Toward a Process Philosophy for Digital Aesthetics

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The creativity of the world is the throbbing emotion of the past hurling itself into new transcendent fact. It is the flying dart of which Lucretius speaks, hurled beyond the bounds of the world.

Alfred North Whitehead, *Adventure of Ideas*

When Whitehead writes about the creativity of the world he is not discussing human creativity. Rather he is directing our thoughts toward the actual creativity of every moment of the world. He is indicating that each instant in time – and everything that exists in that instant – is a new creation; the world is a process of continual becoming (Whitehead 1978: 18-22). So when Whitehead talks about the "past hurling itself into new transcendent fact" (Whitehead 1967: 177), he is proposing that the transcendent fact, which, in his terms, is the becoming of the present moment, takes form as the past transfers information to the present. This is what Whitehead terms *prehension*, the present's grasping of information from the past in order to use this information in its own becoming. This is the essence of process and the way in which we may begin to think about a philosophy of the interactive event and, more generally, a process philosophy for digital aesthetics.

Interactive media art is marked by process. If we are to think of digital aesthetics we need to think of them in terms of aesthetic *events* rather than aesthetic objects and, in order to do this, we must move away from a tradition of aesthetics that positions the human subject and her conscious mind at the centre of experience. We instead need to move toward an aesthetic philosophy of the event. This can be achieved by tapping into various drifts of philosophy, most notably Whitehead's already mentioned thought of the early 20th century and Gilles Deleuze's more recent philosophy of the virtual. What I hope to propose in this paper is that we begin to think in terms of process rather than in terms of a knower/known or subject/object distinction. By providing these starting points, I thus try to move away from anthropocentrism and toward what Steven Shaviro would term Whitehead's "pursuit of univocity", or an object-oriented philosophy (Shaviro 2009: 27-28). This means that instead of investigating interaction as a 'user' who manipulates a machine I want to investigate this event as a commingling of many actants (Latour 2005). The digital image itself is produced by software processes and the constant flux of code; further this, interaction with digital systems

involves a constant process by which a so-called 'user' comes into contact with various machinic occasions. It seems that in light of these processes it is impossible to maintain an aesthetic or media theory that pictures a self-contained and psychologised subject interacting with a static and inert object (Dusek 2006: 209). As Whitehead points out, an occasion of experience is not a passive observance of a mere welter of data (Whitehead 1967: 179). Rather experience comes into being through an active involvement in the events of the actual world.

Process as Actualisation

We can think of process quite easily when exploring artworks like Martin Wattenberg and Marek Walczac's (mw2mw) *Thinking Machine* (2003)*.* The work uses an artificial intelligence program to play chess with the participant. As the user and the machine enter into interaction, a 'map' of thousands of possible moves is created upon the computer's screen. The work represents to the user how a computerised chess player 'sees' the playing board as a field of energies in flux. In a Deleuzian sense the interface traces various lines of flight, one of which will be followed and become actual when the machine settles on the best strategy and moves its piece (Deleuze and Guattari 1987: 9).

Here we clearly see the link between process and the aesthetics of the digital. The digital image, whether static or in motion, is the result of continuous and ongoing computations (Broeckmann 2006: 197). It is an unstable stream of code, never attaining an eternal material existence without the constant flux of information and the actualisation of potential over time. In other words, software processes, as a set of non-visual occasions, give form to visual images. This type of thinking is the heart of Whitehead's process philosophy. For Whitehead there do not exist things, but only things in the making. The entire world of materiality is merely an outcome of process (Whitehead 1978: 78-79). It is this idea of 'things-in-the-making' rather than 'things' that is central to both Whitehead and Deleuze (Halewood 2005: 58).

In general, Deleuze describes process in terms of the *virtual* becoming *actual*; a process by which one potential occasion from a field of virtuality enters into actual existence (Deleuze 1994: 77-85). The field of potential however is not anything or everything but is rather constrained and emergent upon the system itself; it is potential that is immanent to the system. Pierre Levy sheds light on Deleuze's virtual with the example of the tree which is virtually present in the seed. The seed does not know what shape the tree will take. Rather the seed must actualise the tree as it enacts a process of negotiation between its internal potentialities and the environmental circumstances that it encounters (Levy 1998: 23-24). Deleuze's virtual – as the field of potential which provides the capacity for creativity to take place – is made literal by the lines of Wattenberg's *Thinking Machine,* lines which visually

present the field of potential open to the machine.[1] From this field of potential one element will be made actual, and made known to us through our experience in the present moment (Deleuze 1993: 6-8). The computer enacts problem-solving processes and follows one line, actualising virtual potential (Deleuze 1985: 95-97).[2]

Both Deleuze and Whitehead think of the process of the actualisation of potential as the creative activity that drives the world (Whitehead 1967: 177-79) (Shaviro 2009: 17-19). For Whitehead, this act of becoming comes about through the remaking of what he terms *actual entities* or *actual occasions*. These are the final real things of the universe. They are the basis for being and where any philosophy must start; "there is no going behind actual entities to find something more real" (Whitehead 1978: 18). An actual entity can be thought of as a single moment of experience. This single moment however is extremely complex, as it bears with it relationships to all the moments that occur before it and all the moments that occur after it, and it also bears a relationship to the other actual entities with which it is contemporary (Hosinski 1993: 21) (Whitehead 1978: 123-26). Importantly these entities are always in process. They are always *happening*; the entity is always an occasion (Whitehead 2007: 15). Thus all thought should be about process, not about substances. Importantly, this means that we cannot think of a self-contained psychologised subject, because the subject is merely a society of actual entities, a multiplicity of processes. Instead we must think about all the actants of the digital encounter on the same level (Latour 2005). We need to begin seeing the becoming of the world, following Whitehead's process philosophy, as a fact, rather than confining it to the privileged realm of human beings and rational minds (Shaviro 2009: 18-20).

Rethinking the 'user'

This type of thinking has a direct impact upon the way we approach questions of interaction between a human and a machine. For instance looking at Peter Weibel's *Flic_Ka* (2007) and Jeffrey Shaw's *Web of Life* (2002) we can see that it is not so much a process of one user 'using' a machine but rather interaction is an ingression or coalescence of many user generated occasions and machine generated occasions. For instance, In *Flick_Ka,* Weibel sets up a photo-booth in the gallery. The photographs taken by the machine are displayed on screens in the gallery and also uploaded onto the Internet. There is no individual user here rather the work is able to be accessed, interacted with and altered by various users over the Internet and in the gallery installation.

Flick_Ka is made up of a complex of processes operating in concert. The camera *prehends* the user, as information flows into its lens. The mechanical processes of the camera and the

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[1] I am using this work as a metaphor for the virtual. The lines are not literally virtual. This is simply because the virtual does not exist in any visual or actual form. However the lines make literal the idea of the actualisation of potential.

[2] The concept of the virtual is extremely complex and has been developed by many thinkers, namely Brian Massumi (Massumi 2002), Manuel DeLanda (DeLanda 2002) and Pierre Levy (Levy 1998), what I have described here is just one simple act of the virtual, that I use to inform my concept of process.

process of visualisation then initiate another occasion, as does the flux of software occasions and the work's distribution over a network. The artwork takes form as every actual occasion combines with every other contemporary occasion. User initiated processes, camera processes, software processes and network processes work through one another to actualise the work. Digital aesthetics here are a hybrid event, constituted by the commingling of contemporary occasions (Whitehead 1978: 246).

In Shaw's work, which is distributed over three gallery installations via the Internet, 3D abstract and organic patterns, along with archival footage are generated and assembled based upon a series of handprints that are scanned into the machine. In *Web of Life*, any one participant adds to the history of the work and alters the aesthetics of all three sites. Once again, here there is no individual user; rather what is important to the aesthetics of the work is the ingression of multiple *user-occasions* from multiple sites over time.

Both works interact with a set of activities and processes initiated by multiple users across multiple sites. In this event there is no one enduring subject apprehending a permanent object. Rather the 'subject' and 'object' are a multiplicity of processes, both involved in a hybrid event of interaction and *prehension*. As such both actants are conditioned by their involvement in this process, both the 'subject' and the 'object' are a new creation at every instant of interaction. As James Williams points out, "observation is not so much 'of' given facts, but an observation 'with' changing processes" (Williams, 2008: 82); following this, the aesthetic experience of interactive art is not something that happens to someone as they apprehend a staid object, but more like something that happens *with* them as they become invested in the digital encounter.

Using Whitehead allows me to think outside of the binary oppositions that divide the world into knower/known or subject/object relationships (Stengers 2008: 103). I am not interested in any notion of consciousness or a psychologised human 'user', rather I am interested in a particular condition that takes place as user initiated processes work with machine initiated processes. It is the performative action associated with digital aesthetics, including interaction, which is important; these processes provide the condition for experience and knowledge to emerge (Stiegler 1998: 1). This is why I have begun to propose interaction with digital systems as the commingling of contemporary actual occasions, shifting emphasis from a conscious human user and instead focusing on the process of the encounter that precedes this conscious experience (Griffin 2007: 69).

Interaction and aesthetics

A central part of my argument is that user initiated occasions and machine occasions work through one another. We can see this particularly well in Dennis Del Favero's *Pentimento* (2002). Moving images are projected upon the walls of the installation space that narrate the events surrounding a murder in the Blue Mountains. These events are presented as

fragments of narrative, triggered – rather uncontrollably – by a motion detection system, sensing the movement of a user in the room. The experience of the work is largely constituted by the feeling of not being able to make sense of the events of the narrative, but somehow still being able to experience their emotional intensity. The user becomes invested in the narrative, as she is responsible for generating the uncontrolled, disconnected, but highly affective images from the machine's database. She becomes connected, as a result of her investment in the interactive event, to both a large database of narrative information and the affective and relational consequences of this information.

In this work Del Favero does not aim to create secondary trauma for the viewer but rather to "…open up the lived experience of trauma in its temporal and spatial dimensions" (Bennett 2004: 79). The work is not a *representation* of trauma but is rather a *process*, which sets the conditions for trauma to be felt. Here the work brings the user into contact with the digital medium and also its traumatic content. Trauma is felt as the user experiences the discontinuous and turbulent dimensions of the narrative; trauma is *performed* rather than cognised as an aesthetic object.

Conclusion

In these works technology is no longer a tool with which the user connects to a specific reality or "nature", the technology is now itself the reality or "nature" that the user inhabits (Lister, Dovey et al. 2003: 90). The artwork is no longer an object to be apprehended by a 'subject', rather the artwork is an event in which the object and subject are both invested. Significant new media art is no longer concerned with the historical drive for artists to *re-present* something of reality. Rather, the digital artworks that I have investigated are involved in a process of creating a specific type of reality. This is a constructive, more than a decorative or expressive process and is more in line with Whitehead's "flying dart" of creativity (Ascott 1998) (Whitehead 1967: 177). Rather than seeking a re-presentation or re-mediation of reality in its aesthetic, significant new media forms create new processes, new sites of creativity, in which the aesthetic is performed before it is understood.

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