

Networked Learning and the Politics of Speed: a Dromological Perspective.

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ABSTRACT

This paper considers the implications for networked learning of the perspective of dromology (Greek: *dromos*, 'running'). Theorists such as Virilio (1999; 2000), Adam (1998) and Eriksen (2001) have argued that the defining characteristics of our society, and an increasing source of its hazards, are its relentless acceleration and compression of time. The benefits claimed for networked learning environments – productive forms of accessibility, asynchronicity, flexible working, interactivity, instaneity, global reach, inclusivity and contemplative digital space, all appear challenged by dromological perspectives. These latter locate the rise of digital information technologies firmly within the neo-liberal ideology of globalisation, and see them caught inexorably within a logic of 'fast time'. This has dysfunctional effects in relation to creative thinking, deliberation, discernment and other conceptual processes. It has dystopian political effects in terms of the erosion of democratic and cultural space and the discrediting of action. The paper invites discussion of the validity of this challenge and whether it holds for a new generation of so-called 'digital natives' – 'the children of chaos'.

Keywords

Dromocratic condition, globalitarianism, performativity, time compression, death of geography, fast time, liminality, vertical stacking, integral accident

INTRODUCTION

This paper attempts a tentative reconceptualisation of networked learning from a perspective that has enjoyed much currency recently in discussions of other uses of technology, for example in the domains of military strategy, geopolitics, geography and cryogenics, though not, to date, in the sphere of learning technology. This is the perspective of dromology (from the Greek root *dromos*, meaning 'race', or 'running') propounded principally in the recent work of the French theorist Paul Virilio. Theorists such as Virilio (1999; 2000), Adam (1998) and Eriksen (2001) have argued that the defining characteristic of early twenty-first century society, and an increasing source of its hazards, is its relentless acceleration and compression of time.

What follows in this conceptual essay is not an endorsement of Virilio's perspective, which, as will become apparent, is uncompromisingly dystopian. It is interesting however to reconsider the purposes, effects and properties of networked learning through the lens of dromology, and to reconceptualise its practices from this radically different perspective. What are often claimed as benefits of networked learning environments, that they can offer productive forms of accessibility, asynchronicity, flexible working, interactivity, instaneity, global reach, learner empowerment and inclusivity, as well as contemplative digital space, would all appear to be challenged from dromological perspectives. These latter locate the rise of digital information technologies firmly within the neo-liberal ideology of globalisation, and see them caught inexorably within a logic of 'fast time', increasing acceleration and exponential growth of information. As Eriksen has remarked 'there is a growing amount of everything' (2001:89) and 'the growth rates in cyberspace surpass everything else' (2001:97).

The main property of exponential curves is the doubling of their values at regular intervals; so long as the numbers are small, they do not seem to grow dramatically. Eventually, they take off and begin to resemble vertical lines, which indicates – since the *x* axis represents time – that time approaches zero. Surprisingly many such curves can be identified nowadays. (2001: 6)

As Virilio remarks, “Faster, smaller, cheaper” – this NASA slogan could shortly become the watchword of globalisation itself” (2000:66).

From these perspectives certain of our emerging networked learning practices seem caught in an awkward tension, if not disjunction. The pedagogical claims made for them seem to be located within, and to require the integrative and deliberative logic of, what Eriksen characterises as *slow time* (see below). As digital phenomena, however, they increasingly serve to constitute *fast time*, can only accelerate in their future modus operandi, and reinforce the dromocratic principle that fast time drives out and occupies the place of slow time. From dromological perspectives puzzling paradoxes emerge. The massive proliferation of information leads not necessarily to greater understanding but potentially to disinformation and confusion. ‘The sudden multiplication of “points of view” heralds not diversity and difference but media-controlled conformity, ‘the latest globalisation: the globalisation of the gaze, of the single eye of the cyclops who governs the cave’ (Virilio 2000:18). Tele-presence in universal time leads only to the artificial horizon of the screen displaying media perspectives, whilst the global speed of communications moves us only ‘towards inertia, towards the sterility of movement’ (122).

My purpose here is merely to render our current (recently established) practices in networked learning strange, and to pause for momentary, and perhaps salutary, thought on the often unchecked advocacy and wholesale adoption of these increasingly prevalent technologies within the academy in the light of dromology. In the analysis that follows the term ‘networked learning’, which remains loosely defined, will be interpreted in the broadest sense as those aspects of academic practice that involve engagement with (networked) digital tools, artefacts and environments, including the full current panoply of internet and intranet, virtual learning environments, video streaming, mail lists, automated assessment, weblogs, wikis, SMS texting, mobile technology, e-repositories, e-journals, RSS feeds and so forth.

THE DROMOCRATIC CONDITION: SPEED AS POWER

Daniel Bell pointed out in the late 1970s that capitalism contained within itself a cultural contradiction which fused a puritan work ethic with a hedonistic imperative to consume (Bell 1978). In terms of this argument, increasing levels of consumption are required to foster the production necessary to sustain national economic growth. In a globalised society consumption has to take place in less and less time and leisure time becomes the site of this intensified and relentless consumption. In the same period Lyotard saw how this process would be radically accelerated and driven by new information technology, a phenomenon he was to identify as *performativity* and which, he forecast, would come to characterise the postmodern condition. In this condition, leisure time either begins to resemble activities more commonly associated with work time, or comes increasingly to resemble acts of consumption, such as weekends spent shopping. But it was Virilio who was to emphasise the crucial aspect of acceleration in these processes.

Today, almost all current technologies put the speed of light to work...we are not only talking about information at a distance but also operation at a distance, or, the possibility to act instantaneously, from afar...This means that history is now rushing headlong into the wall of time... the speed of light does not merely transform the world. It becomes the world. (Virilio 1999)

The acceleration of the social, political and economic world has led to the compression of the time that is involved in the transference of information, images, objects and people. Adam (2003) argues that this pursuit of speed is not only valorised in our society but remains unquestioned and unquestionable. It prevails over all other considerations in our society, be they social, cultural or environmental. Speed of innovation in bringing a new product to the market first bestows clear advantages over one’s competitors. Earliest production and speed to market are crucial given the huge investment in research and development.

Virilio argues that the dominance of speed has historically been the source of power in all societies, be this through horsemanship, naval power, railway transportation, flight or, now, the fastest technology of all, information technology, which operates, quite literally, at the speed of light. ‘Speed’ suggests Virilio (1999:15) ‘is power itself’.

Whether in ancient societies through the role of chivalry (the first Roman bankers were horsemen) or in maritime power through the conquest of seas, power is always the power to control a territory with messengers, modes of transportation and communication. Independent of the economy of wealth, an approach to politics is impossible without an approach to the

economy of speed...Global society is currently in a gestation period and cannot be understood without the speed of light or the automatic quotations of the stock markets in Wall Street, Tokyo, or London. (15)

Acceleration, in this view, is the hidden side of wealth and accumulation, or capitalisation: in the past the acceleration of maritime transportation, today, the acceleration of information.

TIME COMPRESSION AND THE DEATH OF GEOGRAPHY

When the ultimate use of speed becomes that of information technology, it might be argued that a dromological perspective becomes highly significant as a means of analysing networked learning. Its relevance lies in Virilio's assertion that the speeding up of society is not necessarily beneficial. Moreover, though he does not adopt a Luddite position, and describes himself as one who loves to use technology, he argues that the promise of information technology is anything but emancipatory. The 'dromocratic condition' serves to compress time and space such that users of networked communication are rapidly approaching a point where they will all operate instantaneously in a universal real time. This can only lead to the collapse of space and the 'death of geography'.

What are we to say, for example, of the 'virtual communities' organised in networks around the Internet? There are already 70 million Internet users throughout the world, communities of believers 'tele-present' one to another thanks to the instantaneity – and, before long, the electronic ubiquity – of on-line cameras. (2000: 117)

The dramatic event of this confinement is that youth can no longer conquer the world. 'If, as a child, the world's distance is lost and reduced to nothing, then one experiences a feeling of incarceration and travel no longer forms youth. Youth will be born into a closed world representing an unparalleled threat'. (Virilio 1999). With this comes an erosion of the public sphere and of democratic space. 'The acceleration of speed' argues Bartram (2004:289), 'has had largely detrimental consequences with the decline of the public sphere, the erosion of the democratic process and the increased power of the military complex. For example, Virilio has argued that capital cities of the future will only remain significant because of their ability to act as the intersection of speed, rather than serving any communal or social purpose'. Virilio himself asks:

What, then, remains of the historical importance of the public space of the city in the era of this META-CITY in which the public image is king? An interactive image in commerce, education and the post-industrial enterprise, available at all times – and from one end to the other of our small planet? (2000:117)

Delay in communication was a factor that, in the dromological analysis, determined human freedom to some extent. The absence of geographical space erodes human relations and human liberty.

'The possibility of a 'presentified' history emerges, one known as current events or news. There is the considerable importance of the communication revolution and the power of the media. History only happens in the present. Today historians are being pushed around by the media. ... Today the media no longer exists as narratives but rather as flashes and images. History is therefore being reduced to images'(1999a:57).

Analyses of reader behaviour of online newspapers suggest that average time of perusal of online news can be as little as fifteen seconds. The news 'item' is reduced to an (immediately historical) fragment of information (Eriksen 2001). A disturbing example of this was the recent mining disaster in West Virginia when news 'flashes' reporting firstly that all the miners but one had survived were replaced almost instantaneously by others reporting that all but one had *not* survived. Virilio cites the last election of Berlusconi in Italy as an example of how almost total control of the media in a society, the regulation of all visualising technologies, can overdetermine a single view of political reality in the real time provided by networked media, eroding the possibility of other understandings of 'reality'. Technological and media related vectors become delocalised to the point where, in Virilio's phrase, 'here no longer exists, everything is now' (Virilio 2000: 116).

The end of our history has not happened but we do have the programmed end of the 'hic et nunc' and the 'in situ'. (2000: 116).

Adam (1998:69) identifies the interrelated social and environmental hazards of speed, when it becomes tightly coupled to efficiency and competition, as being 'a rise in energy use, second with the production

of pollution, and third with reference to increased production of waste, all of which in turn, add to an overall escalation of environmental degradation.’ A further pressure on the environment arises, she argues, when, ‘due to the economic valorisation of speed, corners are being cut in relation to safety and sustainability.’ Virilio, similarly, sees globalisation not as economic but as primarily ecological. The pollution it causes is not just that of the physical environment as in the atmospheric greenhouse effect ‘but also to the pollution of distances and delays which make up the world of concrete experience’ (116). In his view ‘globalisation relates to the dromospheric greenhouse effect of confinement within the limit-acceleration of telecommunications’ (117).

INSTANEITY AND THE EROSION OF DELIBERATION

For Virilio new digital technologies are the primary means of instantiating a globalised or, in his preferred phrase, a globalitarian reality. Drawing on Halévy’s (1948) *Essai sur l’accélération de l’histoire*, he argues that in this transformed reality citizens give up their understanding of the broader political context in which they have their being and in which their lives are conducted, in the same way that in the early part of the twentieth century people, with the advent of Einsteinian theories of relativity, abandoned any deep understanding of the physical environment in which they lived. Within this new politics of speed the digital technologies of globalisation ‘blast away all delay, all duration’ (116) and with it that sense of localised historical development that once gave rise to nation states. The latter decline as time-as-duration (*longues durées*) is superseded by ‘a new tempo, a pace which should, at some stage not too far distant, speed up even the “truth” of history’ (116). This is a ‘phenomenon of perspectivization of a new kind’ Virilio argues, which makes its impact ‘through the power of the instantaneous emission and reception of signals’ (118).

More trenchantly perhaps, whereas postmodern critiques have celebrated the collapse of the binary between centre and margin as liberating, in the dromocratic condition *the distinction between what is crucial and what might be deemed incidental is eroded*. So is the time distance ‘that allows human relations to exist and the processes of democratic participation and deliberation to occur’ (Bartram 2004:290). Eriksen (2001) in *Tyranny of the Moment*, argues that ‘slow time’ – the private periods where we are able to think and correspond without interruption – is now one of the most precious resources we have. He argues that a culture lacking a sense of its past, and therefore of its future, is effectively static. Virilio sees new digital technologies, operating quite literally at the speed of light, as collapsing past, present and future through a time compression which becomes the means of ushering in a new universal (globalised) *real time* in which we will all operate simultaneously. This he refers to as the ‘acceleration of the real’. The shift from analogue to the digital is the inevitable effect of speed on information data as the latter undergoes temporal compression. The result, he argues, is that the local and the regional disappear.

By supplanting the ‘chronological’ successivity of local times, thanks to the instaneity of a universal world time, tele-technologies over-expose not only all *activity*, by making it *interactive*, but also all truth and historical reality. (118).

DIGITAL ENVIRONMENTS AND THE DISCREDITING OF ACTION

These are undoubtedly large and sweeping claims. It is quite novel, but interesting and perhaps instructive to consider that the notion of interactivity, much beloved of active learning theorists in the last few decades, might be perceived as detrimental to deliberation and discernment when operating globally in universal world time. This is because, for Virilio, ultimately the threats to (Western) democracy, ethics, and aesthetics arise from the twin problems of *immediacy* and *instaneity* which are integral to the new digital environments. This leads to global interactivity which he sees as eroding difference and diversity, and removing human prioritising and agency.

Every time we introduce a higher speed we discredit the value of an action, alienating our power to act for the sake of our power to react, which is another, less elevated name for what we currently term ‘interaction’. (123)

So global interaction is really more like mere reactivity. But this is as nothing, Virilio argues, in comparison with the advent of the ‘automatable processing of knowledge’:

that generalisation of amnesia which will be the ultimate achievement of the oblivion industry, since the sum total of analogue information (audiovisual and other) should soon be replaced by the digital, with computer codes taking over from the language of ‘words and things’ (123-4).

A representative example of the latter might well be the advent of RSS ‘feeds’ which ‘push’ new information on specific topics to the networked reader. The proprietary names of these technologies, such as ‘Feed Demon’, seem apt from a dromological perspective. What is lost is the kind of ‘slow and measured democracy, locally situated’ (122) which he sees as typified by, for example, the direct electoral processes of the assemblies of Swiss cantons. He envisages the alternative as the kind of faux ‘live’ media democracy exemplified by the swingometers and audience rating measurement used in commercial television or opinion polls. (Much of which is conducted, interestingly, by the use of the hand-held personal response systems increasingly being adopted for student use in Western higher education lecture theatres.)

After the authority of human beings over their history, are we going to yield, with the acceleration of the real, to the authority of machines and those who programme them? Shall we see the mechanical transference of the power of the political parties to the power of electronic or other devices? (122)

Now, we might argue as educators, Virilio is referring to mass online interactivity which is contextually far different from the smaller and more sheltered networked learning environments with which we customarily deal. But cohorts of 1000 networked learners are not unknown already, and lecture theatres of several hundred learners using networked personal response systems are quite common. If the dromologists’ predictions are correct then this will increasingly become normalised as things get ‘faster, smaller, cheaper’.

FAST AND SLOW TIME: TWO LOGICS

A less flamboyant and somewhat cooler analysis is that provided by Eriksen (2001) in his identification of the ‘tyranny of the moment’. He identifies two contemporary temporal conditions within the information age – slow time and fast time – each with its own logic and affordances. Information technology, he argues, is pivotal to the new temporal imperative of fast time. He draws on Bateson’s earlier observation that increased flexibility in one area of practice tends to remove flexibility elsewhere (Bateson 1972). Though the speed of new technologies appears as a benefit to the sender of digital communications, the unintended consequence (Tutt 1985) of the technologies is the displacement of flexibility on the part of the recipient. The scarcest resource for all purveyors of information, Eriksen argues, be they advertisers, authors or academics, is the attention of others. (69) Under the principle that fast time inevitably drives out slow time, performative labour drives out leisure and the distinction between work and leisure is erased. The recipient flounders in a morass of unsolicited and increasingly undifferentiated information. ‘An accelerated professional life offers flexibility and removes security’ (124). In agreeing with Virilio that ‘Our history is the history of acceleration’ (51) Eriksen identifies six dysfunctional effects of speed within an informational society:

- speed is an addictive drug
- speed leads to simplification
- speed creates assembly line (Taylorist) effects
- speed leads to a loss of precision
- speed demands space (filling in all the available gaps in the lives of others)
- speed is contagious – when experienced in one domain the desire for speed tends to spread to new domains.
- gains and losses tend to equal each other out so that increased speed does not necessarily even lead to greater efficiency.(58-77)

In accordance with these effects, or principles, duration and continuity lose out whilst spontaneity and innovation (*per se*) win. Everything becomes, in principle, just as important as anything else and, as in Virilio’s observation, distance becomes bracketed.

There are kinds of knowledge, modes of being, and ways of thinking and practising Eriksen contends, that require slow time, and there are kinds which are appropriate to fast time. However, given that fast time displaces slow time, it is not surprising that the logic of fast time is becoming hegemonic within the academy. The effect of this is that certain ways of coming to know, of knowledge generation and

refinement that are crucial to conceptual understanding are in danger of being sacrificed to meet various performative agendas that valorise speed and efficiency.

THE HEGEMONY OF THE FRAGMENT AND THE EROSION OF LIMINAL SPACE

‘These fragments have I shored against my ruin...’

TS Eliot *The Waste Land*

As an example of the ‘logic of the web’ and of fast time, Eriksen draws attention to the nature of MP3 technology and its operational attributes, pointing out that, in principle, ‘everything is available out there, and each individual user puts together his or her own personal totality out of the fragments’ (Eriksen 2001:107). He sees this aspect of the digital, and indeed the giant warehouse of available fragments that the Internet offers, as one of the foundations of the currently prevailing neo-liberal ideology.

WWW (and multi-channel television, and MP3, and ‘flexible work’...)

offers freedom and choice by the bucket-load. On the deficit side of the balance, we have to note, among other things, ‘internal cohesion, meaningful context and slowness’. (108).

Adam (1998:69) puts forward a similar case when discussing the social risks of speed, pointing out that ‘an important indirect effect is created through the ever decreasing time for reflection, contemplation and deliberation on the processes and their effects’. Slow time, these writers imply, is necessary for certain kinds of intellectual and emotional experience, for the production of certain forms of thought, and for the generation of certain kinds of knowledge. Reflection and deliberation are compromised, and so is creativity, according to Eriksen, which is displaced by ‘a continuous stream of new combinations’ The filling of gaps, which seems to be an effect of speed and is typical of the tyranny of the moment, ‘is seriously detrimental to creativity. The new arises unexpectedly from the gaps created by slack in time budgets, not from crowded schedules’ (Eriksen 2001:112). He elaborates further:

when growing amounts of information are distributed at growing speed, it becomes increasingly difficult to create narratives, orders, developmental sequences. The fragments threaten to become hegemonic. This has consequences for the ways we relate to knowledge, work and lifestyle in a wide sense. Cause and effect, internal organic growth, maturity and experience; such categories are under heavy pressure in this situation ...(113)

The opposite of fragmentation, of course, is integration. Meyer and Land (2003; 2005) discuss learners’ construction of new conceptual understandings within disciplinary contexts, and the transformative effect that such new understandings bring. They emphasise the process of integration within such transformative learning in that it exposes the previously hidden interrelatedness of something. Though the experience of such integration might be sudden, as in the eureka moment, they point to the often troublesome and protracted nature of such ‘threshold’ concept acquisition, indicating, once more, the necessity for slow time in certain forms of learning. An important part of their analysis is the role of *liminality*, the ‘betwixt and between’ state in which the learner wrestles with troublesome knowledge and the learner’s identity gets shifted.

the transformation can be protracted, over considerable periods of time, and involve *oscillation* between states, often with temporary regression to earlier status. (Meyer and Land 2005: 376).

From a dromological perspective the liminal space, which for Meyer and Land is the space in which the integration and synthesis which foster creativity, problem formulation and solution are most likely to take place, would seem to be in danger of being curtailed or even removed in the concertina-like time compression of which Virilio and Eriksen speak. As Eriksen says (2001:111) ‘every vacant spot is filled’.

VERTICAL STACKING

A related digital effect seen as symptomatic of fast time is *vertical stacking*. This, according to Eriksen (2001:6) is ‘a curious side-effect of acceleration and exponential growth .. the strange fact that more and more of everything is stacked on top of each other rather than being placed in linear sequences’. It also draws on the notion taken from postmodern architecture and contemporary music that, in

principle, any architectural form or style can go with any other, or any sound can go with any other sound.

Just as, however, even the most eclectic pastiche of a building must all the same have some sort of foundation that anchors it to the ground, vertically stacked music often depends on an insistent beat. There are layers of trance stacked on top of dance, often without much in the way of stylistic integration. (Martin 1997:290)

The vertical stacking approach suggests Martin (1997:292) 'implicitly (or even explicitly) accepts the idea that music (or art more generally) is now simply a matter of trying out the combinations, filling out the grid.' Eriksen sees Martin's analysis as an 'excellent description of the tyranny of the moment: there are layers upon layers on top of each other, every vacant spot is filled, and there is little by way of internal integration'(Eriksen 2001:111). Eriksen maintains that the metaphor of vertical stacking is appropriate to the ways in which, in a range of practices, we both experience information and also attempt to process it in terms of producing somewhat formulaic renditions of knowledge – 'journalism, education, work, politics, and domestic life, just to mention a few areas, are affected by vertical stacking' (113). The implication is that much of modern learning in digital environments is more 'a matter of trying out the combinations' and less about 'internal integration'. In this view stacking replaces both internal development and the logic of integration, which requires slow time. Images of networked learners pasting, hyperlinking and rapidly scanning and downloading from amazon.com, Google, image banks, search engines, myriad websites and countless other databases certainly conjures the possibility of stacked and fragmented rather than integrated and developed production. The most primitive or least integrated form of vertical stacking, would, presumably, be plagiaristic activity.

CONCLUSION: THE INTEGRAL ACCIDENT OR THE CHILDREN OF CHAOS?

The question remains as to what explanatory power dromological perspectives might carry for busy practitioners of networked learning and to what extent, if at all, it might serve as an action theory in terms of bearing implications for practice. It would be unhelpful merely to posit yet another facile binary, setting linear modernist faith in progress, with strong moral overtones of development towards a more desirable emancipated state, against risk-infused postmodern phenomena of stacking, fragmentation and complexity, in which there is in effect no change but a playful redesign of surfaces and mere recirculation of elements. It is necessary on the one hand to recognise the strong ideological positioning of theorists in this field. Virilio, for example, writes from a committed position of Christian humanism and much of his writing on technology focuses on its military applications, usually in relation to American foreign policy. Eriksen's writing is informed by a Scandinavian and modernist civic responsibility, informed by a progressive sense of personal development and rooted in a humanist sense of individual freedom.

The experiences of any working day of many Western academics caught in the frenetic maelstrom and Babelish noise of emailing, websurfing, networking, and the ceaseless patterns of sending, responding, searching, deleting, linking, sharing and saving, may resonate strongly with the depictions offered by the dromocratic condition. Virilio's view appears uncompromisingly dystopian, offering no respite from continuing acceleration and offering a bleak vision of the inevitability of the *integral accident*. This is the all-encompassing future accident which awaits all of us as networked users of the new information technologies, and which will strike these technologies, in Virilio's view, as certainly as every other technology has eventually encountered a catastrophic accident, from the Titanic to Concorde to Chernobyl. The difference this time is that it will be universal, affecting everyone at precisely the same moment, hence its 'integral' nature. The computer virus damage and stock market collapses experienced to date will, he contends, pale into insignificance in comparison with the unprecedented scale and nature of this impending calamity – the *information bomb* (Virilio 2000) – which will be the product of acceleration, and, of course, global networking.

Such apocalyptic anxieties apart, Virilio also sees the democratic and political space of cities and the cultural and creative traffic contained within these spaces ultimately reduced by accelerated technology until cities are rendered mere 'intersections of speed' (Virilio 1999). Delantey (2001) has pointed to a new function and identity of universities in the age of information as the best-placed node of 'interconnectivity' between technological and cultural knowledges. In this optimistic model the university remains immersed in global cultural traffic, not cloistered away from society, but, through the benefit of networked learning and online resources is able to achieve the permeability, the multiple

points of entry and exit and the creative unpredictability that can lead to the production of lively and convivial spaces. Virilio's dromological view would appear to counter this with a reductionist model in which the academy becomes the educational equivalent of the urban intersection of speed, with online learners in the academic equivalent of transit, stopping long enough to access resources, pick up credit and change modules.

There is of course a certain essentialism in Virilio's association of speed and complexity with dysfunction. This view is challenged from perspectives which welcome radically different networked technologies, such as wikis, as offering new forms of authorship and creativity and welcome shifts in accessibility. Bayne (2005) for example, contends that in these technologies:

Unlimited linkage between text entries, commentary, external web sites, movies and images is enabled, within an ethos of multilinearity, linkability, openness and integration which contrasts strongly with the closure and fragmentation of the WebCT interface. (Bayne 2005:14)

Such technologies are both discomfiting and discomfoting, but far from dysfunctional.

The wiki, it is true, is an initially confusing and slightly uncomfortable environment to negotiate. Yet we can neither expect nor desire the shift of learning and teaching into virtual space (the 'violence of digitisation' (Orliaguet 1999)) to be merely comfortable. To seek comfort by turning to the commercial, out-of-the-box VLE can ...constitute a refusal to confront the awkward and challenging incursions of the new media age. To do this leaves our learning and teaching practices subject to a regressive dependence on pre-digital metaphors, signs and practices which are neither sustainable nor, in the long term, desirable. (15)

Rushkoff (1997) and Prensky (2001), similarly, have pointed out that a new generation of networked learners, variously named the 'children of chaos', 'digital natives' or 'MTV generation', who have never known non-digital culture, expect instantaneity from cash machines, the web and multi-channel TV, and thrive on mobile telephony and the complexity of gaming, are already attuned, and perhaps thrive, on the dromocratic condition. Digital natives, argues Prensky, 'are used to receiving information really fast. They like to parallel process and multi-task. They prefer their graphics *before* their text rather than the opposite. They prefer random access (like hypertext). They function best when networked. They thrive on instant gratification and frequent rewards. They prefer games to "serious" work.' (Prensky 2001:1)

These contrasting perspectives offer a valuable counterbalance. That said, we would perhaps be foolish not to recognise the political dimension of the new technologies. As Eriksen points out (2001:6) we are considering 'nothing less than a new pattern, a new code and a new set of organising principles that may be about to dominate our society'. The issue is not, he makes clear, to regain control over time but rather to 're-learn to value a certain form of time' and why that form of time is important and why it is threatened. It seems appropriate to conclude with his own observation on speed.

This is not meant as a one-sided attack on fast time. Speed is excellent where it belongs. But it is contagious, and it has possibly serious side effects. Unless we understand how speed functions, what it adds and what it removes, we are deprived of the opportunity to retain slowness where it is necessary'. (2001: 59)

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