DROMOSPHERIC GENERATION

The Things that We've Learnt are no Longer Enough

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Abstract **Virilio's work on the dromology provides a model of a political economy. Called the "dromoeconomic" system, it incorporates aspects of temporality, consumption, and technology; arguably three of the core factors for consideration of the future organization of human societies. Durational factors manifest in issues of health, education, governance, data; consumption facilitates the politics of resource and territorial management; technology controls communication and transmission of energy at its base form into the complexities of every facet of life. Living in a dromoeconomy means negotiating a material field created by the speeds of the global objects of communication. In this article, I focus on one aspect of the dromoeconomy, that of the users and producers of this system; the "dromospheric generation." I explore the generation of 2000s users of screen-based digital technologies, in particular focusing on the digital child ["digichild"] as the model information worker, whose operational skills in the field of "transmission" through game play, are producing the material grounds of the future, by their work in the transmission of energy in the dromoeconomy.**

Keywords **transmission; media; digi-child; game; perception; chronopolitics; picnolepsy; kinedrama; dromoeconomics; dromosphere**

Introduction: Transmission

The transformative power of the collective technologies of the Twentieth Century, as developed for purposes of militarization, transportation, communication, and surveillance, according to Virilio, produce a world condition that is so fast in its demands for instantaneity, that the extremities produced by this situation result in bodies producing and being produced through degrees of inertia (Virilio 2012: 26). In the mid 1980s, Virilio (1989) argues this adaptation of immobility affects the management of perception. With the advent of other kinds of recording technologies such as the digital and bio technologies of the late 1990s through the first decades of the Twenty-First Century, Virilio's narrative of the dromospheric conditions and their affect upon a collective

human subjectivity contributes to the dialogue on perception of the changes in the human social sphere, due to ever-increasing rates of the speeds of its own production, and inevitable direction toward an apocalyptic state. Virilio's theory provides for the dromospheric generation[1] of the Twenty-First Century some essential elements for thinking through this condition. Attention by humanities' and political sciences theory, and philosophy to the notion of speed and stasis in relation to technological change has been critiqued in terms of the "accelerationist aesthetics" that is seen as politically problematic (Noys 2010: 5ff; Shaviro 2010; Adams 2013: 97-8). However, as Adams (2013: 9) describes, "speed" in Virilio's work is not just about this speed of the change of things in terms of the problematic of bodies and societies being governed by technologies of social control (Virilio 1989; 1991; 1999c). Rather Virilio's work forms part of the theoretical and scientific disciplinary shift that occurred through the change from mechanization to digitalization, in what Katherine Hayles (1999) characterized as the cyborg era, not just the technical elements, but a joining of "technological object" with a "discursive formation" (115) - thus enabling a different epistemological, and perceptual focus for scientific investigations. The dromospheric has differential speeds, each of which are productive of different and diverse ecologies, not all of which are human, but in terms of *my* human consciousness of them, may be caused by human activities, accidental or intentional. Both Hayles (1999) and Virilio (1991; 2002) refer to the mutations of human subjectivity that occur through change - Virilio in 1991 describes mutations of human perception occurring through life in the "oppressive technological environment" (19), or experience of the "the unknown quantity" (Virilio 2002: 29), or through "the construction of techniques" and "constructed space" (Virilio 1991: 21).

Writing at the end of the decade of the 1990s, Hayles (1999) considers mutation through the disruption of existing patterns by random or error codes, or geophysical or biological change (32-3). Virilio's characterization of the ecological validity of the progressive technology agenda as corruptive of the entire human value system is highlighted in his formula for inertia. Rather than ask what standpoint position Virilio's philosophy can be bracketed into, perhaps asking how change comes into view, or more precisely, what technological perceptual tools enable change to be epistemologically framed might provide the more relevant critical tools with which to work. In this article I describe how "transmission" forms one aspect of Virilio's "dromoeconomic" system (Armitage & Graham 2001; Graham 2013), providing as it does, the terms through which we might begin to ask about one aspect of the epistemological habits of the users of the dromoeconomy, and note that the things that we've learnt are in fact no longer enough. If we take the first decades of mass digital usage, through re-habituation of the dromospheric informatics of the 2010s, we can begin to detail the transformation of the matter of that dromosphere. Putting the material elements of that decade to one side (this is the project of the media archaeologists - see for example, Parrika 2012), I focus on an applied example of transmission, through playing the game *Temple Run* (2011 -) in order to think about the transmission of energy as a material manifestation of the digital environment.

Transmission is a term that Virilio (1998a) uses when referring to the transmission of energy which he names as being either in "potential", "kinetic", or "cinematic" form, through the technological platforms which humans must negotiate once received. Transmission is set up by Virilio in relation to the framed transmission

and reception of signals, for example on the television. But for the purposes of economy, I focus primarily on the notion of transmission, taking it not as a pure Virilian term, but as an idea and action that procures the material field of the dromospheric generation. Transmission is of course a word that describes an action that occurs across mediums and it not limited to a digital application, however for this article, my comments are given in the context of thinking through "transmission" within a screen-based digital environment.

As a physical transference of data, and as a communication concept, the system of the transmission of energy through the digital screen raises many questions for those thinking about reception, in terms of how a digital game as played by young children, pre-teen, might "affect" their social behaviors. Is the digi-child's mediated life productive of new ontologies, through the processes of morphogenesis and affective cognition? I argue that it is not, rather even if new as in novel, then this ontology is not to be understood as automatically creative, or autonomous, rather the digi-child is an information worker, part of a media revolution that self-organizes. (As such, I'm not going to give any ethical pronouncements about the affective game ecology, of digital play.) Transmission, as I use the term in this article, extends the way that the historical phenomenal field of Twentieth century philosophy (Husserl, Merleau-Ponty, Lyotard, Virilio) use the term (see Wright 2013; Colman 2013; Lyotard 2011). Where products in the visual and textual fields of art, literature, political writing (including the terms of journalism) take the phenomenal argument through a modernist telos trajectory of the formation of the plasticity of things, as autonomous technologies, as Virilio argues, the conditions of the dromosphere deny the experiential terms described by the historical field of phenomenology. Operating at a pace and scale that is beyond the capabilities of

the human bodies that created the system (Virilio 2000a), changing material fields situate the user of technology in different ways to the phenomenological arrangement, and produce different discursive images of this matter. As an alternative to a broad mapping of the phenomenological state of subjectivity, which can observe that the digi-child is /or is not "exhausted" (1999b: 55) by the surface interaction between receptor and electronic screen, I want to chart the materialist paradigms that the construction of the body of the digi-child produces. To begin to tackle this problem, this article is divided to look at three inter-connecting components of transmission – 1. TE: the transmission environment (the dromosphere, grey ecology, the implicated anthopocene); 2. TM: the transmission manifestation (concepts of transmission, Virilio's kinedrama, picnolepsy, chronopolitics); and 3. TP: transmission perception (TE <-> TM); (different motor, cognitive, neuro plastic modes) here produced by play as mediation of the dromospheric generation. The article refers to energy as the properties of a system of inter-related matters - expressed through the predications of the laws of physical science, media philosophy and feminist materialist epistemology. Applying this transdisciplinary thinking about energy transmission of informatics, I argue that energy is manifested matter; a form of mediated information that technologies such as digital games organize. In this sense, transmission is not about the conveyance of a "meaning" as such, rather it refers to the time-based material field signaled (in this case by the digital data).

TE: Transmission Environment

For humans, the animation of life is in part supplied by mediating encounters with different platforms, and the transmission of different kinds of energy, required to make

that platform function, over time, and at an expected or desired rate. These platforms – which may be comprized of biological matter, or be analog, or digital in their mode of operation, model the communication of innate needs, provide conceptual frameworks, and direct their hosted forms of information, producing content. In animating matter on screen, moving images produce a certain kind of communication. This communication depends in part on the transmission of specific kinds of energy systems. Once in motion, as Virilio suggests, the technological impetus is what controls transmission. For screen-based media, the properties of their energy systems involve inter-related matters. Energy is a term here that crosses through various elements in reference to a 'transmission' of an image, in terms of the three modes of energy that Virilio identifies - potential, kinetic, cinematic (Virilio 1998a: np), but also the term identifies much more for the transmission of materialist informatics (Haraway 1991; Hayles 1993; 1999; Castells 2001), the philosophies of sciences of the natural world (Serres 1995), and the biodigitized body of remote workers who contribute parts to an unknown whole with their living body - as energy, and as skills (see Bifo 2010; Virilio 2000b). Here I want to connect the political science of Virilio with the materialist sciences of biology (Margulis et al. 2011); philosophical sciences (Stengers 1997); media philosophy (Stiegler 2011); social media product research (Robinson 2013), critiques of carbon based media industries (Bosak 2012); critiques of the forms of 24 hour digital labour (Terranova 2000) and cross-disciplinary feminist work (cf. Alaimo & Hekman 2008; Barad 2003; Olkowski 2012), in order to consider different aspects of transmission.

The energy system of screen media can be expressed in conceptual and empirical terms. There is the matter of the image itself, which can be variously characterized in the

digital data field (able to be manipulated in terms of time and motion, compressed, and incorporated), the kind of data harvested and sent by what audio visual engineers refer to as a "signal" (Watkinson 2001: 251), or what physicists describe as "electromagnetic" energy levels, able to be tabulated by counting atoms and molecular structures, levels of the energy of radiation, or kinetic energy. Biologists sometimes refer to energy as "light" (Margulis et.al. 2011). In screen-based technologies (film, television, radio, portable media-transmission forms), the housing of the medium provides a certain materiality to the experience of the user (Virilio 1998a) as its capability and capacity convey different amounts of electromagnetic energy (Watkinson 2001: 250ff). This material field is then populated through different bodies' interactions with the platform, within different scales of situated environments, and through different time-variants. The body of the user itself is constituted through biological and politically determining frames, and its place within the environmental system regulates what she is able to perceive or interact with, in terms of allowable, or potential energy manifestations, trajectories, and possible "intra-actions" (Barad 2007: 33), which through their intermingling, create a different field, altering the epistemic horizon. While each energy system is specific to its form, body, and action over time, the understanding of an ontology of body, is never a question of singular knowledge, but always one of an intra-active, politically situated knowledge, performed within a materialized field.

Playing games provides an epistemological platform from which the manifestation of the necessary energies work to form experience and consciousness. In other words, the play process provides direction, and frames things and knowledge in technologically, and politically determined ways. Play offers an environment, and a

condition for transmission of energies through specific platforms. The kinds of energy systems that are transmitted by play forms vary. The energy drawn up is contingent upon the play platform, which acts as the architectural support for the game, and can generate and use a range of physical, emotionally, physiologically, cognitively, and technologically produced resources. Body systems' uses of these resources (for example, the neuro-synaptic energies and forces created by forms of sensory and or intellectual, or physical activities), as mediated by a platform, are what materialize a specific form.[2] The play platform may be framed in a number of determining ways, according to the predication of gender, and the political agenda of the developer (Barbie dress ups for girls, first person shooters for boys). The transmission of energy during the play mode is a transformational, cognitively reconfiguring, processually up-training of sensory-motor neuron skills, performing the predication of a subjectivity (a gender role being performed, for example), or opening potential existential territories (Guattari 2013), re-coordinating the synaptic and the neural produced through the play experience. The materiality of a particular energy is crafted through play forms. The material of digital game play is not the same as the material of non-digital objects of play. A popular digital game platform (*Temple Run* [2011 -]) can be characterized as being made for the "digivolution" (gender-humanization by edutainment) of children of the dromospheric generation whose main media are convergent technologies. It can be characterized by its formal tendencies: speed of play that requires digital dexterity and cognition, abstraction of a colonialist narrative to a digital, instantaneously downloadable "free" commercial content.

Temple Run is an "endless runner" game where your character has to run (and leap, turn and slide) for as long as possible without falling to their doom, smacking face-

first into trees or bridges, or getting caught by the giant monkey that is chasing you. If you die, you go back to the start. The default runner characters are gendered by their stereotypical popular cultural images as either male or female. The player takes on the role of an explorer who, having stolen an idol from a temple, is chased by monkeys. The original *Temple Run* game was made by an US independent game company, *Imangi*, a free downloadable App, released in 2011, with 170 million downloads at 2013 across iOS and Android. *Temple Run 2* continues the successful formula, with a simple set of touchscreen gestures used to control your runner. The running in-place is on the surface of the hand-held screen device (it must be hand-held in order to activate the motion sensor). The player swipes the screen up to jump, swipes left and right to turn, swipes down to slide, and tilts the platform to turn. These are the basic tools for avoiding the obstacles on the path, while playing the game by collecting virtual coins and power-ups along the speedy run through the game landscape, in order to score points (highest score wins).

So for the game player user, this form of digital play concerns what children's media market research indicates as the transmission of energy (a peer generated buzz; neuro-synaptic chemical rush) - generated through share-ability and multi-platform experiences (Robinson 2013). The digi-child can discuss the content that engages them with their peers (*Temple Run* has the look and feeling of the 1967 Disney film *Jungle Book*, itself reworking the 1894 *Jungle Book* by Rudyard Kipling; the cross-media platforms by which this content is distributed (printed book to television to stage to cinema to game console, facilitated by digital influences); the next version, *Temple Run: Brave* developing the Disney film [brand] *Brave* in 2012, and *Temple Run: Oz*, based on

the film *Oz: The Great and Powerful* (also a Disney property) (2013 release), thus its appeal as a heritage item for parents as a product that signifies nostalgia). Children don't always require a narrative for play, and *Temple Run*'s non-narrative possibility is something that media content developers tap into when they want to expand/develop by tapping into shareable heritage.

The digital game relies on a mode of play that is about the transmission of certain forms of energy - not as singular things, but inter-connected and active. They seek to be creative of a different material field for the sake of a market requisite novelty factor – which has commercial value. However there are side-affects of playing the game that are not bound to that economy. The speed of any transmission of matter depends on the platform medium through which it passes. So if we think of game play, there are a number of interacting and interfering energies, moving as waves via the play platform. The screen radiates intensive light, using intensive RGB additive colour modeling, and the physical perception of the digital luminance is manifested as multiple strands of energy (perception being an aggregated image, produced through the situated nature of the predicated body doing the perceiving). Play is the platform. The digital plate of a hand held digital device enables this platform to become a medium of energy. Play is perception and motor coordination. Play creates a territory and a surface to be inhabited. Play is about enacting colonizing powers in order to win. Through repetition of manipulation of the data required to win the game, users also learn to do other things, other than "succeed." The experience of the user is an already quantified algorithm where game platforms map out movements, pathways and actions, and where the play ecology engendered is productive of a range of modalities, not all of them normative or striated.

On screen, different modal relations between the user and the coded information and their relational products are made and dispersed at different speeds and digital time. These products have different affect sequences, contextually situated and contextually mediated by events. In other words, the relational product (between the digital screen information and the user) is squeezed and stretched into pockets of affective knowledge, applied within the range of utilitarian information to creative informatics. This product is the result of what Virilio terms the "chronopolitics" of our current digital era (Virilio 1999b: 17; Virilio and Lotringer 2008: 20ff). Technological epistemology for the digi-child involves not only the actual technological platforms (although these are important), or tools used to facilitate content. Rather, technological epistemologies refer to the modes of formation and distribution of content; that is to say - the ways in which digital languages are used, synchronized, compressed, systematized, and organized into market size consumables (chunks of data). This is not a continuation of modernist/ post-modernist discourse, but a description of the metaphysical whole of technological kinesis as a material process. There is the historical hardwear of media forms that comprises the productive labor of this materiality. For example, the Apple App Store is a digital application distribution platform for iOS developed and maintained by Apple Inc. (opened 2008), which is a nationally-bounded distribution network, where the national markets (regulated by governments) determine the breadth of consumables available globally, and in this way shape the consumer before they have even unwrapped the box. Digital environment is manifested in a game as a play transmission that operates through haptic and perceptual practices; becoming manifested through the user's levels of interactivity.

TM: Transmission Manifestation

Watching a very young child interact with an animated film or play a digital game such as *Temple Run* (and the internet has many examples of children from ages of six months up playing this type of game), we can observe their skills in media literacy, platform manipulation skills, as well as the affects the content produces; pleasurable energies, transmitted as squeals of delight, manifested as particular kinds of finger-thumb and hand-eye motor coordination.[3] Analysis of children's interactions with digital games could consider the empirical energies and skills that run the game system and their place - their motor skills, coding knowledge, and the range of gestures, speeches and semiotics of transferable market / consumer knowledge being imparted (informatics of the selling points of gaming) (see for example Leroi-Gourhan 1993 on gesture economy). Analysis of the game play is not straightforward, in terms of the context in which it is produced, and cannot, I would suggest, be limited to the experience or reception of the player / user. What is motivating play within the dromosphere is a complex economy. Power fields (of institutions, of private corporations, of historical territorial movements) feed the energy behind the forms of play, and thus direct the synaptic and cognitive transmission.

The dromospheric generation of the early 2000's digital use is set up and in the process of creating the infrastructures for future digital work, manifesting in the politically-controlled areas that feed the fiscal requirements of the current global monetary system: in the sciences (health care) and in technology (military, media forms, music and pornography). Workers engaging in digital-related work require certain skills that are less to do with being attached to a specific industry, than with testing out

potentialities and servicing the current politically determined demands of subjectivities, as the dromosphere require (De Peuter & Dyer-Witheford 2005; 2009; Colman 2012a). In addition, this information can be analyzed with Virilian tools such as the concept of picnolepsy as a productivity device - where a screen-based user is rendered unconscious of their surroundings and fixated only by the screen image (Virilio 1999a: 10); and the situated chronopolitics of the interface between the user and her situated body, where the local political environment is what colonizes the body of the user (Virilio 2008: 127). This political aspect of the dromoeconomy manifests itself in outbreaks of actions of militarism, and actions of designated health crises. The digital game user is also trained in the chromos of political transmission; being self-aware and able to organize and regulate the time spent within the energy-system of the platform. Commercial games will have a play life that is known to the gamer; varying from under a minute, to 70 hours, to several months. Gaming teaches time management through the energy resource, which is regulated by a cheap capital infrastructure (the non-space of the game platform; easily transportable, does not require the resourcing of a staff room, or office as the user works from home, etc.), and managed by the transmission (in this case, the game as technology).

In terms of the digi-child, the matter of online access to content and the speed of access remains an evaluative trigger that is systemic and difficult to factor. Seamless access to engage is not always *and* not yet an option. Inhibiting factors include cost, economic context, and various government softwear, and household policies on regulation of access. Access and vulnerability to the digital pornographic is something that our contemporary digi-child has to negotiate. Negotiation of the pornographic image

and event are skills required to be taught to the media literate child, alongside other education of epistemological histories that concern economies of gender, colonization, slavery and tourism. So those specificities notwithstanding, I want to now turn to consider the range of technological affects that the dromoeconomy produces - as cognitive, sensorial, political stimuli for an event of the digi-child, and observe and explore what and if the digi-child's singularity holds. Is it possible to think there is an epistemic immanence of the digi-child?

The event of the digi-child can be dated within its chronopolitical era of production. The gaming era of *Temple Run* can be characterized by its image style; the aesthetics of Twentieth-century picture book stories, journalist narrative and animation. The particular flash gaming coding spans a specific video and online gaming era that had a typical shelf life – as other current digital technologies – of two to five years, thus the 2011-2015 event span for the technological platform as "new", but which will be retrieved and accessed at different eventual moments, as nostalgia for the market, providing the archive survives. Discussion of children instantly provokes a number of the core anxieties for specific eras, according to the laws defining "children," "family," "work" and so on. The concept of "a child" is indexed to the *normative* refrains of what Guattari describes as "capitalistic abstractions" (2011: 64; [I discuss these further in relation to death, see Colman 2012b: 191])

The digi-child also provides a measurement, a mattered measurement of the relation of speed to technological knowledge (Stiegler 1998: 61) and, in Virilian terms, the digi-child's facilitation of this relation provides a capital, cognitive measurement of the affects of the repetition of speed time, in which every transport technology loop

limitation is being used (Virilio 1995). The screen user, operating as both a speculative user and as a predicated living capital body [the lcb], takes the digital information [images + text + sound] in different ways. In play, the aim is to inhabit, and simultaneously seed knowledge of the potential of a state of *un-readiness-to hand* (Heidegger 1962) - in the desire to beat the algorithmic pathway. The digi-child's consciousness accesses different modeling platforms of commercial and socialized life to perform as per/functionary movements of this transmitted information – as a realization of energy, moving through the system. Halberstam (2011) argues that animated life in film (such as *Chicken Run* 2000 dirs. Peter Lord and Nick Park) offers a place where revolutionary activity can occur, as a representational siting of where alternatives to mainstream behavioral structures can be evidenced. But if we take Jonathon Beller's (2006) observations on the spectatorial labor that consumers of media forms provide in conjunction with the requirements of dromoeconomics, then the digi-child must be cast as one of many "information workers" as Bifo (2010) describes. Working within the system that validates the skills required does not allow for "revolution" to be realized, as components of a processual becoming are reincorporated, or cast out as mutations of the dromosphere. Reality is manifested by the movement of the energy circulating at any given time in the dromosphere, creating a "kinedramatic" material field (Virilio 1995: 23). Digital kinedrama is productive of political modalities for subjectivity, through different transmission modalities, which are politically situated over their durational span. This material field transmits screen based image environments, temporally situated. The affects produced by the transmission are contingent upon the technological platform (text/image/sound/ kinesis) and involve the specific technological capacity for not just the

facilitation of data to occur, but the transformative potential of the technology of transmission (analogue, digital, bio-autonomous) to take affect upon the user. Transmissions affect habituation of their modalities - the orientation of the field is limited by their eventual duration and determined by their politically and territorially determined technological platform (mining or scavenging for metals, assembling postage boxes, using designer products, transporting the garbage, playing games etc.)

TP: Transmission Perception

To address the digi-child, consideration of the conditions of their media ecology is required, in the contextual terms of the epistemological materiality in which their specific play ecology operates and generates. As I've argued elsewhere in relation to screen worlds of the cinematic, regardless of the theoretical position or classification, there are two main approaches to the categorization of screen categorization: technological epistemology and event epistemology (Colman 2009). These epistemologies affect the image plane, through their deterministic, locational [read political] context, and through the autopoietic organization of the image. This image plane becomes a part of the materialized transmission field; codes and data bits turned into physical content.

Virilio (2009) sets a particular political context for contemporary children; the dromospheric generation, which he describes as the grey ecology. The finite-ness of this world is played out multiple times in films of apocalypse, in video games and other screen based media where one of the most popular genres is exactly the horror genre; a horror of the world. Play directs the digi-child away from presence-at-hand and *Dasein* [Heidegger's Being who understands that it exists] to the revelationary post world-end

state of un-readiness-to-hand. This is where there is a disturbance to the way that the tools that facilitate or are perceived to facilitate being are not working. Heidegger describes this from the point of view of the phenomenological experience of the user: "we discover the unusibility not by looking and ascertaining properties, but by paying attention to the associations in which we use it" (Heidegger 1996: 68). If we consider this in terms of the transmission economy of information, then the consideration of the "experience" of the user is not unique, but an already quantified algorithm, which in itself may or may not direct the user toward a normatively designed interface (for example, the use of game screens as a consumer, or for the normativity of military training). Experience becomes useful only in terms of making a time-based judgment on the duration of skill required to facilitate the end point of the exchange of energy for the transmission at hand. The digi-child acts as a material vector and also forces an applied confrontation of how the digital encounter affects children of the dromospheric generation. The consideration of the category of the digi-child, in terms of an address toward "children" in itself requires further analysis that I can do here. By considering for example: 1. The determination of a "child"; 2. The anxiety surrounding the address of children as the value accorded to and of children in a overpopulated, asymmetrically resourced global system; 3. Implicit in these first two points is the possible measurement of that value by different localized contexts and historical determining factors. This measurement is given by the contexualizing degree of the dromospheric world that the child is directed by; and 4. Again implicit in the first three issues is the ethical approach that a local culture takes toward its children. The dromospheric generation of minors have become unionless information workers.

The digi-child feels the digital conditions; in language participation (playing the game), synchronous movement produces genesis within the language and the play produces the feeling of the digital's simultaneous reproducibility and language creation, something the viewer can mark out as the temporal vectors of perceptual and affective resonant response to the movement (whatever media activity). In other words, the very matter of the media (game) is what produces a specific affective outcome, which at some levels activates other kinds of perceptions, and a range of emotional responses. Satisfaction and pleasure through achievement or attainment and creation (a morphogenesis) and the participation (viewing, playing) in the game can enable a transferable and potentially transformative knowledge. The participation and creation of materiality is thus epistemic in its transformative affect; it provides "a feeling" linked to a recognizable "action" and "outcome" that operates at the ontological level.

Consideration of the child as the generation future digital user provides the value-spine for the post-industrial, digital-revolutionary era they inhabit. The child-value of the early 2000s is the generation of the post-millenial, or what the US calls the "post-Homeland" [9/11] generation. The change in social systems that they will bring exceeds the inter-generational work attained at the technological platform development levels of the past 30 years of work in the media ecologies that determine the operating systems of current global market economies. This generation of users embrace data; in fact they actively seek data and act to seek how they can utilize it in ways that are currently quaintly referred to as "hacking", but which for the post-millenial is just another way of creative problem solving, productive of more forms to take to market.

The game ecology provides stimulus to sensory and motor neurons of the human user. This body can be seen as no longer just a "passenger" of a "motorised machine" **(**Virilio 2005: 55**)** but as a synaptic energy-vector in the transmission system. The digi-child has transformed the phenomenologically observed practice of technological platform as only transport, to the form of becoming a practical vector of the consumption of pre-produced images. Her un-readiness-to-hand as a non-passenger, but as a part of the dromospheric circuit, transmits the body as a materialist informatic of the dromoeconomy.

Conclusions: Play as a Perceptual Mode of Transmission Ontology

Highlighting his thesis on Charles Dickens's use of the value of the "things" that make up a life as told by the body of the old man Scrouge, Deleuze uses the chronological contrast of the non-individuality of the very small child. "Small children", Deleuze (1995) notes in his essay "Immanence. A Life", "through all their sufferings and weaknesses, are infused with an immanent life that is pure power and even bliss" (29-31). In the aggregated image of the digi-child at play, absorbed in the game, the historical singularity of the historical situation of the child is transformed, the immanent plane/s revealed through responsive corporeal movements and sounds, and an affectivity that is performing an ontological shift in cognition is visible [squeals of delight/ quiet concentration / physical exhaustion /intensive singular concentration]. That is to say, following Deleuze's Spinozist position, "what we call virtual is not something that lacks reality but something that is engaged in a process of actualization following the plane that gives it its particular reality" (Deleuze 1995: 31). The reality that the dromosphere

creates, Virilio argues, is one of a disappearance of certain experiences. But this does not infer a non-actualization of reality. Rather, this position frames the changed forms that the dromospheric generation operating within grey ecologies have produced; a different time registration being required to fully express the self-organization that the energy systems in process form and deform.

My provocation in this article has been to consider the immanent epistemology of what might have once been referred to as "the future generation", but can now be seen as the generation that will have to deal with the entropic decay of the world, and or its implosion; the dromospheric generation. In describing the digital ecology of play as an epistemic platform, then the range of informational (technological, biological) modalities of this require detailing, in terms of their type of modal stimuli for and as an event of the child, so as to be able to observe and explore what a digi-child's singularity holds. On the one hand, we might conclude that digital play signals the epistemic immanence of the digi-child. Turning to Virilio, the transmission of the energy of the body of a user is one that must be understood as contributing to the dromospheric event as the condition of grey ecology (Virilio 2009: 47) - the latter affording a generational realization of the results of industrial large scale consumptive practices by humans, or what some refer to as the anthropocenic era (Colebrook 2014). Singular and evental energies feed the dromospheric atmosphere, generative of certain kinds of trajectories of the energy use within its system. A humanist might ask what kind of material field will be enabled by the dromospheric generation, but this question misunderstands the regulatory nature of the social sphere that Virilio's dromoeconomic system describes. The user plays within the material field, and as the body of the user mimics what exists to access the system,

the user is in turn live-feeding the field, transmitting signals, stimulating the processes of the dromosphere, administered by the technology and regulated by their situated duration.

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References

Adams, Jason. M. 2013. *Occupy Time*: *Technoculture, Immediacy, and Resistance After Occupy Wall Street*. New York: Palgrave.

Alaimo, Stacey and Susan Hekman. 2008. *Material Feminisms*. Bloomington: Indiana University Press.

Armitage, John and Phil Graham. 2001. "Dromoeconomics: Towards a Political Economy of Speed". *Parallax* 7, no. 1: 111-123.

Barad. Karen. 2003. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." *Signs: Journal of Women in Culture and Society* 28, no. 3: 801-831.

Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning.* Durham: Duke University Press.

Beller, Jonathan. 2006. *The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle.* Hanover and London: University of New England.

Bifo, Franco Berardi. 2010. "Cognitarian Subjectivation." *E-flux journal* 20, http://worker01.e-flux.com/pdf/article_8888183.pdf

Bozak, Nadia. 2012. *The Cinematic Footprint: Lights, Camera, Natural Resources.* New Brunswick, N.J. : Rutgers University Press.

Castells, Manuel. 2000 [1998]. *End of Millennium: The Information Age: Economy, Society and Culture , Volume III (The Rise of Network Society #3).* Cambridge MA; Oxford , UK: Blackwell.

Colebrook, Claire. 2014. *Death of the PostHuman: Essays on Extinction, Vol. 1.* Open Humanities Press. http://openhumanitiespress.org/essays-on-extinction-vol1.html

Colman, Felicity. 2009. "What is Film-philosophy?" In *Film, Theory and Philosophy*, edited by Felicity Colman, 1-15. Durham: Acumen Publishing.

Colman, Felicity. 2012a. "Notes on Guattari's 'Machinic Unconscious': Play as an Affective Field for Activating ubjectivity." *Deleuze Studies* 6, no. 2: 250-264.

Colman, Felicity. 2012b. "The Death Index." In *Revisiting Normativity with Deleuze*., edited by Rosi Braidotti and Patricia Pisters, 189-202. London and New York: Continuum: 189-202.

Colman, Felicity. 2013. "Merleau-Ponty, Maurice." In *The Virilio Dictionary*, edited by Armitage, 120-123. Edinburgh: Edinburgh University Press.

Deleuze, Gilles. 2001 [1995]. *Immanence: A Life.* Translated by Anne Boyman. Cambridge & London: The MIT Press.

De Peuter, Greig and Nick Dyer-Witheford. 2005. “A Playful Multitude? Mobilising and Counter-Mobilising Immaterial Game Labour.” *Fibreculture Journal* 5 http://five.fibreculturejournal.org/fcj-024-a-playful-multitude-mobilising-and-counter-mobilising-immaterial-game-labour/

De Peuter, Greig and Nick Dyer-Witheford.. 2009. “Empire@Play: Virtual Games and Global Capitalism.” *ctheory.net*. http://www.ctheory.net/articles.aspx?id=608#_edn2

Graham, Phil. 2013. “Dromoeconomics.” In *The Virilio Dictionary,* edited by John Armitage, 71-72. Edinburgh: Edinburgh University Press.

Grosz, Elizabeth. 2005. *Time Travels: Feminism, Nature, Power*. Durham & London: Duke University Press.

Guattari, Félix. 2011 [1979]. *The Machinic Unconscious: Essays in Schizoanalysis.* Translated by Taylor Adkins. Los Angeles, CA: Semiotext(e).

Guattari, Félix. 2013 [1989]. *Schizoanalytic Cartographies*. Translated by Andrew Goffey. London & New York: Bloomsbury.

Halberstam, Judith/Jack. 2011. *The Queer Art of Failure.* Durham and London: Duke University Press.

Haraway, Donna. J. 1991 [1984]. *Simians, Cyborgs, and Women: The Reinvention of Nature.* London: Free Association Books.

Hayles, Katherine. 1993. “The Materiality of Informatics.” *Configurations* 1, no. 1: 147-170.

Hayles, Katherine. 1999. *How We Became Post-Human: Virtual Bodies in Cybernetics, Literature, and Informatics.* Chicago: University of Chicago Press.

Heidegger, Martin. 1962 [1927]. *Being and Time*. Translated by John Macquarrie and Edward Robinson. Oxford: Basil Blackwell.

Leroi-Gourhan, André. 1993 [1964]. *Gesture and Speech*. Translated by Anna Bostock Berger. Cambridge & London: The MIT Press.

Lyotard, Jean-François. 2011 [1971] *Discourse, Figure*. Translated by John Mowitt and Mary Lydon. Minneapolis MN: University of Minnesota Press.

Margulis, Lynn, Celeste Asikainen and Wolfgang Krumbein. 2011. *Chimeras and Consciousness: Evolution of the Sensory Self.* Cambridge & London: The MIT Press.

Noys, Benjamin. 2010. *The Persistence of the Negative: A Critique of Contemporary Continental Theory*. Edinburgh: Edinburgh University Press.

Olkowski, Dorothea E. 2012. *Postmodern Philosophy and the Scientific Turn*. Bloomington: Indiana University Press.

Parikka, Jussi. 2012. *What is media archaeology?* Cambridge: Polity.

Robinson, Peter. 2013. "Taking Heritage Brands Online." Paper presented the annual meeting of the *Children's Media Conference*, Sheffield, UK. [http://www.slideshare.net/dubit/taking-heritage-brands-online]

Serres, Michel. 1995. *The Natural Contract*. Translated by Elizabeth MacAuthur. Ann Arbor: The University of Michigan Press.

Shaviro, Steven. 2010. *Post-Cinematic Affect.* London: Zero Books.

Stengers, Isabelle. 1997. *Power and Invention: Situating Science*. Translated by Paul Bains. Minneapolis MN: University of Minnesota Press.

Stiegler, Bernard. 1998. *Technics and Time 1*: *The Fault of Epimetheus.* Translated by Richard Beardsworth and Georges Collins. Stanford: Stanford University Press.

Stiegler, Bernard. 2011. *Technics and Time 3: Cinematic Time and the Question of Malaise*. Translated by Stephen Barker. Stanford, California: Stanford University Press.

Terranova, Tiziana. 2000. "Free Labor: Producing Culture for the Digital Economy." *Social Text* 63, no. 2: 33-58.

Virilio, Paul. 1989. *War and Cinema: The Logistics of Perception*. Translated by Patrick Camiller. London: Verso.

Paul Virilio. 1991. *The Lost Dimension*. Translated by Daniel Moshenberg. New York: Semiotext(e).

Virilio, Paul. 1995. *The Art of the Motor.* Translated by Julie Rose. Minneapolis MN: University of Minnesota Press.

Virilio, Paul. 1997. "The Museum of the Sun." In *TechnoMorphica*, edited by Joke Brouwer and Carla Hoekendijk. Rotterdam: V2 Institute for the Unstable Media. [http://v2.nl/archive/articles/the-museum-of-the-sun]

Virilio, Paul. 1998a. "Architecture in the Age of its Virtual Disappearance." In *The Virtual Dimension: Architecture, Representation and Crash Culture*, edited by John Beckmann, 178-187. New York: Princeton Architectural Press.

Virilio, Paul. 1998b. "Dromoscopy, or The Ecstasy of Enormities." Translated by Edward R. O'Neill. *Wide Angle* 20, no. 3: 11-22.

Virilio, Paul. 1999a. [1980] *The Aesthetics of Disappearance*. Translated by Philip Beitchman. New York: Semiotext(e).

Virilio, Paul. 1999b. *Polar Inertia.* Translated by Patrick Camiller. London: Sage

Virilio, Paul. 1999c. *Politics of the Very Worst: An Interview by Philippe Petit.* Translated by Michael Cavaliere. New York: Semiotext(e).

Virilio, 2000b. *The Information Bomb*. Translated by Chris Turner. London: Verso.

Virilio, Paul. 2002. *Unknown Quantity*. Thames and Hudson : Fondation Cartier pour l'art Contemporain.

Virilio, Paul. 2005. *Negative Horizon: An Essay in Dromoscopy*. Translated by Michael Degener. London: Continuum.

Virilio, Paul. 2009. *Grey Ecology.* Translated by Drew Burk. New York: Atropos Press.

Virilio, Paul. 2012. *Administration of Fear.* Translated by Ames Hodges. Los Angeles: Semiotext(e).

Virilio, Paul, and Sylvère Lotringer. 2008. *Pure War.* Translated by Philip Beitchman, Brian O'Keefe and Mark Polizzotti. New York: Semiotext(e).

Watkinson, John. 2001. *Introduction to Digital Video*. Oxford: Focal Press.

Wright, Mark. 2013. "Husserl, Edmund." In *The Virilio Dictionary,* edited by John Armitage, 101-104. Edinburgh: Edinburgh University Press.

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[1] For the purposes of this article, I am thinking of the digital users of the Twenty-First century as being the dromospheric generation, although Virilio begins with his generation of the Twentieth Century. In terms of the digital, we could date this generation from 1946, with ENIAC, although we could also return to modify this and start in fact with the work of Ada Lovelace, and examine the notion of transmission in the context of algorithmic developments through to the industrialization processes of digitality.

[2] Technology builders in 2014 produced a computer circuit that mimics the affects of corporeal-cognitive reactive energies, naming this circuit "TrueNorth", a reference to the geophysics of the earth where the difference in degrees between magnetic north and true north is contingent upon where is measured. (http://ibnlive.in.com/news/new-postagestamp-size-chip-delivers-supercomputer-speed-functions-like-a-human-brain/490995-11.html)

[3] Playing Temple Run : http://www.youtube.com/watch?v=DQpFYVKYgME&feature=player_embedded

This youtube film shows a very young child playing this hand-held tablet version of Temple Run in 2012. The child is 18-20 months old, and can be seen holding a milk bottle in one hand while balancing the tablet, and at points in the game that require the player to tilt the tablet, she places the teat of her bottle into her mouth without cessation of the play. The access that this child has to codes her childhood – in shot are Nickelodeon figures, she has access to technology, her situation in a home with a parent nearby – all of these political and territorial demographics, are enablers of a particular kind of dromosphere. Children are a significant capital resource and investment, and their value is contextually accorded.

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