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Lifeworld Inc. – And What to Do About It

Introduction

What if there was not one ontology we had to choose as constituting the world but several? Then, new ontologies, understood in the Humean sense as inferences about the world's connections – 'natural' organizations/perceptions of experience and of 'causation' and of what therefore constitutes both existence and non-existence (Norton and Taylor, 2009) - could come into being as constructed entities, not as timeless arrangements of perception that are always already there. We can understand this point in three ways.

On a philosophical level, we might settle for a form of multi-naturalism, a term most commonly used by the anthropologist, Eduardo Viveiros de Castro, who argues, in a reversal of the usual mode of thinking, by way of an analogy with animist ways of thinking that conceive of entities as similar in terms of their spiritual features but as varying by virtue of the sort of body that they are endowed with, that though our culture is the same our natures differ (Latour, 2009). Following on from a critique of Kantian idealism, Viveiros de Castro argues that we need to multiply ontologies and 'ontology-speak'. Such a conception is not as rare in the history of philosophy as might be thought. It was the vision of William James, for example. James argued that there existed a series of different non-isomorphic modes of existence¹. Later in the twentieth century, we can point to the work of Etienne Souriau (1943, de Vitry Maubry, 1985), who proposed to tackle head on the question of the plurivocity of being not, as is so often the case in the history of philosophy, by offering up variations on one central mode of existence – that is knowledge - but by insisting that entirely different modes might exist. Feeding on the key notion that prepositions too are given in experience, as James would have had it, Souriau added flesh to James's notion of a pluriverse by cleaving to the idea of a series of modes of existence. More recently again, Sloterdijk (2009) has made the argument for a right of return to a polytheistic 'Egyptian' world in which multiple spheres can live tolerantly side-by-side, rather than opting for a series of monotheistic cultures each of which can assert its sense of the world as the one and only. There is no world that is somehow more complete, in other words, but rather a series of incompletes.

¹ Such a vision can be taken as ontological in several ways. For example, it can be thought of as a form of polytheism understood as multiple sets of values, each of which imposes an obligation to live in a particular way.

A second way of thinking through the cause of multiple ontology comes from anthropology. From early in the history of the discipline, anthropologists have tried to peer inside other worlds which they have often thought of as not just cultures but as something much closer to an abiding sense of reality – what it is to be the case. In recent times, the most notable attempt at understanding this kind of worlding has been Descola's (2005) fourfold classification of ontologies. But this classification has proved controversial. For example, Viveiros de Castro argues for the possibility of many more ontologies which either exist or are possible (see Latour, 2009). In a similar vein, others have argued that the radical mobility which animates so many cultures disables the very notion of a rooted and settled ontology; codes, structures and definitions are in constant change (e.g. Greenblatt, 2010). What is at issue is whether such a stance unsettles the very notion of ontology or simply adds another mode of existence to the roll call.

On a third, more practical level, we might simply draw an analogy. When we think about the possibility of different ontologies, we might make a rough and ready comparison with the synchrotron, a cyclic particle accelerator which produces a beam of very intense light which can then be broken down into its constituent wavelengths, each beam line allowing different kinds of world/experiment/inference to be constructed². Most synchrotrons do not use all of the possible beam lines; there are usually unused ports awaiting the construction of worlds/experiments/inferences yet to find a place in the scheme of things, new projections and stainings of the world, to use two Humean terms (Kail, 2007). I want to suggest that the world that I want to describe is just such a line in construction, a place in which a new world/experiment/inference is starting to be tuned up.

The ontology that I want to describe as in construction depends on the birth of a new information age which is also, as in previous information ages (see Headrick, 2000), a transformation, most particularly in the production of space, brought about through new practices of organizing, analyzing, displaying, storing and communicating information. In a

² Such as, in the life sciences: protein and large molecule crystallography, and drug discovery and research. In materials science: 'burning' computer chip designs into metal wafers, studying molecule shapes and protein crystals, analysing chemicals to determine their composition, inorganic material crystallography and microanalysis, fluorescence studies, and semiconductor material analysis and other structural studies. More generally: geological material analysis, medical imaging, and proton therapy to treat some forms of cancer.

number of other works (eg Thrift, 2005), I have described the way that the proliferation of Euclidean calculation has produced a new kind of world not once but twice. In each case, what started as an epistemological shift transmutes into an ontological one. In the first pass, the Euclidean model of numbered and angled space produced a grid over the world. That process took some four hundred years to complete, if we date it as beginning with the first large-scale surveys and as carrying on through the advent of chronometers in the early nineteenth century to end with the advent of global positioning systems based on satellites (Higgins, 2008). The second pass overlapped in that it began with the introduction of new forms of information technology that produced a generalised capacity to track movement and is likely to end with a redefinition of the world of persons and objects as constituent elements of a mutually constitutive moving 'frame' which is not really a frame at all but more of a fabric that is constantly being spun over and over again as position becomes mobile, sometimes producing new patterns.

The effects of this second pass are still in formation but already we can see that they are producing a world of 'movement-space', at least in those places where the technology stretches³. This is a space in which movement is able to take on a different form, no longer understood as a simple displacement in space, knowable only in terms of the actual, the movement already taken, but arising instead from the institution of what Manning (2009, p187) calls a 'resonant grid' that can itself shift shape and which is able to detect and work with the coming-into-existence as well as that-which-already-exists, a world of moving 'through movement moving' (Manning, 2009, p64)⁴. This paper is both about what that form is and what possibilities it might call forth.

If I had to summarize the developments I want to describe, I would draw on the work of Tim Ingold. Ingold is an exceptionally interesting but, in the end, traditional phenomenologist. His work on lines (Ingold, 2007) argues that we are beset by a world in which Euclidean lines which work from point to point have superseded an older and better way of proceeding which might be understood as the wayfaring line, the kind of line which can wander about (and which, by inference, is closer to the fabric of the world). I want to argue that the kind of world in which this wandering, wayfaring line held sway is now being rebuilt – but out of

³ It is important to note that these developments are not confined to the former Euro-American core but stretch in to many other spaces, for example, China.

⁴ Manning (2009) works up a convincing portrait of a radically empirical world but ignores the way in which this portrait could become the anchor for new kinds of power, perhaps because she believes that intensity is anathema to quantification.

fields of number, out of the stuff of calculable coordinates. In this process of reconditioning the world, a new ontology is being constructed which, as Stiegler (2009, p) argues, takes us on from the ‘orthographic age’; ‘technical development [gives birth to] a new programmatic; this new programmatic is a process of psychic and collective individuation’ but, as I shall argue, it is much more than this process of individuation⁵. It is a more far-reaching reconditioning which is allowing a new kind of landscape to be built out of different gradients of resistance which reconstitute what we think of as the world.

The paper is therefore organized as follows. In the main section of the paper, I argue that the ontological horizons of human societies are changing as a result of a series of developments which allow what I will call, after Sterling (2009), the security-entertainment complex to come into being, a complex made up of two particular linked assemblages which have gained increasing purchase by feeding off each other. The security-entertainment complex has replaced the military-industrial complex as the main creator of an exaggerated humanity. It produces a stance towards the world which is naturally experimental and which is able, to use a Humean phrase, to employ technology to make this experimental stance, ‘irresistible’. This ‘irresistible’ experimental stance aspires to be all-encompassing but it must perforce retain an open-endedness if it is to be effective⁶ and this open-endedness provides all manner of opportunities to experiment in ways which allow for its interrogation and recomposition.

In the subsequent section of the paper, I will argue that, if my previous arguments are accepted, then we need to think seriously about social science methodology. For in this kind of restless experimental world, we may not need data as such – that will be there in increasing abundance – so much as new means of probing what is going on and instigating new behaviours/assemblages. We need, in other words, to invent an art of experiment which can up the methodological ante. I am looking, then, for a social science which promotes a rewoven empirics which, most particularly, generates the quality of provocative awareness. That means an experimentalist orientation must be in-built which can start and restart association. I will consider three moments in the invention of this art of experiment.

There are some very brief conclusions which return to the theme of ontology.

⁶ Thus retaining both of dimensions of the meaning of experiment (see Krohn and Weyer, 1994).

The Experimental Economy

In other papers (Thrift, 2008, 2009), I have tried to point to ways in which our sensing of the world is changing so that the conventional technology of writing is no longer enough, both because the new technologies have conjured up a technological unconscious in which writing is only one, and not necessarily the primary means of description, and because new kinds of ‘writing’ are coming into existence which ‘explicitate’ in different ways, thus allowing other forms of description to take on life. In other words, there is what Stiegler (2009, p35) calls a ‘general modification of event-ization’ based upon the back and forth of moving fields of data which are able to track and trace human ‘motivations’ by reworking them in much richer ways than were possible in the era of writing. This diagrammatic world⁷ has a long and tortuous genealogy which has gradually placed human being in a ‘blur of only partially registered data constantly shaping the world by means of correlations guided by error corrections’ (Bender and Marrinan, 2010, p200).

But for the world to show up as this kind of descriptive regime, one which sacrifices perceptual certainty for the alternative rigours of a continual experiment in experiment, demands the reconstruction of our inferences about the how the world is connected. Such a generative phenomenality depends upon the construction of the world as a surface in continuous motion, a world which depends on being able to construct a constant state of provisionality, a world always almost there, and thus always elastic in the way it leans into the moment, a world of infinite mobilization.

Such an auto-activated world arises out of five main socio-technical characteristics which have come into existence over the last thirty years or so, and which, when taken together, point to a reconstruction of the technological unconscious. The first of these characteristics is a structured continuity which always privileges the appearance of movement. As Galloway (2004) points out, what is actually being privileged is one form of structure – the horizontal network – over another – the tree. This surface is not narrative-based or time-based. Rather, it is a form of continuity which gains its phenomenal grip from ensuring that what should be an experience of dislocation is experienced as an intuitive plane of motion – always going somewhere - through a

⁷ This world is consistent with the move made in continental philosophy towards philosophical drawing or ‘thinking in diagrams’ in which the diagram becomes a moving outline (Mullarkey, 2006).

whole host of techniques which are designed to sink into the background and to be background: conceal innards, eliminate dead links, make sure there are no dead ends, inject the meaning of the link into its forms, place all content as close to the front door as possible, disallow any differentiation between media types like text, images or animation, work at the highest speed possible, eliminate all traces of where the medium derived from, multiply feedback loops (email responses, chat rooms, blogs, etc.) so that many-to-many communication is easy, and so on.

The second characteristic is the nature of the interface used. In the manner of all nascent technologies, computer interfaces have been modelled on previous technologies – keyboards and the semi-ubiquitous screen, in particular (Nusselder, 2009). But this has been a first phase only: interfaces are now changing their character. The symptomatic change is often regarded as the spread of touchscreens, as are becoming increasingly common. But these devices can be seen as, at best, half-way houses. The work of Maes and the Fluid Interfaces Group at MIT is a good guide to the evolution of thinking in this area and to what the future holds as motion control becomes a reality⁸. Maes started out by designing horizontal screens which resembled landscapes, enlivened by touch technology. But now she is working on devices that will continuously augment the physical world with digital information by using gesture as the main interface. Thus she is designing a system called SixthSense which has at least some understanding of where the user is, what the user is doing and who the user is interacting with. A small camera sees what the user sees and reacts with relevant information. It also tracks the movements of the user's hands. In turn, when the information is recovered a small projector in the same pack as the camera will project it onto any suitable surface, so that any surface can become an interactive surface.

The third characteristic is 'awhereness' (Thrift, 2008): the continuity of motion becomes locative as the world is tagged with an informational overlay. It would be foolish to suggest that we are yet at the stage where the dreams of pervasive computing have become a reality⁹ - the dreams of 'everyware' (Greenfield, 2006) dictating everywhere (Economist, 2010) - but it is certainly possible to see an emerging ambition: to tag a locational identifier to any unit of content so that it becomes possible to say that

⁸ Indeed, Microsoft has been working on a roughly similar system, Project Natal, which will allow people to play video games without a hand controller (Kendall and Ahmed, 2010).

⁹ Though everyday means of visualization of location are now becoming available, such as gowalla.com and foursquare.com, as are free maps, symbolized by Nokia's and the British Ordnance Survey's recent announcements.

‘maps ma[k]e more sense than spreadsheets’ (Sterling, 2009, p113). Everywhere will be coded. That is the ambition. In turn, that ambition will produce a phenomenological inventory and a means of navigating it whose heterogeneity will both reflect and mould our opportunistic, flexible patterns of attention.

To use Mackenzie’s (2009) phraseology in another context, maps have always been engines rather than cameras. But now, even more than before, maps become key means of achieving social assent (Wood and Fels, 2008) - as the unit of account, as the means of defining the defining features of the world, as the means by which it is read descriptively and prescriptively at the same time¹⁰. But these are now inhabitable maps in which location is engineered in order to produce defined experiences which can be commoditized and validated as commodities by their thereness. It is too strong a statement to say that the population ‘no longer [draws] distinctions between immersive games and the city streets’¹¹ (Sterling, 2009, p129) but the population does increasingly function as a set of human pantographs, measuring out the world and themselves both at once (Wood and Fels, 2008). Indeed, we might see the inhabitable map as a new version of the imperial map but one in which the maps are not just means of colonization but the colonization itself. The inhabitable map produces both a knowing, empowered imperial audience and its subjects¹². Thus a summary of the wherewithal of the imperial map has layers of irony when applied to the present day:

All maps serve thoroughly ideological functions in that they allow their users and readers to engage either instrumentally or intellectually with the world. They might do so at a variety of conceptual scales or degrees of resolution, depending on the cartographic mode within which they are produced, circulated, and consumed, but all maps empower their users and readers to discipline the world and to construct territory. The mapping by one polity, within its own spatial discourses, of the territory of another establishes a geography of the mind, within which empire can be conceptualized and advocated, and a geography of power, within

¹⁰ I take it that maps include a full complement of paratexts or, as Wood and Fels (2008) would have it, paramaps, all the surrounds and extensions of a map which are crucial to its survival as a relatively immutable entity (see Thrift, 2004).

¹¹ The phrase ‘augmented reality’ has been expressive of a pipedream up until now but as iPhone apps like NearestTube become ubiquitous, as other applications like Google Goggles become common, and as social network applications like Brightkite (which allows users to find friends in their vicinity by turning on the camera on their mobile phone and pointing it around them) spread, so the world can be literally overlaid.

¹² ‘Google Earth is at once a delightful and marvellous way to travel around the world vicariously and a somewhat scary reminder that we can be and are being watched’ (Akerman, 2009, p2).

which empire can be physically be constructed. ‘Empire’ is a cartographic construction; modern cartography is the construction of modern imperialism (Edney, 2009, p45).

But, in the contemporary era, maps take on a different quantity, measuring out territory that is continually on the move, thus rendering the imperial impulse a more flexible entity in which territory can be temporarily held – on a permanent basis.

The fourth characteristic is constant feedback. Advances in facial recognition and the detection of honest signals make it increasingly easy to read bodily responses – from the face or more general body movement - in real time. The result is that an old ambition, dating back to the ancient Greek, *Physionymas*, to be able to read the signs of a person’s nature, to read a person’s temperament and inclinations from external appearance, is able to begin to be realized en masse as the imperceptible becomes capable of being measured. A new doctrine of bodily signs can come into being which makes its way into official certifications of who we are embedded in software which literally re-cognizes us. This is fingerprinting taken to a new level. But it is more than this. For a redefinition of the body is also taking place, an automation which itself produces more signs of the body, but an extended body. Studies of human-computer interaction have concentrated on replicating and extending what Harper (2009) has called the physical geography of bodily interactions, whether that be how we move, touch, or glance, on more complex, communicating bodies. In setting out on this path, new forms of the body and mindfulness are being produced via technologies which have concentrated on amplifying just a few means of bodily extension as surrogates for communication. Thus the human zoo is being populated by new variants which have been produced through concentrating on intensively ‘breeding’ just a few physiological traits.

At the same time, another form of feedback has spread: it becomes possible to produce ‘interactive composition’, a term first used in the 1970s in new music to refer to instruments that made decisions that responded to a performer (Lewis, 2007), so introducing the idea of shared control of the music-making process in which simple pre-arranged processes are replaced by innovation as a result of inserting the ability to improvise. In turn, this notion has led to all manner of improvisatory technologies which allow the user at least some say, active co-construction, if you like, through ‘live algorithms’. As software has become more interactive, so its effects have become more pronounced. Not only does feedback allow the producer and consumer to interact and

co-construct worlds, thus commodifying all manner of enthusiasms, but it also allows new forms of intelligibility to come into being, based upon negotiation.

The point is that this fourth development is not just about media, but about social media, which can be understood as a new form of mediology in which the details of the everyday lives of millions of people are able to be uploaded and analysed: ‘what was ephemeral, transient, unmappable, and invisible [becomes] permanent, mappable, and viewable’ (Manovich, 2009, p324) and thereby acts as a new source of entertainment located somewhere between factual content, opinion and conversation¹³. Often painted as a playground of individual choice, this new sphere is actually heavily biased to the interests of corporate producers, following the templates of the professional entertainment industry. Thus, companies ‘have developed strategies that mimic people’s tactics of bricolage, reassembly, and remix’. In particular, industry is able to capture the tactics pursued by individuals as a conscious part of corporate strategy by producing products that are explicitly designed to be customized (Beer and Burrows, 2010). Thus ‘strategies and tactics are now often closely linked in an interactive relationship, and often their features are reversed’ (Manovich, 2009, p324, p323), as people’s tactics are turned into strategies and sold back to them.

The fifth characteristic is that cognition becomes even more of a joint experience between persons and things. Of course, this has always been the case but what is different now is that, as well as inevitably being incorporated into matters of concern, things have a say themselves as more than dumb actors as agency is displaced on to a host of new and varied entities. It is as if writing itself starts to write. Agency increasingly presides in disembodied entities, in presences, ‘agents without’, to use Chodat’s (2009) term. It is like an illustration of Whitehead’s world view, in which all things have a degree of consciousness, but one that is boosted as more and more things are able to become able. Thus, we return to a kind of animism in which the body is the same but natures differ. The world starts to resemble that of the Shinto religion in which spirits (Kami) occupy objects and galvanize them.

How might we understand this world of new forms of verification and extimacy as it gradually gains both some measure of stability and some

¹³ Thus, increasingly research shows that people are getting news content through their social networks, with all the consequences that has for the conduct of public opinion. Content, news or other media are used to initiate a conversation, in other words (Manovich, 2009). Lippmann’s phantom publics become regnant.

stability of measure? One possibility is to argue that what we have arrived at is a society characterised by a generalised theatricality. This has become a common move in the literature (eg Virno, 2005, Ranciere 2009 Schulze, 2007). But what is often overlooked is that theatre is itself a technology and one that has changed through its history, often in reaction to ideas about the capacities of space of the spectator which are themselves politically charged. Given that history, it might be better to argue that theatricality and play are being reformatted to fit an era in which the conventional theatrical frame becomes only one of many options for sensing the world.

I want to argue that what is happening is something different: the driver of these five intertwined characteristics is better described, in contrast to the previous era of the military-industrial complex, as the result of a society in thrall to a security-entertainment complex, an era of permanent and pervasive war and permanent and pervasive entertainment, both sharing the linked values of paranoid vigilance (Truby, 2008) and the correct identification of the potential of each moment¹⁴. The first sector, boosted by the replacement of the binary of war and peace by a generalised state of conflict, now takes in a vast array of activities from prisons and myriad private security forces¹⁵ and new forms of predictive policing to the multiple kinds of surveillance that populate everyday life, which rely on vast material infrastructures¹⁶. Increasingly, after events like 9/11 and the generalised response to the war on terrorism and drugs around the world, defence has been recast as a part of this sector rather than vice versa (Turse, 2008). Equally, the entertainment sector has grown in size and influence, becoming a pervasive element of the world. From the base of consumer electronics, through the constant innovations in the spatial customization of pleasure found in mass leisure industries like toys or pornography, through branding, gaming and other spatial practices, to the intricate design of experience spaces, entertainment has become a quotidian element of life, found in all of its interstices amongst all age groups. And these two sectors are becoming co-extensive - from the obvious fact that corporations are now often involved in both sectors (Turse, 2008)¹⁷ to the general emphasis on surveillance by police or military or retail corporation, from the spreading of consumer electronics

¹⁴ Thus, the interest is, as I have pointed out elsewhere, in the identification of propensity, a theme which can be argued as arising from classical Chinese military strategy or, indeed, a kind of Whiteheadian aesthetics in which the cure for malaise is replaced by attention to the unexpected.

¹⁵ Of which a company like Blackwater is simply the most visible part.

¹⁶ Many of these developments are based on military models which have been generalised up so that they become something else. It is worth remembering that militaries are predominantly bureaucracies.

¹⁷ Thus, in a particularly striking juxtaposition, the TV series Law and Order is a product of the defence giant, General Electric.

research and development costs across both markets to the common availability of graphics cards which can be used for all manner of simulations, as well as the general use of applications from iPhones by both consumers and the military (Economist, 2009)¹⁸.

These two sectors have more or less involvement with the state, though in all cases that involvement is extensive, but they also involve growing levels of corporate activity which often complement, simulate or simply substitute for state functions. Indeed, it would be possible to argue that they lie at the heart of an authoritarian capitalism that has been remorselessly building over the last twenty or thirty years, a post-democratic consensus in which business and state elites rule the roost through, precisely, a mixture of control through surveillance and distraction through entertainment, thus allowing capitalism free rein: ‘the forms of democracy remain fully in place [but] politics and government are slipping back into the control of privileged elites in the manner characteristic of pre-democratic times’ (Crouch, 2004, p6). The result is a kind of convergence of state forms based on the premise that it is no longer clear that capitalism and democracy are necessary partners in a world where it is possible to have both the ‘inverted totalitarianism’ (Wolin, 2009) of the United States and the machinations of a state like China. In both constituencies, as in many more, politics increasingly becomes the pursuit of profit through a citizenry which ‘welcome change and private pleasures while accepting political passivity’ (Wolin, 2009, p xv) in what has become an increasingly managed political process based around the self-conscious constructions of a media system which has become much more than an overlay and in which the values and practices of politics and celebrity have become increasingly synonymous (Dill, 2009)¹⁹. The promise of happiness reigns (Ahmed, 2010, Ehrenreich, 2009) and liberty drains away (Kampfner, 2009, Wilson, 2009).

Whatever the exact relationship with the state in its formal or outsourced mode of operation, both the security and entertainment sectors of the economy have been able to grow substantially and become more and more closely integrated through the growth of two linked capacities, both based on the greater interactivity that has become possible as socio-

¹⁸ As in the availability of both an app like ‘chirp’, which allows consumers to identify birdsongs, and an app like ‘bullet flight’, which allows consumers who want to be snipers to calculate range and trajectory (and which, incidentally, has been adopted by the American forces) on the same platform.

¹⁹ Indeed, Bill Clinton can be seen as the forerunner of this kind of world, with his voracious appetite for data coupled with immense affective skills.

technical convergence has occurred²⁰. The first of these capacities is the growing intelligence of intelligence. Founded on the ubiquity of ‘active’ data, the intelligence-gathering principles and outcomes of both the security and the entertainment industries have become remarkably similar in their aims, based on models that can track activity through a pervasive sphere of information which no longer cuts space up but suffuses it. Means of information targeting (and I do not think that the descriptor is a coincidence), whether by means of contextual targeting, demographic targeting or now behavioural targeting are used by both realms, and often draw on the same principles, research, and software. Not surprisingly, some of the firms doing the work are held in common²¹. Then, both sectors increasingly construct the world as the output of the mediology of a set of modulated online social networks whose purpose is to build exceptional nodes which are able to gather network power to them. But ‘to be a node is not solely a causal affair’ it is not to ‘do’ this or to ‘do’ that. To be a node is to exist inseparably from a set of possibilities and parameters – to function within a topology of control’ (Galloway and Thacker, 2007, p40). These networks depend on distributed means of aggregation/individuation that allow a continual process of variation to occur, thus not only producing data but also providing the push whereby that data can keep on coming into existence. They thus provide the opportunity for new kinds of power to grow up based on exceptional topologies rather than sovereignty as such and founded in protocols of resonance.

The second capacity is the engineering of stress. Events nowadays come freighted with stress, not least because of the increasing cultural organization of extreme emotions that, at one time, would have chiefly been in the grip of religion. Both the security and entertainment complexes have taken to engineering these emotions by mixing better calculation with better understandings of emotional aggregations, whether these be the self-intoxication of terrorist networks or the pursuit of erotic and other allied forms of capital by celebrity fans (Payne, 2009, Hakim, 2010). The world becomes akin to a permanent and calculated state of ‘entertainment’, what Muhlmann (2008) calls ‘evaluated uninhibitedness’, pulled into shape by various panic and anti-panic architectures (Truby, 2008).

²⁰ An interactivity best signalled by the massive success of the game, *Call of Duty: Modern Warfare 2* in 2009 which became the first true interactive Hollywood blockbuster, a bigger launch hit than any film had ever been (Nuttall, 2009).

²¹ Indeed, one could argue that, increasingly, surveillance has itself become an entertainment opportunity, as in the spread of ‘reality television’ of various kinds, crime shows featuring surveillance tapes, etc.

In such a state of ‘en(ter)tainment’, Tarde’s principles of glory, whether of a military or celebrity nature, take on a renewed significance since display is so important. In the modern world, as Tarde (2007) pointed out, there are not only divisions of labour and divisions of riches but also divisions of glory. This glory can take many forms, including military exploits, intellectual prowess, and, most importantly, celebrity. But what has become clear is that though few can share in the spoils of a division of glory like celebrity, many other ways of attaining this kind of status have become available to the population on a smaller scale as a result of the rise of structured social networks which have allowed all kinds of ‘long-tail’ communities to agglomerate, each with their own systems of merit which, because of information technology, can be metered and accordingly prized. The proliferation of these glorimeters, to use a Tardean term, is itself a part of how the modern division of glory is constructed (Thrift, 2008).

What we can see, therefore, is a decisive change that has taken place in Western cultures as older ideas and practices of decorum, based on a notion of abstinence, have gradually been replaced by newer cultural frames which emphasize quite different ways of making sense of the world - ways founded on calculated excitation and especially on being able to generate what Collins (2008) calls ‘forward panic’ (with reference to a battlefield where instead of panic setting off a flight to the rear, it produces a ‘flight to the front’), the result of an overpowering emotional rhythm in which a prolonged period of tension is followed by a period of quick-release; ‘a dramatic shape of increasing tension, striving toward a climax’ (Collins, 2008, p85). These frames, which have depended on the spread of mass entertainment, and the corresponding appetite for affect in a screened world, tend to value emotionally intense action over reaction and include melodrama, which I have outlined elsewhere (Thrift, 2007), and what Muhlmann (1996) calls ‘suspense-dramaturgy’, in which the tension generated by the fear of death which at one time was reserved for war, becomes general. The constant calculation of situational tension becomes general. The models of attaining glory have shifted too. For example, threat and reward can be distributed on the principle of glory found in activities like gaming²². Notions like gaming become widespread because they formalise and make visible tournaments of emotional value which then enshrine these tournaments as brief but attractive nodes. This is a mutation in the means of social control which draws on continuous recording of the emotional investments of the population for fuel – and for power. It is a new infrastructure of feeling,

²² I think it is no accident that so much of the modern world relies on gaming, including the military. In a sense, war and entertainment can become synonymous (see Gregory, 2008).

one which acts rather like the electricity grid or roads in its ability to both transport and energise the economy.

The political increasingly becomes captive to this constituency, in which feeling and the abstraction of calculation are threaded together²³. The conduct of such an ‘ontological’ politics is based on engineering attention of a kind that has been pointed out many times now, but no longer brought about through a ‘simple’ theatricality. Rather, what counts as theatre is being radically redefined by the knowledges of a coalition of agents, ranging from games designers to the purveyors of grand stadium shows which function in the round. Theatre is no longer a single framed space in which determinate genres are acted out at set times (Thrift, 2008). Rather, it consists of what, following Deleuze and Guattari (1987, pp174-175), we might call the deterritorialized (that is, taken out of its humanized role) facialization of the world²⁴ in which the intent is to gradually produce an experience of immersion which both limits (through the selective engagement of attention) and expands what can be sensed and how it can be sensed through a careful attention to movement through space (Kozel, 2007), allowing knots of infiltration and dispersion of affect to be tied and untied constantly, to be temporarily arrested and then let go again. It is an immersive mode of complete absorption in a particular iteration²⁵ which, rather like Chantal Akerman’s pellucid films or site-specific events like the 2009 walk-through show ‘It Felt Like a Kiss’, with its increasingly common conceit of using an old, abandoned building as a tool to combine theatre, film and music in new ways, can be both physical and virtual, both documentary and fiction, both distanced and deeply felt, both movie and installation, all at the same time (Sultan, 2009). It is ‘like a shifting, complex flipbook’ (Sultan, 2009, p53) in which novel juxtapositions induce novel senses of the singular (not particular), immanent to themselves but always also the rem(a)inder of another reality (Read, 2008).

²³ As attested to by the way in which Ronald Reagan and, subsequently, a whole series of American Presidents have become political totems.

²⁴ Agreeing with Levinas’s account of the face as something that cannot be reduced to a face (see Diehm, 2003) and that the whole body needs to be facialized – ‘not only the mouth but also the breast, hand, the entire body, even the tool, are ‘facialized’ – they then, in effect, undermine Levinas by generalizing the face, making it something more problematic²⁴, an indistinct ‘crossing and re-crossing of intensities across and between ... surfaces’ (Read, 2008, p37). Facialization does not stop at the limits of the body. It includes the whole environment, the landscape. What Deleuze and Guattari (1987, p181) call the faciality machine ‘performs the facialization of the entire body and all its surroundings and objects, and the landscapification of all worlds and milieus’.

²⁵ As a number of commentators have pointed out, immersive has become a kind of watchword across many spheres (cf Bracken and Skalski, 2010). Its most extreme manifestation is currently to be found in the new generation of 3D films, which in the latest technological format seem likely to stick as more than a novelty, as well as the rise of augmented reality applications..

The growth of these two capacities for what is often called in the videogame industry natural mapping might be understood as the first stirrings of a phenomenology machine, one which has been rebuilt from the ground up to be able to reproduce phenomenal awareness through an orrery of surfaces understood as flows brought about by an economy which organizes ‘the system of energetic exchanges ... within an ecosystem with the system of sociocultural devices which make it possible to reproduce these flows’ (Descola, 2002)²⁶, a phenomenal awareness made to appear whole through the art-science of appearance, thus echoing phenomenology’s prehistory as a theory of appearances (Henry, 2000). This is Lifeworld, Inc. It relies on a whole battery of explicitated knowledges of the semiconscious glance which give the impression that ‘those particular images were already in my head, and I was looking for them’ (Akerman cited in Sultan, 2009, p16, see also Thrift, 2008). In other words, each glance, ‘taking in so much in so little time’ (Casey, 2009, p203) requires the careful construction of a compelling sense of always being already there, of the promise of a kind of almost unity²⁷. It is an instrumental phenomenology, if you like, in which the supposed authenticity of the lifeworld becomes a market value that can be constructed through the calculated marriage of apperception and feeling, moment by moment (Pine and Gilmore, 2007, Kamvar and Harris, 2009)²⁸. Such construction of temporary envelopments – open-ends which are constructed for determinate ends - does not require clear and distinct images so much as it requires the construction of a mental state through a blur of motion which awakens the imagination of the observer, providing both continuity of experience and affective release; ‘an image which releases strong emotions is not visible in the normal sense of the word as is the case with pictures that can be looked at and recognised in peace’ (Muhlmann, 1996, p66)²⁹. These mental states are therefore full of ‘ingenious gaps’ resulting from careful techniques of omission or compression. In other words, they depend not so much on stimulating latent qualities and capacities (though this can occur) as on building mental landscapes which are able to confirm their own existence, not so much by negotiating new rules as by founding series upon series of momentary new worlds which continually sweep up the gleanings of perception because they feel ‘full’ (Viveiros de Castro,

²⁶ I am well aware that Descola is writing about the case of the Achua socialization of nature but it is interesting to think how contemporary developments may be pulling us in this direction.

²⁷ We might see this as a modern version of Freud’s ‘after-education’, a revived awareness of something that feels like it is already known, but instrumentalized and made portable.

²⁸ But, as Manning (2009) and Canales (2009) point out, each step in producing new machines which can track this blur allow other possibilities to be realized which, in turn, allow the construction of new machines.

²⁹ Muhlmann (1996) argues that this is an organic disposition resulting from the quick paths affect takes in the brain. Perhaps.

2004). These worlds ‘do not represent movement: they live it’ (Manning, 2009, p108).

This landscaping complex can survive and become imprinted on the population as new inferences about the world because, correlatively and in part because of the developments I have described, and the permanent display behaviours (Muhlmann, 2008) that they generate, processes of psychic and collective individuation are changing³⁰. Subjectivity has been turned inside out. In contrast to the idea of the romantic subject with a deep inner core we now find subjects being built which rely on the onflow of information in motion to comprehend their place in the world. There is a growing space for a kind of mobility of identity. In particular, the exterior of the body becomes a richer and richer place to inhabit as all manner of signs, itemizations, glossaries, and taxonomies come into being, dependent on bodies that can be honed and even changed in ways that were previously unavailable and which provide numerous means of accumulating glory through means of self-description that are also means of self-transformation³¹. In other words, the subject is built up and gains its identity from the imperfect stitching together of new means of identification and naming, mediated by the security-entertainment complex. Rather like the change that took place between the Middle Ages and the Renaissance, when lists, and identifiers like origin, height, and distinguishing marks both increased in and changed in nature, becoming more systematic, thereby producing a subject used to being described by and thinking through all manner of such characteristics (Groebner, 2007), so what we now see is new means of contact and surveillance arising which do the same. Subjects are enmeshed in a web of markings which define their existence, which brand them as them: search engines, social networking sites, web pages, video clips, ringtones and mixes, and maps combine to produce new forms of identity paper which act as passports to particular kinds of experience, replacing the seals, letters of introduction and conduct, registers and lists and certificates, travel documents, and other means of recording proof of authenticity and assurance that once defined a person’s existence. These older forms of proof may still exist, embedded in software, but they have become simply the first step in

³⁰ The footprint of the security-entertainment complex is nowhere clearer than in the educational sector. Teaching instruction has become an odd mixture of show-and-tell. Current pedagogy prepares the child for a world in which they will need to be able to present publicly, seek out data, and produce new kinds of significance about what it means to be a subject. They need to be not so much learners of determinate knowledge as little entrepreneurs of onflow.

³¹ Of course, this is not to suggest that the fallout from this obsession is necessarily a good one: It produces a new distribution of losers (see Berlant, 2008).

constructing a personal profile³². In turn, that profile can be worked upon, feeding back into mass personalised entertainment, as in the growth of YouTube, through sharing, buying, managing, recording and downloading. Again, security and entertainment intermesh³³.

The Empirical Turn

Something interesting is happening in social science which is, I believe, connected to the developments I describe. It is born out of a sense of just how simultaneously embedded and lost human beings are in the newly transparent world of the security/entertainment complex in which, through the agency of state security and a knowing capitalism, both wanting to know ever more, quantitative and qualitative data have become more and more voluminous with the consequence that an increasing part of the output of what was formerly carried out by social researchers – surveys, questionnaires, interviews, and the like - is now available as data in one form or another. Much of what was regarded as the domain of social science therefore no longer needs to be explicitly constructed but is a part of the processes by which the world is made³⁴. In other words, the very ubiquity of data and the corresponding ability to mine them for all kinds of associations that they were not originally intended to contain produces an interesting challenge for social science.

One ‘not good enough’ response to the challenge is to argue that these are not the right data and all kinds of other data are still needed. Another ‘we can do things better’ response is to argue that social science can provide better and better tools for analysing these data. A third ‘we know best’ response is to argue that only social scientists have the theories to make meaningful sense of these data. All these responses may have their own resonance but it is worth noting that there are voices amongst the agents of knowing capitalism who argue that in time these kinds of objections

³² Another way to see this is as a change in the technology of address (see Thrift, 2007).

³³ It is also worth noting that just as the change in processes of subjectification between the Middle Ages and the Renaissance involved building up new spaces, changing the nature of distance by building up a dense infrastructure of mobility that could work at a distance to produce the justification of identity - ‘whoever sought to enforce judicial literacy had to conquer space. Registers and lists thus became mobile’ (Groebner, 2007, p74) – so the changes taking place now are redolent of that period in that they also play with how distance is constructed and understood in order to produce new means of justification.

³⁴ Of course, there is still a need for construction of some data but only rarely of a wholesale kind, as in the past.

will become moot. The sheer weight of data will outweigh them: the redundancy of information will render them meaningless.

Certainly, in the face of such developments, there is an argument that social science now needs to rework what it is doing. Recent interventions have argued as much (eg Adkins and Lury, 2009). This is not to say that mass data-gathering exercises will no longer be needed. But they will become just a part of a much larger activity of continuous data collection. What is certainly not possible is to simply call a halt to these developments. Equally, it is not possible to just let them lie, a stance which can take two forms. One is to fall back on a kind of empirical theoreticism, in which speculative insights from continental philosophy³⁵ are taken to be the case which the world illustrates, insights which are only lightly tethered to any empirical stratum but act as though they were already empirically validated. The other, which is just as problematic, argues that we should simply conduct business as usual and that recent developments might even be a good thing, allowing us to return to the good old craft of social science.

But that still leaves several alternative responses that are possible, ranging from the fundamental work of redefining what is meant by basic social science terms like ‘the case’ (Berlant, 2008) through the forging of a ‘faster’ mode of proceeding which documents new developments as they unfold, using an amalgamation of journalistic and social science methods (Thrift, 2005), and on through to the growth of an interest in ‘social science fiction’, the conjuring up of dramatized analyses of social structures and situations, of which ‘The Wire’ (and its attendant garland of academic interpretations) is often regarded as the archetype.

Given the constraints of space, I want to single out what is only one of these many alternatives. That is the notion of social scientists as involved in promoting the experience of an extended childhood, and the corresponding virtues of ‘growing young’ that mirror the neotenus character of the human species. After all, human beings are (un)naturally experimental. Their purpose is to continually search out the contours of a world they can never fully fit into. They are permanent orphans but they are orphans precisely through their attachments (Montagu, 1981, Evernden, 1993).

In other words, rather than constitute social science as a theatre of certainty I want to produce something more open-ended; ‘a theatre for

³⁵ Such as the sometimes penetrating and sometimes simply whimsical certainties of a Badiou or a Žizek.

events and operations with sometimes necessary but never sufficient reasons' (Stengers. 1996, p257). As humans grow old, many of them tend to lose the qualities we often associate with being child-like, a capacity for imaginative play, curiosity and the eagerness to learn, and an associated receptiveness to new ideas, and a general willingness to experiment. This new empirical turn is born out of a desire to recapture some of these qualities in a social science grown middle-aged. It privileges what might be called the experimental, a 'showciology' if you like³⁶. 'Experimental' can sound as though social science is simply aping scientific protocols but, as this brief preface makes clear, I want to argue that it signifies something quite different, something which can be eloquent and even brave and which contains the germ of real possibility, not least because it allows the world to speak back into the all-encompassing ambitions of the security-entertainment complex in unexpected ways from which it is possible to learn new associative open-ends. This is production without guarantees, based on a programme of 'borrowing' space in an explicit return to a kind of nomadism which no longer privileges fixed territory as necessary to produce effects but which does not therefore think that the attachments of territory are somehow unimportant³⁷.

I want to begin by calling up a phrase first used by Gaver, Boucher, Pennington and Walker (2004) – cultural probes – to frame this ambition. For Gaver, Boucher, Pennington and Walker (2007, p1) cultural probes were 'collections of evocative tasks meant to elicit inspirational responses from people'. Even though the frames could be controlled in these tasks, the outcome was uncertain - and indeed was meant to be uncertain - because definite knowledge has its limits, and needs to be supplemented by other modes of understanding that value uncertainty and exploration. The aim is precisely to produce frames that can produce uncertain outcomes, to be able to incorporate surprise. This is what Gaver (2002) calls the construction of a 'provocative awareness' which takes what is often thought of as an artistic impulse³⁸ – to imagine new things – and harnesses it to the practices and protocols of social science so as to be able to be prepared for and able to take in the vagaries of a fleeting but

³⁶ I take the term from Read (2008) but use it in a very different way. One could equally relate this term to Latour's 'slowciology', an attempt to highlight the fact that sociology must involve chains of intermediaries so that, for example, there is no instant leap possible between local and global.

³⁷ In making this performative turn, I do not want to shy away from the undoubted difficulties. Most particularly, performance tends to format things and so is in constant danger of missing the unformatted things, the not yet formatted that Latour places under the general heading of 'plasma'. But performance does at least have the merit of stressing latent potential which gets part of the way there (Read, 2008).

³⁸ Though clearly it is not, since one might just as well argue that science owns this impulse too.

decidedly nonsuperficial glimpse/glance as a key means of orientation. As Casey, (2007, p91) puts it, this is;

neither glancing intently at – which presumes that the object is already targeted and that I wish to bear down on it – nor is it just glancing around: a much more casual and open act. The glancing in which I need to engage involves a keen searching out of my environs, given that I am greedy for geographical guidance. Such a glance is not a move of last resort – when all else has failed – but a step of first resource ... It takes account of, indeed it is a direct response to, my lack of previous knowledge – not a mere reaction to it, but a move that copes creatively with my unoriented state. I say ‘unoriented, not ‘disoriented’. The distinction is not trivial in the present context. To be disoriented is to be genuinely lost in the landscape ... To be unoriented is to not know where I am – not yet. This does not mean that I am lost: it just means that I cannot specify my whereabouts ...

The intent, then, is to produce different kinds of familiarity which demand neither conviction nor rejection but rather the taking up of the latent potentiality in a situation. Such dispositions are not about what to do or who to be but about suggestion, curiosity and wondering. The work of the social scientist, then, is to produce cultural probes that can help people to rework the world by suggesting new unorientations rather than correctives.

Now, I think there is an element of the romantic (and a dash of humanism) in this kind of formulation but, at the same time, it does suggest a different means of travelling - towards a mode of investigation which can create the medium of its own existence. At the same time, I think that the notion of cultural probe needs expansion: specifically cultural probes need to be understood as spaces, frames constructed to produce uncertain outcomes which still have grip, frames which both interrupt and restart the process of association and, in the process, conjure up invitations to act differently. And where has most work been carried out on the kinds of spaces which keep connection in play, which provide people with speculative tasks and stimulate provocative awareness, which are most likely to trigger not just what might be laid out for them but something else entirely? I would argue that it is best found in the makeshift, higger-mugger field of performance, a field where characteristically there is no separation between inscription and site: ‘a sequence of spheres in a multiplicity of movements’ (Read, 2008, p37). The point is to design and animate spaces so that they can function as

edifices which can concentrate and work on processes of association – spaces which are able to transmit differential traits. Such spaces, functioning at a slant, would produce knowledge by boosting involvement in ‘something that remains to be done’, through ‘new and renewed associations’ (Read, 2008, p45). Now, one thing to say straight away about an art-science of giving rise to new developments, of producing infection, is that the lore of these spaces has often only been partly written down: the effects of different spatial arrangements of bodies and objects, of different props, of different assumptions about how space is figured, of what is different about a network of scaffolding, or a cage, or a cul-de-sac, or a door, or a bridge may be obvious in everyday life but they exist as a fragmented series of knots of knowledge across different disciplines and practices which only intermittently communicate with each other. So we not only need knowledges of space but integrating knowledges of these knowledges in order to take part in acts of restarting the social. And these knowledges need to allow us to practice an intensified reflection, a surreflexion as Merleau-Ponty put it, a reflection on reflection which opens with in its own fabric an abyss which it cannot span but can only worry at (Toadvine, 2009). I will point to three of these models of what Mullarkey (2006) calls ‘ecstatic naturalism’, each of which counts as an opportunity to mobilize ‘the often unrecognized, vague and fuzzy spaces in between forms of reality, knowledge and practice’ (Brown and Stenner, 2009, p39) which ‘work because they do not work’ (Serres, 1980/1982, p13).

One – the most obvious - is the reworking of phenomenology itself. It is worth remembering that phenomenology is concerned with alterations in the sense of being in the world and, consequently, changes in the sense of what is significant and therefore possible – and possible to change. But only a few commentators continue to insist that phenomenology is irreversibly caught up with the anthropological machine and therefore has to embrace the conscious subject as the bellwether of these changes or it is nought³⁹. I have already argued that the security-entertainment complex creates a kind of instant phenomenology of what is available in the world, a bricolage born out of an inhuman set of associations which depend as much on what is omitted as on content. But this is a very different phenomenology from that which has gone before. Not only is it dynamic and designed but it gives objects much more importance than traditional phenomenology since it is so obviously an assemblage that depends upon the articulation of bodies and objects in new combinations for its force – and the parallel provision of room to describe them as the expressive play

³⁹ Either in order to defend its traditional incarnation or as a means of stabilizing it so as to make it a polar opposite and therefore a convenient object of critique (eg Latour).

of differences. In other words, this is a phenomenology which can take both continuous change and the exteriorization of human being into account through technics whilst simultaneously subverting phenomenology's idealization of material form. That way, we can start to overcome some of the objections to traditional phenomenology and also understand that such a phenomenology will look very different from the phenomenology to which we have become accustomed. We can think of a number of comparatively recent attempts to do this. One is the later work of Maurice Merleau-Ponty on nature and chiasmic becoming in which reflexivity is no longer 'a power of the human subject or the auto-affectation of a tacit cogito, but is rather a manifestation of being's own self-interrogation' (Toadvine, 2009, p18). In particular, his account of space moves from one in which all orientation derives from the being of the human subject to a pre-experiential space which is formed at the confluence of body and world which is simultaneously being's own orientation, its striving towards expression. The second attempt is to be found in the work of writers like Don Ihde (2008, 2009) which attempt to reconstruct phenomenology by adding technics – human-technology interrelationships – into the brew, thereby underlining not just that it is impossible to predict technological outcomes but that the spaces of human-technology interrelationships continually mutate. The third attempt is the work of Peter Sloterdijk on spheres which depends on the evolution of technologies of surrounding in which new atmospheres can be explicitated, constantly bringing new worlds into being. Space becomes a set of envelopes, containing different atmospheres and acting as a postal system which both allows and constrains their intermixture.

These new takes on phenomenology have been instantiated in various practical ways but, in the end, they have usually depended upon producing new, more expansive forms of localization (Lippard, 1997). Most of the examples of this localization come from the arts, from performance, from installation art, from site-specific art, and so on (see Bishop, 2005). They depend upon devising responsive processes that are able to be instantiated through the design of places that produce experiences of immersion which, in turn, produce new associations and project them outward.

More recently, artists and performers have been experimenting with how to produce ambulatory places, places that are able to be linked up into sometimes planned and sometimes meandering chains of action which can straddle the globe, usually using a combination of physical props and information technology. It is neither possible nor necessary to summarize this work – it is too diverse. But it has a questing spirit which is surely

vital. Perhaps the most interesting development – precisely because it is so embedded in the socio-technical developments I have been describing – is the move to so-called radical game design. These games can involve redesigning apparently standardised spaces like houses, or the manipulation of spatial devices like maps or board games, or the production of actual locative games which blend online and urban spaces, or even the construction of games which explore geopolitical consequences in ways which are not just interventions but openings to other worlds in which new forms of emancipation and attachment can thrive (Flanagan, 2009). In each case, they are concerned to redefine situations so as to produce different kinds of players.

The second knowledge might be termed a biopolitics of space. This area takes in a number of endeavours, including those in geography, biosemiotics and bioart (c.f. Dixon, 2009, da Costa and Phillip, 2008). but developments in architecture are amongst the most interesting. As Till (2009) argues, architects are the perfect denizens of the security-entertainment complex in that they design prisons – entertaining prisons but prisons nonetheless. A number of architects have tried to exit this conditioning, often by moving to a paradigm based on flow. This kind of work has become popular of late because it seems to offer a means of producing organic evolution of built form or what is usually called, after Lynn (1999), animate form: ‘the evolution of a form and its shaping forces; it suggests animalism, animism, growth, actualisation, vitality, and virtuality’. The process of animating form involves animating the form of a design so that it is not only conceived of as in motion but allows the motion to alter the force of form.

But I want to factor into this growing body of work the lessons we might learn from the parallel turn in architecture towards evolutionary motifs and especially the energy unleashed by the idea of animal (or perhaps I should say post-animal) urbanism (Ingraham, 2007). This kind of work has been stimulated by many sources – not least the increasing fund of research which shows that animals modify their environments in ways that resist reduction to simply instinct and stress genuine cognitive processing (Gould and Gould, 2007, Hansell, 2007). Certainly, many architectural forms – particular mouldings of space - have proceeded by analogy or at least association with the animal in its many forms. But, as Ingraham (2007) points out, this is an enterprise fraught with difficulties. Hence Ingraham’s deployment of the category of post-animal in order to try to avoid certain standard patterns of argumentation. What Ingraham is trying to envisage is an architecture in which spaces would associate in new ways such that no Chinese Wall exists between nature and culture. She is then able to consider all the ways that living beings produce the

specific complexities of space in order to animate an unknown reserve of floating forms. This architecture is a kind of mapping of what Ingraham (2007, p319) calls ‘life problems’, ‘the deeper reaches of aliveness that are simultaneously biological, territorial, engaged in critiques of the various ‘fields’ in which life exists, a play between constancy and motion, materiality and information, and so forth’, and is intended, therefore, to also act as a challenge to the assumptions that are already embedded in the cybernetic and biological metaphors that inform the software with which architecture now defines its world. Such architectural projects can be thought of, in other words, as arguments taking shape. In many cases, architects responding to the call to animate have simply designed more sophisticated prisons but, in a few cases at least, they have produced ‘out of place’ entities which genuinely provoke thought, just as out of place animals can (see some of the studies in Vidler, 2008).

The third knowledge is writing. We might put this another way. Can we write the world differently? Take the transduction of sound into script. ‘To record the sound sequences of speech’ writes Friedrich Kittler, ‘literature has to arrest them in a system of twenty-six letters, thereby categorically excluding all noise sequences’⁴⁰. But what about the ghostly imprint of an imaginary, supplemental alphabet starting with letter twenty-seven (Galloway and Thacker, 2007, p159)?⁴¹ We might argue that it is precisely the attempt to find and illuminate this extra letter (and many more too) in what Krauss (2010) calls the ‘post-medium condition’ that is what the experimental turn is trying to achieve, not by ignoring the standard letters of the alphabet but by adding new ones in which allow other descriptions of the world to become possible, thus producing new forms of script and of its accompanying illumination.

Script and medium both have to be simultaneously re-invented because writing now works across many sensory registers, in a period when data flow has become such a gargantuan prospect that explicating it through various means of visualisation has become a task in itself, one which demands substantial aesthetic/cursive skills (see Klanten et al, 2009, McCandless, 2009 and websites like flowingdata.com). In each sensory register, the act of explicitation (Sloterdijk, 2007) is a choice of emphasizing some features over others in order to produce a coherent script. Certain ‘notations’ banish or subsume other features. Others

⁴⁰ I hardly need to remind the reader that many alphabets around the world have more than 26 letters but the idea is clear.

⁴¹ In the nineteenth century, in many countries, the 27th letter of the alphabet was the ampersand (&). Perhaps this symbol could stand for the project of association I am trying to unfold here.

underline them. Others still, in synaesthetic vein, substitute the features of one register for another. These are new means of animating the world. Neither words nor images but both of these and more besides: procedures that can frame the world in new ways which deliver a kind of structured uncertainty from which it is possible to detect new things, and, at one and the same time, the ways of writing these things down which themselves are likely to constitute a defective but productive orthography, one in which errors of transcription occur and synaesthetic overflow is common, and can themselves become ammunition for ‘landscapization’ (Deleuze and Guattari,).

Perhaps these new forms of writing are best characterized by the extraordinary renaissance of mapping, using the kind of spatial knowledge that is the leitmotif of the security-entertainment complex but bent to different ends. Maps have become the elemental currency of the security-entertainment complex, the basic unit of account – a means of building infrastructure, locating and wielding influence, shaping identity and generally explicitating new territories that are then there for the taking. But they can be used in other ways too which make them into means of questioning the world rather than just asserting it: tactical cartography in a world of map or be mapped (Kitchin and Dodge, 2007). For example Goodchild (2009, p575) talks of the growth of ‘citizen-sensors’ who volunteer information for general use, as in the OpenStreetMap mapping of Atlanta or the proliferation of mapping parties and mapathons. All kinds of other agencies for redrawing our spatial vernacular are opening up too from GPS drawing to wikimapia. The net result is becoming clear, at least. Whereas in the past, we;

relied on the authority of agencies and systems to provide our geographic information. [We] set up structures, such as boards of geographic names, to approve the names people assign to features. And [we] changed the names of features when we found the existing names, the vernacular names to be unacceptable for some reason.

All of that, suddenly, has changed ... we are, in effect, back to the days of the 1500s when it was possible for someone – a cartographer – but with no qualifications whatsoever, and no authority, to produce a map which led, in effect to the naming of America.

Not only is it possible to use maps as a means of giving people their own means of visualising their position - through people’s GIS, various forms of mash-up, and so on – but they can also be used as means of reworking

the familiar so as to make it unfamiliar, not just renaming but reworlding all kinds of spaces, from borders to landfills, from trade to landforms (see Abrams and Hall, 2003, Cartwright, Gartner and Lehn, 2009, Harmon, 2003, 2009, Kozloff, 2008, Mogel and Bhagat, 2008, Thompson, 2009). We are asked to ‘rethink the map, the landmark we presumed we could locate, the direction we thought we knew how to follow’ (Manning, 2009, p183) in order to alter our capacity to connect and relate. As just one example out of many, Gaver (2002, 2006) recounts the derivation of a series of technological devices which allow people not just to reframe the world but to use it more imaginatively, devices which produce maps that have play incorporated into them. In a way, what we can see typified here is the opportunity for people to re-define/re-cognize their environments, not so much by enveloping them (as in the Sloterdijkian account⁴²) as by producing new gaps, fractures, breaks and slippages, thereby inventing new, more mobile definitions of historical memory, mindfulness and political engagement that provide at least the opportunity to connect differently.

Conclusions

In a famous passage, Viveiros de Castro (1998, p92) argued that the Western tradition of thinking had an impoverished notion of ontology, in contradistinction to the proliferation of epistemology talk.

The Cartesian rupture with medieval scholastics produced a radical simplification of our ontology, by positing only two principles or substances: unextended thought and extended matter. Such simplification is still with us. Modernity started with it: with the massive conversion of ontological into epistemological questions – that is, questions of representation – a conversion prompted by the fact that every mode of being not assimilable to obdurate ‘matter’ had to be swallowed by ‘thought’. The simplification of ontology accordingly led to an enormous complication of epistemology. After objects or things were pacified, retreating to an exterior, silent and uniform world of ‘Nature’, subjects began to proliferate and chatter endlessly: transcendental Egos, legislative Understandings, philosophies of language, theories of mind, social representations, logic of the signifier, webs of signification, discursive practices, politics of knowledge – you name it.

⁴² Sloterdijk’s atmospheric trope breaks down when pushed too far, or leads to an intensification of his theoretical model to the point where the alternatives become hard to see.

But, as I have tried to show, this lack of an ontological vocabulary is now becoming a practical as well as a theoretical issue. A new ontology is multiplying, which is able to survive by virtue of technologies which seem to lead to irresistible inferences about the world, because they, quite literally, put things in their place. For, at the heart of inference is the ability to weave space and time into a fabric which acts as an automatic default: each ladder and snake seems to follow on from each other, as though no other solution was available. What is happening currently with Lifeworld Inc is that practical vocabularies for understanding and constituting this ontology are running ahead of any theoretical vocabulary. That might not matter if these vocabularies were a benign development but many of them are not. They are caught up with new expressions of power, the aim of which is to reterritorialize the world through the deployment of resources which, rather like the apple in the fairy tale, have the ability to poison how we live. Lifeworld Inc needs to be reworked so that its excesses can be halted and its undoubted treasures can be brought to the fore.

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References

Abrams, J., Hall, P. (eds) (2003) Else/Where. Mapping New Cartographies of Networks and Territories. Minneapolis, University of Minnesota Press.

Adkins, L., Lury, C. (eds) (2009) Special Issue on What is the Empirical? European Journal of Social Theory, 12(1).

Ahmed, S. (2010) The Promise of Happiness. Durham, NC, Duke University Press.

Beer, D., Burrows, R. (eds) (2010) Special Issue on Consumption, Prosumption and Participatory Web Cultures. Journal of Consumer Culture, 10.3-149.

Bender, J., Marriman, M. (2010) The Culture of Diagram. Stanford, Stanford University Press.

Bishop, C. (2005) Installation Art. London, Tate Publishing.

Bourriaud, N.. (2009) 'Altermodern' in Bourriaud, N. (ed) Altermodern. London, Tate Publishing.

Bracken, C.C., Skalski, P.D. (eds) (2010) Immersed in Media. Telepresence in Everyday Life. New York, Routledge.

Brown, S., Stenner, P. (2009) Psychology Without Foundations. History, Philosophy and Psychosocial Theory. London, Sage.

Bruno, G. (2007) Public Intimacy. Architecture and the Visual Arts. Cambridge, Mass., MIT Press.

Canales, J. (2009) A Tenth of a Second. A History. Chicago, University of Chicago Press.

Cartwright, W., Gartner, G., Lehn, A. (eds) (2009) Cartography and Art. New York, Springer.

Collins, R. (2008) Violence. A Micro-Sociological Theory. Princeton, Princeton University Press.

Crouch, C. (2004) Post-Democracy. Cambridge, Polity Press.

Da Costa, B., Philip, K. (eds) (2008) Tactical Biopolitics. Art, Activism, and Technoscience. Cambridge, Mass., MIT Press.

De Vitry Maubry, L. (1985) 'Etienne Souriau's cosmic vision and the coming-into-its-own of the platonic other' Man and World, 18, 325-345.

Diehm, C. (2003) 'Natural disasters' in Brown, C.S., Toadvine, T. (eds) Eco-Phenomenology. Back to the Earth Itself. Albany, State University of New York Press, 171-185.

Dill, K.E. (2009) How Fantasy Becomes Reality. Seeing Through Media Influence. Oxford, Oxford University Press.

Dixon, D. (2009) 'Creating the semi-living: on politics, aesthetics and the more-than-human' Transactions of the Institute of British Geographers, NS34, 411-425.

Ehrenreich, B. (2009) Bright-Sided: How the Relentless Promotion of Positive Thinking has Undermined America. New York, Metropolitan Books.

Economist (2009) 'War games' The Economist, December 12th, 77-78.

Economist (2010) 'Follow me' The Economist, March 6th, 81.

Edney, M. (2009) 'The irony of imperial mapping' in Akerman, J.R. (ed) The Imperial Map. Cartography and the Mastery of Empire. Chicago, University of Chicago Press, 11-46.

Ehrenreich, B. (2010) Smile or Die. How Positive Thinking Fooled America and the World. London, Granta.

Evernden, N. (1993) The Natural Alien. Humankind and Environment. Second Edition. Toronto, University of Toronto Press.

Flanagan, M. (2009) Critical Play. Radical Game Design. Cambridge, Mass., MIT Press.

Fuller, M. (ed) (2009) Software Studies. A Lexicon. Cambridge, Mass., MIT Press.

Galloway, A.R. (2004) Protocol. How Control Exists After Decentralization. Cambridge, Mass., MIT Press.

Galloway, A.R., Thacker, E. (2007) The Exploit. A Theory of Networks. Minneapolis, University of Minnesota Press.

Gaver, W. W. (2002). Provocative awareness. Computer Supported Collaborative Work. New York: Kluwer, pp. 475 – 493.

Gaver, W. (2006). The video window: My life with a ludic system. Personal and Ubiquitous Computing 10(2-3): 60-65.

Gaver, W., Bowers, J., Boucher, A., Gellerson, H., Pennington, S., Schmidt, A., Steed, A., Villar, N., and Walker, B. (2004). The Drift Table: designing for ludic engagement. Proceedings CHI'04 Design Expo. New York: ACM Press.

- Gaver, W., Bowers, J., Boucher, A., Law, A., and Pennington, S. (2007). Electronic furniture for the Curious Home: Assessing ludic designs in the field. International Journal of Human-Computer Interaction, 22(1-2): 119-152.
- Gaver, W., Sengers, P., Kerridge, T., Kaye, J., and Bowers, J. (2007). Enhancing ubiquitous computing with user interpretation: Field testing the Home Health Horoscope. Proceedings CHI'07.
- Gaver, W., Bowers, J., Boucher, A., Law, A., Pennington, S. and Villar N. (2006). The History Tablecloth: Illuminating domestic activity. Proceedings DIS 2006.
- Goodchild, M. (2009) 'An interview with Michael Goodchild' Environment and Planning D. Society and Space, 27, 573-580.
- Gould, J.R., Gould, C.G. (2007) Animal Architects. Building and the Evolution of Intelligence. New York, Basic Books.
- Gould, S.J. (1977) Ontogeny and Phylogeny. Cambridge, Mass., Harvard University Press.
- Gregory, D. (2008) 'The rush to the intimate'. Counterinsurgency and the cultural turn' Radical Philosophy, No 150,
- Greenblatt, S. (2010) Cultural Mobility. A Manifesto. Cambridge, Cambridge University Press.
- Greenfield, A. (2006) Everyware. The Dawning Age of Ubiquitous Computing. Berkeley, CA, New Riders.
- Groebner, V. (2007) Who Are You? Identification, Surveillance and Deception in Early Modern Europe. New York, Zone Books.
- Grusin, R. (2010) Premediation. Affect and Mediality After 9/11. London, Palgrave Macmillan.
- Hakim, C. (2010) 'Erotic capital' European Sociological Review,
- Hallward, P. (2009) 'Staging equality: Ranciere's theatrocracy and the limits of anarchic equality' in Rockhill, G., Watts, P. (eds) Jacques Ranciere. History, Politics, Aesthetics. Durham, NC, Duke University Press, 140-157.

- Hansell, M. (2007) Built by Animals. The Natural History of Animal Architecture. Oxford, Oxford University Press.
- Harmon, K. (ed) (2003) You Are Here. Personal Geographies and Other Maps of the Imagination. Princeton, Princeton Architectural Press.
- Harmon, K. (2009) The Map as Art. Contemporary Artists Explore Cartography. Princeton, Princeton Architectural Press.
- Harper, R. (2009) 'From tele presence to human absence' Proceedings HCI, September 1st-5th, Cambridge.
- Headrick, D.R. (2000) When Information Comes of Age. Technologies of Knowledge in the Age of Reason and Revolution. Oxford, Oxford University Press.
- Heller-Roazen, D. (2005) Echolalias. New York, Zone Books.
- Higgins, H.B. (2008) The Grid Book. Cambridge, Mass., MIT Press.
- Hrdy, S.B. (2009) Mothers and Others. The Evolutionary Origins of Mutual Understanding. Cambridge, Mass., Harvard University Press.
- Ihde, D. (2008) Ironic Technics. Automatic Press.
- Ingold, T. (2007) Lines. A Brief History. London, Routledge.
- Ingraham, C. (2006) Architecture, Animal, Human: The Asymmetrical Condition. New York, Routledge.
- Jaggar, A. (1983) Feminist Politics and Political Theory. London, Routledge Kegan Paul.
- Kampfner, J. (2009) Freedom For Sale. How We Made Money and Lost Our Liberty. London, Simon and Schuster.
- Kamvar, S., Harris, J. (2009) We Feel Fine. An Almanac of Human Emotion. New York, Scribner.
- Kendall, N., Ahmed, M. (2010) 'No more joypads, simply wave at the screen' The Times, January 8th, 27.
- Kitchin, R., Dodge, M. (2007) 'Rethinking maps' Progress in Human Geography, 31, 331-344.
- Klanten, R., Bourquin, N., Tissot, T., Ehmann, S. (eds) (2009) Data Flow. Visualising Information in Graphic Design. Berlin, Gestalten.

- Kozel, S. (2007) Closer. Performance, Technologies, Phenomenology. Cambridge, Mass., MIT Press.
- Kozloff, J. (2008) Co+Ordinates. New York, Distributed Art Publishers.
- Krauss, R. (2010) Perpetual Inventory. Cambridge, Mass., MIT Press.
- Krohn, W., Weyer, J. (1994) 'Society as a laboratory: the social risks of experimental research' Science and Public Policy, 21, 173-183.
- Latour, B. (2009) 'Perspectivism: type or bomb?' Anthropology Today, 25 (2), 1-2.
- Lawlor, L. (2006) The Implications of Immanence. Toward a New Concept of Life. New York, Fordham University Press.
- Lehrer, J. (2009) 'Don't! The secret of self-control'. The New Yorker, 26-32.
- Lewis, G.E. (2007) 'Mobilitas animi: improvising technologies, intending chance' Parallax, 13, 108-122.
- Lippard, L. R. (1997) The Lure of the Local. Senses of Place in a Multicentred Society. New York, New Press.
- Lynn, G. (1999) Animate Form. Princeton, Princeton Architectural Press.
- McCandless, D. (2009) Information is Beautiful. London, Collins.
- Mackenzie, D. (2008) An Engine, Not a Camera. How Financial Models Shape Markets. Cambridge, Mass., MIT Press.
- Manning, E. (2009) Relationscapes. Movement, Art, Philosophy. Cambridge, Mass., MIT Press.
- Manovich, L. (2009) 'The practice of everyday (media) life: from mass consumption to mass cultural production' Critical Inquiry, 35, 319-331.
- Mogel, L., Bhagat, A. (eds) (2008) An Atlas of Radical Cartography. Los Angeles, Journal of Aesthetics and Protest Press.
- Montagu, A. (1981) Growing Young. New York, McGraw Hill.
- Muhlmann, H. (1996) The Nature of Cultures. A Blueprint for a Theory of Culture Genetics. Vienna, Springer Verlag.

Muhlmann, H. (2005) Maximal Stress Co-operation. The Driving Force of Cultures. Wien, Springer Verlag.

Muhlmann, H. (2008) 'Foreword' in Truby, S. Exit-Architecture. Design Between War and Peace. Wien, Springer Verlag, 1-10.

Mullarkey, J. (2006) Post-Continental Philosophy. An Outline. London, Continuum.

Norton, D.F., Taylor, J. (eds) (2009) The Cambridge Companion to Hume. Cambridge, Cambridge University Press.

Nusselder, A. (2009) Interface Fantasy. A Lacanian Cyborg Ontology. Cambridge, Mass., MIT Press.

Nuttall, C. (2009) 'Profits of doom' Financial Times, November 14th, p11.

Payne, T. (2009) Fame. From Bronze Age to Britney. London, Vintage.

Raijmakers, B., Gaver, W., and Bishay, J. (2006). Design Documentaries: Inspiring design research through documentary film. Proceedings DIS 2006.

Read, A. (2008) Theatre, Intimacy and Engagement. The Last Human Venue. Basingstoke, Palgrave Macmillan.

Sengers, P. and Gaver, W. (2006). Staying open to interpretation: Engaging multiple meanings in design and evaluation. Proceedings DIS 2006.

Schulze, G. (2007) 'Between emotion and calculation. Patterns of modern life' NZZ Podium, 7th May.

Sloterdijk, P. (2009a) God's Zeal. The Battle of the Three Monotheisms. Cambridge, Polity Press.

Sloterdijk, P. (2009b) Derrida, An Egyptian. On the Problem of the Jewish Pyramid. Cambridge, Polity.

Souriau, E. (1943) Les Differentes Modes d'Existence. Paris, Presses Universitaires de France (reissued in 2009 with an introduction, 'Le sphinx de l'oeuvre' by Stengers, I., Latour, B.).

- Sterling, B. (2009) The Caryatids. New York, Del Rey.
- Stiegler, B. (2008) Acting Out. Stanford, Stanford University Press.
- Stiegler, B. (2009) 'Technologies of the snail: the errant self wired to a WiMax network' Theory Culture and Society, 26, 33-45.
- Sultan, T. (ed) (2009) Chantal Akerman. Moving through Time and Space. Houston, Blaffer Gallery.
- Taussig, M. (2009) What Colour is the Sacred? Chicago, University of Chicago Press.
- Thompson, N. (ed) (2009) Experimental Geography. Radical Approaches to Landscape, Cartography, and Urbanism. New York, Independent Curators International.
- Toadvine, T. (2009) Merleau-Ponty's Philosophy of Nature. Evanston, Northwestern University Press.
- Truby, S. (2008) Exit-Architecture. Design Between War and Peace. Wien, Springer Verlag.
- Turner, A. (2009) Introduction to Neogeography. Chicago, O'Reilly.
- Turse, N. (2008) The Complex. How the Military Invades Our Everyday Lives. London, Faber and Faber.
- Vidler, A. (ed) (2008) Architecture Between Spectacle and Use. New Haven, Yale University Press.
- Whatmore, S. J. (2009) 'Mapping knowledge controversies: science, democracy and the redistribution of expertise' Progress in Human Geography, 23, 1-12.
- Wilson, B. (2009) What Price Freedom? How Freedom Was Won and Is Being Lost. London, Faber and Faber.
- Wolin, S. (2009) Democracy Inc. Managed Democracy and the Spectre of Inverted Totalitarianism. Princeton, Princeton University Press.

Wood, D., Fels, J. (2009) The Natures of Maps. Cartographic Constructions of the Natural World. Chicago, University of Chicago Press.