements as there are in conventional games. Again, habit, competence and familiarity render the movement of thumbs on controllers below attention, beneath consciousness. But these movements – whilst minute – are, as *Pong* advertisements loudly proclaimed, radically different from established television use. Sudnow's book offers vivid examples of the kinaesthesia of pre-Wii videogame play. Though the bodily movements required by a game such as *Breakout* (primarily the turning of a dial between thumb

and index finger) or *Missile Defense* (a trackball and set of buttons) were minimal by Wii standards, and as such might simply be regarded as further evidence of the Wii's revolution, Sudnow's account tells a different story:

> I smoothly swept right beneath their paths without stopping the cursor, firing en passant. When my placement and rhythm were together, as my missiles got to where the cursor had been when I'd pushed the button, theirs were there too. It was a panning action with several little articulations along the way, the hands in synchrony, one wiping past while the other inserted punctuations. As you watch the cursor move, your look appreciates the sight with thumbs in mind, and the joystick-button box feels like a genuine implement of action. *Bam*, *bam*, *bam*, got you three right in your tracks… (Sudnow 1983: 21-22).

10. Conclusion

This recalls our earlier discussion of both habitual gestures *and* newness in everyday media technoculture. Firstly, for example, Sudnow frequently compares his struggles with these games with his experience as a piano player. Without labouring the comparison we might point out the centrality of digital dexterity and habitual gesture in both these entertainment technocultural activities. Secondly, Sudnow's is a rare account of the training of the body by a new technology. Rare perhaps because the moment at which a new user might reflect on their recent process of learning the demands of their part of a new technocultural assemblage (for example, from TV remote controls to computer mice to rumble packs and analogue joysticks to stylii and touch screens) is the moment at which that process and that assemblage cease to be visible and novel, at which they cease to be *perceptible*. His struggle to assimilate the - initially at least - unintuitive relationship between the circular movement of the console dial and its transposition into the lateral movement of *Breakout*'s virtual bat resonates strongly with the Wii-bowler's collapsed arm-swing-and-step-forward. Initially these actual and virtual physics jar and confuse, but are soon naturalised and embodied. Just as the Wiimote is currently training millions in its proprioceptive regime, so in the 1980s a generation of bodies was configured to develop new micro-movements and to collude in virtual and actual movement and gestures: paddles, blocks, eyes, fingers; and virtual and actual acceleration, collisions and trajectories.

Whilst attention to the history of televisual change and everyday life may be used to debunk the revolutionary claims for new devices and gestures such as the Wii, we would shift the

argument. A comparison between *Breakout* and *Wii Sports* suggests both that the short history of videogame plesiovision should be rethought. The Wii's genuine novelties are worthy of analysis in their own right, but also highlight the significance of kinaesthesia in popular technoculture, suggest ways of theorising and studying proprioceptive bodies (both human and nonhuman), across videogame culture and televisual history.

References

Douglas, J. Yellowless & Hargadon, Andrew (2004) "The Pleasures of Immersion and Interaction: Schemas, Scripts and the Fifth Business" in Noah Wardrip-Fruin and Pat Harrigan eds, *First Person: New Media as Story, Performance and Game* Cambridge, MA and London: MIT Press

Eagleton, Terry. (1990) *The Ideology of the Aesthetic.* Oxford: Blackwell.

Flynn, Bernadette 2003, Geography of the digital hearth, *Information, Communication and Society*, 6(4), pp 551-576

Gibson, J J (1950) *The Perception of the Visual World* London: George Allen & Unwin

Gibson, J J (1979) *The Ecological Approach to Visual Perception* London: Houghton: Mifflin

Giddings, Seth (2009) Events and Collusions: a glossary for the microethnography of video game play *Games and Culture* April 4(2).

Giddings S & Kennedy H W 'Little Jesuses & Fuck-Off Robots': aesthetics, cybernetics, and not being very good at Lego Star Wars' (2008) in M Swalwell & J Wilson eds *The Pleasures of Computer Gaming: Essays on Cultural History, Theory and Aesthetics* New York: McFarland & Co.

Green Eileen, Adams Alison eds (2001) *Virtual Gender: Technology, Consumption, and Identity* London: Routledge

Haraway, Donna (1991) Simians, Cyborgs, and Women: The Reinvention of Women New York: Routledge

Hayles, N. K. (1999) *How We Became Posthuman. Virtual Bodies in Cybernetics, Literature and Informatics*. Chicago and London: University of Chicago Press.

Lahti, Martti. (2003) "As We Become Machines: Corporealized Pleasures in Video Games." *The Video Game Theory Reader.* Ed. Mark J. P. Wolf and Bernard Perron. New York: Routledge, 157-70.

Lister, Martin, Dovey, Jon, Giddings, Seth, Grant, Iain & Kelly, Kieran 2009, *New Media: a critical introduction*(2nd edition), London: Routledge

Mauss, Marcel 1992 [1934] Techniques of the body, in Crary, Jonathan and Sanford Kwinter (eds.). *Incorporations* (Zone 6). Zone Books: MIT Press

Salamon, Gayle (2006) "The Place Where Life Hides Away" *Differences* (17) 2 96 -112.

Silverstone, Roger 1994, *Television and Everyday Life*, London: Routledge

Simon, Bart 2008, Wii are out of control: bodies, spaces and the not-at-all virtually real,

Sudnow, David 1983 *Pilgrim in the Microworld: eye, mind and the essence of video skill*, London: Heinemann.

Swalwell, Melanie 2008, Movement and kinaesthetic responsiveness: a neglected pleasure, in Melanie Swalwell and Jason Wilson (eds) *The Pleasures of Computer Gaming: essays on cultural history, theory and aesthetics*, NY: McFarland

Taussig, M (1993) *Mimesis and Alterity: A Particular History of the Senses* London: Routledge

Williams, Raymond 1974 *Television: technology and cultural form*, London: Fontana