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Aesthetic Form in the Computer Game

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This paper tries to clarify the place of the handheld controller in computer game aesthetics. It starts from the premise that aesthetic form, perhaps the central category of modernist critical theory, is present in our play with computer games. The central argument is that controllers and our use of them are repressed in gameplay and that this repression facilitates a diversion of the player's energy that helps explain the compulsive nature of good games. Our sense of participation in events in game fiction is bought at the price of a loss of interest in our hands. The smooth integration of players into the rough, faltering world of gameplay is made possible by an excess of energy that passes from the unacknowledged tension in the hand into the imaginary relation we have with on-screen action.

Keywords: *controller; hand; Focillon; Benjamin; form*

This article investigates the central place of the controller in the aesthetics of play with computer games. Drawing on ideas from Henri Focillon, Walter Benjamin, Susan Buck-Morss, and Henri Lefebvre, I argue that full exploration of the kinds of ''synthetic reality'' (Benjamin, in Buck-Morss, 1991) that are associated with the computer game as a form requires that we look at the role of the hand in connection with the computer game system as instrument, analogous with traditional, musical instruments. I begin by exploring what aesthetic form is in this context and why it matters. The ''Hands and Touch'' section explores the applicability of Focillon's ideas about hands in artistic creation to play with computer games, which leads, in the ''Controllers'' section, to detailed reflection on what we actually do with controllers. The section ''Embodied Activity and Culture'' is related to the idea that one context for understanding computer games as a cultural phenomenon may be Benjamin's argument that we can classify cultural forms with reference to the demands they make on the human body. This points toward an analogy between complex play with

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controllers and dance as an aesthetic medium. In conclusion, I suggest that understanding controllers in relation to aesthetic form and the potentially revelatory and revolutionary implications of the latter is suggestive for future developments of the medium.

Why Aesthetic Form?

Form is a problematic concept in aesthetic theory. Adorno's use of the idea sometimes verges on circularity. He defines it 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. Its ''magic spark,'' present in the artwork, is the promise of something better; irreducibly ideational yet completely inseparable from the material relation of shape, line, and color to sense and to feeling. Viewed in this way, form is integral to the historical dialectic, wherever there are humans trying to do something more than just surviving (perhaps the whole idea of form is that humans are always trying to do something more than surviving, even when we have run out of reasons or meanings). Adorno (1966/2002) makes the idea central to his masterpiece, *Aesthetic Theory*. In that book I think he tries to build bridges between his own mature theory and ideas his friend Walter Benjamin put forward decades earlier about the new media of the 1920s and 1930s; ideas he had, at the time, rejected. Hence, Adorno is much more open in his later work to the notion that form need not be tied to privileged cultural forms (''art''), but could migrate to other locations in the culture. Benjamin had written of the decline in art's ''auratic'' appeal: In the age of easy reproduction, the things that make art magical, get dispersed and constitute a diffuse set of energies at large within the social field. At the time Adorno seems to have disliked the implications of this because of the implicit endorsement of a vulgarized cultural politics—for this reason he disliked the influence of Brecht on his friend's work. But in *Aesthetic Theory* Adorno shifts the emphasis in his theory to include the vulgar, the mass, and the popular.[1] Adorno writes that the dialectic of technique and materials in art, '' . . . should not be conceived as absolute. It originated historically and can pass. In electronics it is already possible to produce artistically by manipulating means that originated extra-aesthetically'' (Adorno, 2002, p. 33). The category of form is central to this shift of emphasis; it is what persists across the different manifestations of artistic technique and the changes of material.

Notwithstanding these ideas, elsewhere in aesthetic theory at this time, the idea of form was under attack (Morris, 1993). With the rise of conceptual art in the 1960s, aesthetic form lost its centrality in art criticism. Instead of working on our senses to stimulate a feeling response, artworks were now concerned with the direct communication of ideas. According to Scott Lash and Celia Lury (2007), in conceptual art of this period, ''the ideational space of a horizontal vector connecting the subject and

object'' gets substituted for ''the material space of the painting'' (p. 68). When confronted with conceptual art installations, for example, we are no longer drawn into the work by our senses, but experience it as an event, a temporal field that communicates its meaning(s) as ideas. Perhaps in part because of this, and the proliferation of media over the past 40 years, many have seen Benjamin's ideas as particularly useful to understand contemporary art and culture.

In Benjamin's analysis the artwork has aura, a cultic property it inherits from ritual and sacred objects. A series of paradoxes are in play here. The artwork is something we experience intimately, yet it is alien and other, it is immediately accessible, yet, it poses a challenge of comprehension and interpretation; the works are artificial, yet the illusions they offer tend to efface their created character. Auratic objects—art objects—possess aura as a result of these tensions. This idea involves terms that are more psychological and perhaps more straightforwardly materialistic than the concept of form. However, there are clear affinities between the two sets of ideas. Both concern the response that is excited by the encounter with an artwork. The series of tensions or vital oppositions that lie within the auratic work are entirely of a piece with Kant's (1795/1960) analysis of form, for example. In both cases there is an oscillation, at once puzzling and pleasurable, to be played out. And play here is no mere metaphor, as both Kant and Adorno emphasize that real physical play, including fun and laughter, is integral to the experience of aesthetic form (Kirkpatrick, 2007). The idea that form might migrate to unexpected areas of culture must be attributed to Benjamin. For him, the aura of the artwork is in a state of decay in the modern era and its energies are dissipated, dispersed within the social field. These energies remain on the boundary of the tangible and the magical, the inert and the vital.

Critical theorists concur, then, in assigning significance to an excess, a ''more'' than the world of empirical science and in identifying this with various radical potentials which, although elusive and inherently unmeasurable, are essentially human, being linked to utopia and to hope (Feenberg, 2002, p. 33). If this *more* resists summation in language and that's why we need/have art, it remains integral to the historical process and its history is the history of form. In Adorno's work the idea is carried through history by the idea of a non-self-identical subjectivity. Splits and resistances in the structure of the human individual, as this is variously manifested and lived in the historical process, create openings for form and it is inherently associated with the dynamism of history, underlying human restiveness, inventiveness, and the questioning that makes history something more than an extension of biological evolutionary processes. For Adorno, dialectics incorporates form in a way that conventional methodologies cannot because dialectics embrace the instability, the dynamism, and the challenge that form presents. In Benjamin's thought, however, the critical notion of excess gets fused with a Messianic conception of history. According to this vision, history is not one temporal process with a single logic, however convoluted, but can involve the interplay of alternate temporalities, including disjunctures, eruptions, and

breaks in which mundane reality can become infused with flashes of energy drawn from a radically different, parallel temporality. Buck-Morss (1991) characterizes this messianic vision in terms of a utopian collective remembering,

> Collective imagination mobilizes its powers for a revolutionary break from the recent past by evoking a cultural memory reservoir of myths and utopian symbols from a more distant ur-past. Utopian imagination thus cuts across the continuum of technology's historical development as the possibility of revolutionary rupture. (p. 116)

A key influence on Benjamin here, as Pierre Missac suggests (1995, p. 115) is Henri Focillon's notion of form as residing in a different temporality; a kind of *ur*-history. The appeal of Focillon's theory is that it focuses on and elaborates some of the specificities of this critical theory of form that are most relevant to the computer game and the experiences it makes possible. Whereas Benjamin and Adorno set the scene in terms of their ideas about perception, space, play, and technology, Focillon points us toward the active role of the human hand in the history of form.

Hands and Touch

The controller occupies a paradoxical position in computer game studies. Although it is central to gameplay experience—it marks physically the difference between play with a game and merely watching a screen—it goes largely unreflected on by gamers and in gaming literature. Although other aspects of gaming paraphernalia, not only graphics cards but also limited edition colored consoles and other fetishized hardware, are intensively discussed, controllers rarely receive our attention. There are exceptions to this, of course. There has been a lot of gamer discussion of and interest in the Wii-mote device; Guitar Hero has a guitar-shaped controller, and a ''chainsaw'' controller was designed especially for Resident Evil 4 on the Gamecube. The difference is that other features of gaming and game design are routinely considered in things like game reviews, as varying with each game, whereas the controller tends to be bracketed as a constant of the hardware. Yet the controller is not just hardware nor is it software and it is also not straightforwardly a transmitter of player intentions in the game. It is the most concentrated intersection of these, the key elements in gaming. This makes it curious that the details of how this happens—what each game feels like in the hand, so to speak—is so rarely a matter for reflection.[2] It is perhaps even integral to contemporary computer-game experience that we do not rationalize our actions with direct reference to controllers. No one talks about pressing ''X'', then ''O'', then ''Δ'', and no one feels that this is what they are doing, unless they are bored with the game, following a ''walk through'', or using a cheat for the first time. To play the game we have to act without thinking at this level of effective implementation. Good play is about feeling, and being able to feel what we are supposed to be feeling is,

at least partly, a function of *not* looking at or thinking about our hands. At the same time, it is powerfully determined by what we do with them.

The relationship between hands and aesthetic experience is discussed by Henri Focillon in his *Life of Forms in Art* (1934/1992). Focillon places the artist's ''touch'' at the centre of artistic creativity,

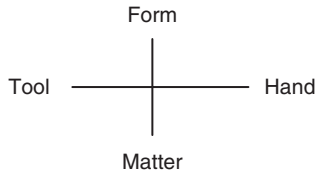
> The sense of touch fills nature with mysterious forces. Without it, nature is like the pleasant landscapes of the magic lantern, slight, flat and chimerical ... Without hands there is no geometry, for we need straight lines and circles to speculate on the properties of extension. Before he could recognize pyramids, cones and spirals in shells and crystals, was it not essential that man should first ''play with'' regular forms in the air and on the sand? (p. 163)

Direct, physical contact with matter enables the artist to create form. In this process matter is shaped and through this a new experience of space is created. As Henri Lefebvre points out, space is not a neutral datum unaffected by human activities, but rather a plastic variable experienced differently depending on aspects of the organization of our activity: ''Organised gestures, which is to say ritualized and codified gestures are not simply performed in 'physical' space, in the space of bodies. Bodies themselves generate spaces, which are produced by and for their gestures'' (Lefebvre, 1991, p. 216). Similarly, for Focillon (1934/1992), form and matter come into being together. Form is not be found anywhere without matter. And when it comes into being, it defines an experience of space,

> We must never think of forms, in their different states, as simply suspended in some remote, abstract zone, above the earth and above man. They mingle with life, whence they come; they translate into space certain movements of the mind. (p. 60)

Form is a kind of extrusion of preconscious mental content, of that level within the mind that is below conscious experience. Like Benjamin after him, Focillon seems to envisage a kind of collective unconscious that unfolds according to an infrahistorical logic, outside of yet parallel to biological evolutionary processes, which occasionally explodes into history and is often associated with a new direction in the arts or in culture. Benjamin's idea of a dialectical image that bursts the limits of the present with rays of a forgotten past is informed by a similar idea (Missac, 1995). When this dimension of mind is extruded and so enters chronological time, the result is aesthetic creation—the imposition of form on matter. To understand how this works, Focillon (1934/1992) urges us to follow closely the technique of the artist. As a painter paints, or as a pianist plays, he argues, we can discern a force greater than their own creative conceit, it is ''the very technique of the life of forms itself, its own biological development'' (p. 105). Focillon argues that the elements involved here—the hand of the artist, the tools, the material, and the form itself—cannot be understood

Figure 1
Focillon and the Role of "Touch" in Making Form From Matter and Space



independently of one another. In a sense, form *is* the coming together of these forces in an object or performance. At their point of intersection is "the touch" of the artist.

> The touch ... conceal[s] what it has done: it becomes hidden and quiescent. But, underneath any hard and fast continuity as, for example, a glaze in a painting, we must and can always detect it. Then it is that a work of art regains its precious living quality. It becomes an entity, well organized in all its parts, solid and inseparable. (p. 110)

In making itself invisible, the hand endows the creations with a seeming permanence and solidity—a sheen or appearance of independent life. Focillon concludes that "touch is structure" (p. 110) (Figure 1).

Focillon's model assigns a privileged role to the artist. However, informationalism and digital culture have been associated with a more creative role for consumers and players in determining what cultural objects will be (Dovey & Kennedy, 2006; Lash & Lury, 2007). Describing the way players repeat actions over and over to achieve desired performance in a particular gaming sequence, Dovey and Kennedy (2006) make an explicit connection with music and sports.

> No other kind of cultural consumption requires this kind of repetition. Instead we find it in cultural activities where musicians or sports players are called upon time and again to repeat actions in order to achieve a preferred performance or a kind of virtuosity. (p. 116)

To fully experience form in a game we have to play well. In improving our ability to play we also come to a better understanding of the game and, just as in performance theory, there are distinctions to be drawn here. In music criticism, for example, the virtuoso is instrumental in his or her play; they are perfectly efficient (Scholes, 1970). But the term is often used ironically to suggest that the excellence is a bit empty, in particular, virtuosity is contrasted with interpretive play. Great performers relate to the form they are given and bring it to life, rather than just playing through it. This is why they can be as important as the composer to realizing the potential in the piece.[3]

An adequate player of Resident Evil 4, for example, will be aware of various intersecting labyrinths in the game and derive pleasure from steering their character through them. Rapid exploration of the game, according to its logic of discovery, generates a feeling of coherence and a pleasing sense of closing the temporal gap between, on one side, the many deaths and re-tries of playing and, on the other, the time of the game fiction. These sensations are only dimly perceived by the poorer player, who loses the thread of the story and gets lost in the labyrinth, when he sees the same hallways and corridors as before. These elements, of repetition, labyrinthine circularity, and rapid movement are moments in computer game form, in Focillon's terms, and are found in many, narratively defined, genres of computer game. They are produced in the tension described here between, on one side, movement of the hands to wring something out of the dark matter of the computer and, on the other, feelings of exhilaration and of pleasure associated with the game as a kind of spectacle. Moreover, as discussion of the game in many online forums shows, each player experiments and finds her own way through.

Controllers

Game controllers allow us to experience form in gameplay. The controller transmits the player's intentions into the game and is correspondingly understood as an ''input'' device. However, maneuvering through a labyrinth on the screen always involves digits pressing and muscles and tendons straining. A complex and dynamic forcefield is established in the palm, wrapped around the controller, and it is changes of pressure and tension here that help to determine what happens in the game. Grodal (2003) may be on to something when he argues that this originates in an, as yet undiscovered, neurophysical correspondence between contemporary cultural forms and our Neolithic hardwiring. It corresponds to the notion of an infrahistorical, or *ur*-game, an underlying force that precedes even the biological; is a kind of in-itself of biological phenomena. Form in this sense cannot be grasped by inductive processes or experimental research but is real nonetheless. It seems to have been something like this that Benjamin (1979) had in mind when he wrote of ''languages issuing from matter'' (p. 122). Focillon (1934/1992) calls the active principle here *mitosis*, the movement of form beneath the surfaces of history:

> In the same way that sand spread out on the diaphragm of a violin would fall into different symmetrical figures in response to the strokes of a bow, so does a *secret principle*, stronger and more rigorous than any possible creative conceit, summon together forms that multiply by mitosis, by change of key or by affinity. (p. 48)

The tensions in the hand are shifting and if we recorded the movements of fingers and thumbs against the plastic buttons we would find a kind of crystalline

representation of game action. In a sense, the important forces that drive the action of the on-screen game fiction are present in the tension between fingers, thumbs, and plastic controller. There is a formal continuity between the configuration of digits and the structured, dynamic action sequences in the program and on the screen—sequences that Ian Bogost calls ''unit operations'' (Bogost, 2006). Unit operations are programmed objects that correspond to chunks of activity we encounter as users of a system at its human interface.

The controller and its resistances are those of the game and its objects, compared with the screen image they are commonly a miniaturized and condensed instantiation of the game program.[4] Play involves exploring and altering the field of tension. When Steven Poole (2000) writes that the physical skills learned in the playing of ancient, spear-throwing games are ''exactly those skills exercised by modern target videogames'' (p. 174), he is obviously wrong, in the sense that throwing a spear is not the same action as holding down the ''B'' button on a controller, but he also conveys an important truth about controllers. Something of the experience of throwing a javelin—its tensions in the body, its discipline, its conscious manipulation of weight and energies—gets condensed into the hand. This is, perhaps, best understood as the form of the action.

The same forms are present when we play using a Wii-mote. The first feeling triggered by the Wii-mote is one of vertigo, because the tensions of play are not contained within the hand any longer. Some (not all) of the actions we have to do to play the game no longer have the controller to refer to, so to speak, and instead must occupy the empty space of the room we are in. We use more (a greater part) of our bodies to trace out the formal patterns that have to be enacted if we are to play the game but whereas traditional controllers involve a kind of condensation of the formal properties of the game in miniature, the Wii-mote generally makes the forms bigger, but more abstract. This change in the phenomenology of controller use corresponds to the shift Don Ihde detects in the move from analogue to digital clocks. The conventional clock with hands communicates with us by establishing a kind of tension between the clock face, which represents blank, empty time, and the hands whose current positions signify only with the face as a background. The position of the hands is our position relative to time as a whole. When we move to digital clocks, which present us with a numeric representation of time, time loses some of its concreteness and becomes more abstract: digital clocks only tell us the time it is now, removing the current instant from any context. Ihde (1990, p. 68) links this to the historical trajectory of technology itself, which moves us towards increased detachment and decontextualization of information (see Feenberg, 2002). Driving a car with a digital speed display produces a similarly frictionless sense of speed, because the tension between the needle and the background, which here represents stillness, is no longer present and speed becomes more abstract. However, this doesn't change their fundamental character as forms because spinning one's arm when holding a Wii-mote (to ''serve'' in tennis perhaps) makes the same kind of pattern we would make with our thumbs

using a lever on a traditional controller, only now it is drawn out in empty space rather than against the resistance of a physical object.

Why, then, do we find such lack of reflection on controllers as compared with other aspects of the computer game interface (story, graphics, etc.) in the popular and scholarly literature that surrounds the medium? It is in the silencing of the controller that we construct the boundary between ordinary experience and the illusion we enter when we relate to screen imagery and other game feedback ''as if'' they constituted an environment or immersive world for play. Players initially learn to use a controller in connection with a specific game, finding out what each button does, learning about special moves, and so on. To be a gamer is to have acquired these experiences and learning generic properties of the controller is an important part of the transition from (casual, or new) player to gamer. When we feel we have learned enough of the controller syntax in this way—its basic terms and grammar—we try to speak for ourselves. This goes together with a clarification of game limits and rules; what perhaps seemed, on the basis of visual resemblances, to be a powerful simulation of experiential domains familiar from other contexts, turns out to have highly distinctive parameters. In learning how to play in this way, a process that is akin to learning to play any other game, or learning to do a new job, we can move closer to an appreciation of the forms available in the game program—its constitutive, unit operations.

In some games we are told quite early on to look again at the controller and when we do this it feels different than when we initially picked it up. An image of the controller appears on the screen and we look at our own hands as if from a new distance. This moment of alienation is important because it highlights the notion mentioned above, that we must sense the discrepancy between our ''real'' actions and their translation into action ''in'' the game. The sense of this and its subsequent repression constitute a central dynamic of computer gameplay, sometimes discussed as entering its ''magic circle'' (Huizinga, 1955), and is particularly visible in some of the best and most discussed elements of contemporary computer games. To resume the example used earlier, in Resident Evil 4 there are several crucial moments in the game when an image of the green button on the controller appears on the game screen,[5] with an arrow indicating that it must be pressed now. Events in the game move very rapidly in these moments and success turns on doing several other things besides just pressing the button rapidly, such as steering to avoid a boulder, to swim in a certain direction, or to aim a weapon.

When it happens the first time this eruption of a representation of the controller onto the screen is very amusing. The rapidity of game events means that we nearly always ''die'' while the button flashes on the screen in front of us, but events have taken an unexpectedly comical turn. While previously we have been intently focused on progressing through the game scenario, the appearance of the button and the sudden quickening of events seem to conspire to produce a sense of ridiculousness. In the midst of playing the game, especially serious games with adult content, like Resident Evil 4, we are suddenly offered the spectacle of our own activity as

something childish. We see ourselves pressing a brightly colored plastic button on an infantile toy. The image of the controller here bursts onto the screen as a symbol of toys and toy-ness, a shocking reminder perhaps of the same impulses that made us want to play when we were children. These seem to be completely out of place when we are engaged in a repetitive, cyclical struggle for existence with an adult game (the game has a ''15'' rating in the United Kingdom). The laughter has an element of nervousness in it, perhaps reflecting the fact that normally when we laugh at someone's childishness we are in fact offering a corrective to their behavior, a point made by Henri Bergson (1940/2007) in his theory of the comic.

For Bergson, we become comical when our actions resemble those of a machine. Automatic or memorized parts of behavior, perhaps the parts we do with least thought, are the parts of character that get seized on by satirists for this reason; they are the things we repeat because we are most sure of ourselves in them, but they hover over the space of ridicule. Laughter here, as elsewhere, includes a disciplinary component for Bergson, because it tells people when they are being ridiculous and ridicule is supposedly corrective. All these properties are clearly present in connection with most computer games. There, we identify with animated characters and we assume a playful role. When we ''die'' in the game and throw our controllers across the room in frustration we become ridiculous to ourselves and others. The machine-like nature of our movements during play looms large and normally this, along with the knowledge that it was always going to end that way, is a source of amusement, which, although pleasurable also includes an element of discomfort. It relates to Adorno's (1966/2002) observation that through artworks we can experience a form of play that brings home what is childish in the idea of being grown up (p. 43). Intense involvement with a computer game involves us in the kind of tension that contains comic possibilities of just this kind. The controller's role here is to keep the player physically attached to the game, while remaining concealed from his or her attention. Paradoxically, holding a controller is never a disinterested activity, even though no player will say that the controller is the ''interesting'' part of gameplay. Holding a controller always involves a physical tension for the player, even if we are just waiting for the end of the cut-scene (occasionally something that is frequently cunningly undermined, as in Resident Evil 4, which puts us in control at moments when we don't expect it). But this tension, like the controller itself, and like the swaying from side to side that we all get into occasionally, is not conscious. We do not intuit it from the inside, as we would if we were swaying or tensing in other circumstances, but we do sometimes see it, as if from outside, especially when our attention is directed there by events on the screen. This makes it seem funny—there's a release of tension—rather than pathological.

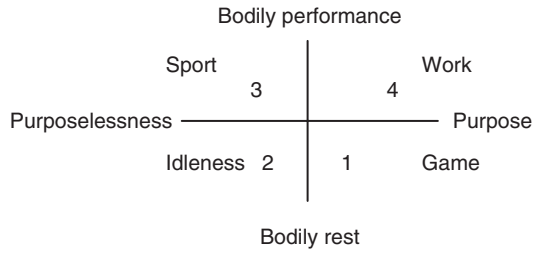
The effect of seeing the controller on the screen, with its humorous yet disciplinary connotations is an example of what Walter Benjamin described as a ''dialectical image'' (Buck-Morss, 1991). As gamers, we participate in a cultural phantasmagoria, in which computer games are aligned with other contemporary technologies,

being sleek, appealing, and fetishized as commodities that are desirable for adults. Participating in this present—the world that game designers and console manufacturers project for us and as the ''future'' for their businesses—presupposes that we have forgotten the real history that got us to this point. Consequently, we forget that the present of play is fraught with contradictions: Who wants you to play? Why is it normal for you play? Why was it ''not normal'' 10 years ago for people your age to play? The forgotten history is a subjective one, of growing up with toys, learning to play, repudiating play to become an adult, and then overcoming these conflicts to rediscover play in the highly specific cultural context that legitimizes play with computer games for adults. The objective history is also fraught, revealing an industry that shifts its demographics, deliberately misrepresents its consumers, and tells whatever story about players is conducive to its own survival at any given time (Kline, Dyer-Witherford, & de Peuter, 2003)—recall how Nintendo and Sega fought each other to appeal to different age groups of children a decade ago. When the toy image of the controller appears on the screen, against the background of an attempted murder in Resident Evil 4, it is this real, conflicted history that breaks through, undermining the illusion of unproblematic play, and its central value in our culture, straightforward ''fun.''

The kind of tension described here—unreflected on and subject to ''release'' is associated in psychoanalysis with blockages and repressions. We can see that what is being repressed is the controller itself and with it the world of objects, including our own bodies. They are being excluded from our conscious attention and we are distracted by the illusion that is the ''game'' and the range of feeling responses it excites. However, the act of repression described here is, of course, the key that gives us access to events in the game's fiction to and their seeming coherence. Coherence in the events we fabricate from the flood of sights and sounds generated by game programs is held together or bought with energy we save by not paying attention to what our bodies are doing. That there is a game, and that we are playing it; these are illusions the gamer works to produce and against which he or she struggles: We play against games not with them and our activity is directed from the outset by the urge to bring it to an end, by winning. This work is done with the hands but the fact is not normally presented on screen. What appears on the screen only holds our interest (even seems to many to constitute a world) because this work of the hands is repressed, hidden from view. The tensions in the hand give rise to the pleasures of gameplay, which is why we become most aware of controllers when we feel their inadequacies. The experience of ''dying'' in the game, perhaps caused by failing to hit the green button fast enough, causes a breakdown in the seamless experience of form. But, paradoxically, such breakdowns also disclose its character as *form*.

In these moments the controller is visible as a scratched, decaying object. It symbolizes the body and death and, as such, it casts its rays over the whole gaming experience. Here it becomes apparent that the repetitions and intensities of play have served as portals to another world—a kind of experience that contains something

Figure 2
Benjamin's Model of Physical Activity—The Context for Understanding Games



Source: Buck-Morss (1991, p. 213).

more and cannot be understood in terms of representation or meaning. The timelessness of gameplay, widely commented on in game studies literature, is an opening to Focillon's time of forms and to the Messianic, or utopian time in Benjamin's theory. The appearance of the controller as suddenly visible in play in Resident Evil 4 coincides with a kind of breakdown, consistent with modernist aesthetic interventions that draw attention to their medium (Butler, 1993; Kirkpatrick, 2004) and to the unseen and distasteful aspects of a phenomenon to recontextualize it. In these moments our pleasurable experience of drawing out form from the dark matter of the computer game program with our bare hands gets detached from the illusion of smooth, continuous on-screen action, and is re-positioned as an activity that involves us physically. By seeing the game in this alternative context, which is that of embodied physical activity in contemporary culture, we are able at the same time to see ways forward from the contemporary computer game that involve richer and more diverse developments of its form, with all that could mean for the culture as a whole.

Embodied Activity and Culture

To see what is at stake here, it is useful to consider the cultural context as theorized by Benjamin in terms reflected in the chart below (Figure 2), put together from his notes by Susan Buck-Morss (1991). Benjamin argues that the different elements of popular culture can be understood in terms of the demands they make on the human body. Just as early photography merely mimicked painting, especially in portraiture, so play with computers has so far been limited to mimicking games. As appreciation of the form element in games develops, this could change and digital entertainment could shake off its association with games.

Most computer games to date have been located in the bottom right quadrant of Benjamin's schema. This places them alongside board games and other physically quite passive activities that involve a degree of purposive concentration. The number 1, then, denotes computer games played with traditional controllers. Number 2 represents sandbox type games that also do not make many physical demands, beyond the tension in the hands discussed above, but are also not really purposive and have been analyzed in terms of the pleasures of exploration (Juul, 2006). The Wii controller, along with Benami dance mats, and the Eye Toy facilitate the design of games that occupy the third quadrant, where the body as a whole, beyond the hand, gets involved in the choreography of the game. Here computer games become more like sports, in Benjamin's classification. The Wii has implications for the politics of space associated with computer games that are brought out by this classification. Lefebvre (1991) associates empty, abstract space with modernist strategies of domination. The Wii stretches an intimate, encapsulated, bodily-generated space across an empty abstract one and this potentially exposes play to disciplinary intrusions.[6] Similarly, the number 4 signifies the recent emphasis on producing ''useful'' computer games with educational objectives, like Dr Kawashima's Brain Train program (Nintendo, 2002). This has given us games that have training or educational purposes but retain a concern with fun and enjoyment because these are known to correlate with good effective learning. It is clear that computer games are, in principle, mobile within this field identified by Benjamin and that form is a long way from being the only value that is realized in the design of computer games.

The point of positioning games in this way is to comprehend them as an element within physical culture that can be associated with aesthetic form, as defined by Focillon. The human body cleaves form from matter that is, in itself, inert, and unshaped. The way that human beings carve out a place for themselves in the world involves form before it can involve meaning or other, secondary cultural truths. As Lefebvre points out, before we fill space with our communicative utterances, values, and ways of life, we must first define it, delineate it so to speak. These processes are historical and largely unreflected on and they involve the body, especially the hand, as a kind of infrahistorical agent. Once they are established, forms and the practices associated with them become folded into meaningful social structures and ways of life. Underlying them, however, is a kind of *ur*-ness, an affinity or correspondence of the human and the rest of nature—there are patterns that recur in the different delineations of social and cultural space, just as sand on a violin tends to form into the same shapes. As digital technologies have been appropriated and exploited by different social forces over the past few decades, we have become habituated to thinking of them as affording us novel experiences of space—of ''worlds'' and ''environments''. This space has been carved from the dark matter of processors and screens by hands and bodies and the computer game and its controller have been important tools in the process, alongside programming languages and keyboards.

Controllers represent not only the bodies of players but also the history and diversity of games. They contain redundancy, like unused strings of DNA or organs that are no longer useful. They change slowly and if we ever looked at them we could see the history of games as a story of failed experiments, silly misadventures, boring failures, time wasted as well as all the great simulations, hilarious adventures, and so on. Game graphics, in contrast, are endlessly ''new'' and are caught up in the cultural project of distraction—they are always hyped as the ''next development''. Gamers use graphical improvements and other technical accomplishments as indexical for improvements in game quality, but those changes rarely represent a new structure of feeling or real innovation related to form. Few reflect on controller design, yet it is here that many of the really interesting changes occur. In Benjamin's terms, the controller is the past active in the present and this makes it antithetical to the game as commodity, which is always ''new'' and constantly defines itself in terms of innovation.[7] Benjamin's notion that alternate historical trajectories can burst into the present, undermining our collective sense of direction, is illustrated by the controller and the field of forces and tensions that are parceled up in, or around it. The futurism and progressivism that gamers are involved in, whereby they fetishize the next technological innovation, the latest gadget, constructs straight lines out of the present. It is linked to a forgetting—of the diversity of games in the past, the good, and the bad—which makes it possible to believe that the perfect game, the ultimate game is out there ahead of us. According to Benjamin, such straight lines only acknowledge physical mortality as an intersection, perpendicular, barely interrupting the overall direction of people moving forward. However, if we listen to the language of things, in Focillon's terms, if we experience their form, we can assume a different course. This is not a question of lecturing people on the history of failed games. It is the search for a gaming aesthetic that would give us games that powerfully challenged contemporary social reality, especially the use we are making of computer technology under the hegemonic rubric of overwhelmingly visual concepts like ''virtuality'', rather than merely reaffirming it.[8]

Conclusion: Toys, Games, and Cultural Politics

By putting the focus on forms made with the hands and the body I hope to have clarified the significance of controllers, including developments like the Nintendo Wii system, to the development of computer game aesthetics and culture. Unlocking and developing aesthetic form in computer games depends on giving more power to hands to cleave form from the dark matter of the computer. New matter-forms, which depend on the invention of new controllers, will define new spaces for the playful body to inhabit (Lefebvre, 1991). This relates to a Benjaminian politics which challenges us to subvert the always new (in this case, ever more photorealistic graphics) with images that help us perceive the truly new

and the immanent potentialities of technology, so often suppressed by hegemonic design standards. The ''toy-like'' quality of games controllers is important here. Superficially, using the Wii-mote is more like playing a real game of tennis than other video game simulations in which the player hits the ball by pressing a button on a joy pad. However, after playing for a while and getting better at the game the most striking thing about Wii tennis is the dissimilarity between effective movements in the game and those of playing tennis. This triggers amusement and, as in the case of the green button on the screen of Resident Evil 4, it prompts a kind of self-consciousness. With computer games, the ironic distance or gap between what the player is doing (with the controller) and what the screen is representing is ineliminable. This is an important part of the answer to a question that regularly gets asked at academic computer game studies conferences, namely, at what point will the power of games as simulations of reality mean that they stop being fun to play? The answer lies in the controller, or more precisely, the relationship of controller to screen, and beyond that the repressed awareness of the hand and its movements that is essential to the medium. Computer game aesthetics are all here in this formal correspondence.

In Benjaminian terms, the moments when we are made aware of the controller by our games constitute dialectical images that subvert the idea of a *progressus* informing the development of games. The dominant illusion, which informs much gamer discourse and fan culture, is of a steady movement towards ever more compelling simulations, with ''virtuality'' (the all-encompassing, multisensory illusion that is indistinguishable from the real) as its *telos*. Moments of comedy, in which tension is released and our own activity as players gets foregrounded, shatter this idea and remind us that the actual course of game development is jagged rather than linear and includes both moments of disappointment and many unexpected pleasures not obviously associated with the dominant ideal. The latter constrains our thinking about games, what they can be for and what we ought to do with them. It is in providing such moments that controllers can be integral to the development of computer game aesthetics.

Susan Buck-Morss (1991) writes that, ''The writer's most important strategic task is less to fill the new literary forms with revolutionary content than to develop the revolutionary potential of the forms themselves'' (p. 137). The observations I have presented here may be relevant to contemporary cultural politics, for a number of reasons. First, it seems to be part of the aesthetics of contemporary computer game design that aspects of game ''production'' (in multiple senses of that phrase) are concealed from gamers. This aspect of design re-enforces and polices the producer–consumer distinction, and projects a dominant conception of games as commodities. This model affects gameplay itself, limiting player reactions and defining games as closed off, non-negotiable objects. The controller as sealed unit with little scope for unplanned user input is a vehicle for this hegemonic concept of computer gameness. Game designs that draw the player's attention back to the controller during play subvert this tendency, however, by reminding us that it is a technical apparatus we are

using and drawing attention to our own machine-like qualities once we enter the game.

Notes

1. Adorno (2002) refers to the plebeian as an essential element in art (p. 240); he says the circus prefigures all great art (p. 81); likens the pleasure we take in art to enjoying fireworks (pp. 79-80), and perhaps most importantly for the purposes of this essay, describes foolish, childish play as an ''essential layer'' of art (p. 119). See Kirkpatrick (2007) for further discussion.

2. The strange blind spot that obscures the controller is manifest in some of the most sophisticated computer game scholarship. Dovey and Kennedy (2006), for example, write that computer games illustrate our ''... ability to intervene and control the computer through increasingly sophisticated visual interface designs'' (p. 2), which is at best a strangely partial truth.

3. Interpretation here should not be understood in terms of a hermeneutics of meaning—critics can tell us what the piece ''means'' in this sense. Interpretive playing is about enacting and realizing the form locked up in the score as a structure of feeling, while the virtuoso follows its pattern with great precision.

4. This comment about scale is not true in the case of small handheld devices like the Gameboy or Nintendo DS, or the Nintendo Wii.

5. The green button appears on the Gamecube version, if you play on the Wii you see a white button.

6. Indeed we see this in the form of a wave of applications that displace the autonomous values of gaming in favor of the popular obsession with fitness in contemporary culture, such as ''Wii-Fit''.

7. I am grateful to Helen Kennedy for conversations on this theme.

8. Examples of such games are discussed by Alexander Galloway (2006), who understands the development of form in terms of an expansion of the algorithmic elements in game design as against the easily reproducible, front end features defined by game engines and graphics.

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