

BELIEVING IN THE (ANALOGICO-)DIGITAL

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Forever deferring the switchover

An important question dominating cybernetic research was that of the extent to which the homeostatic human body and its environment functioned as a digital computer and as an analogue computer. A seminal essay that develops cybernetics' articulations of the analogue and the digital is literary critic Anthony Wilden's 'Analog and Digital Communication: On Negation, Signification, and Meaning'. This essay is part of Wilden's 1972 book, *System and Structure*, in which he attempts to connect the principles of first-wave cybernetics with humanities-based studies of communication and representation. Wilden defines an analogue computer as 'any device which "computes" by means of an analog between real, physical, CONTINUOUS quantities and some other set of variables. These real quantities may be the distance between points on a scale ... a quantity of some liquid, or the electrical current in a conductor. Examples of the analog computer thus include a number of common devices: the map, the clock, the ruler, the thermometer' (1972: 155-156).

To use one of Wilden's examples, the analogue clock – whether a sundial or a display with hour, minute, and second hands – is analogue because it represents a continuum (time experienced as continuous) by using a scale analogous to this continuum. Dividing an hour with its hands, for example, enables visible comprehension of an amount of time remaining and an amount of time past, thus approximating an experience of time's continuous movement. 'The digital computer,' Wilden states, 'differs from the analog in that it involves DISCRETE elements and discontinuous scales. Apart from our ten fingers, the abacus was probably the first digital computer invented. ... Any device employing the on/off characteristic of electrical relays or their equivalents (such as teeth on a gear wheel) is a digital computer' (1972: 156). Wilden's principal example of a digital computer is 'the thermostat, [because] although [the

thermostat] depends upon continuous analog quantities (the bending of its thermocouple in response to temperature) [it] involves a digitalization at a second level, because the thermocouple is connected to a switch which either turns the furnace off or turns it on' (1972: 156). In other words, homeostasis depends on a digital intervention, distinction and decision within a variable analogue continuum. To summarize Wilden's distinctions, the analogue is the domain of the continuous, the 'more or less' (1972: 156), the variable or fluctuating. It is the domain exemplary of 'bending', to recall Wilden's description of thermostat function. The digital is the domain of the discrete, the discontinuous. It is the domain of opposition, decision, control, and the constitution of borders.

For Wilden the analogue/digital distinction, as well as describing the way in which information is transmitted in computers, 'is equally applicable to or derivable from the way information is transmitted within the human organism ... or from the way it is transmitted between human organisms' (1972: 155). Wilden goes on to claim that the analogue/digital distinction is not made as clearly when describing information transmission in and between bodies. To demonstrate the distinction's more complex applicability to information transmission *within* bodies, Wilden refers to 'the constant switching between the analog and the digital in the behaviour of the message systems of the body' at the level of the human nervous system. A 'digital command', Wilden claims, 'releases a chemical compound which performs some analog function or other, this release or its result is in turn detected by an internal receptor neuron which sends a digital signal to command the process to stop or sets off some other process, and so on' (1972: 158). Wilden here posits the working body as a chain of discrete, digital (on/off) commands borne by the analogue chemical processes that these digital commands continuously 'set off'. Therefore the digital always takes on characteristics of the analogue: a fully digital body is never achieved because a digital intervention only refers, continuously (analogically), to another digital intervention. Wilden thus implies that bodies work *analogico-digitally*, rather than through the imposition of one definable computer onto another.

My purpose here is not to determine the scientific or anthropological veracity of Wilden's assertions. Instead I wish to underscore Wilden's implication that bodily intelligibility is coextensive with the inability of the digital to supersede and nullify the analogue. This point is significant because it problematizes the

succession-logic informing the notion that, in the twenty-first century, bodies are moving inexorably towards (or have inexorably entered) a 'digital age'. I am referring here to the rhetoric of a transition from analogue to digital; at the time of writing, governments worldwide are enacting policies designed to facilitate the transition from analogue media to digital media. Accompanying these policies is the distribution of information that prepares body-machines for imminent digitization: households are instructed to replace analogue technologies with digital technologies in time for this shift in communicative type. In the United Kingdom, this policy is referred to as the 'digital switchover'.² The premise here is that, owing to technological development, a digital (on/off) decision and intervention is capable of bringing analogue communication to an end, switching off the analogue and thus inaugurating a new time of bodily relations. The crucial point to be drawn from Wilden's study, though, is that within communication, full digitalization is forever deferred: a distinction between the digital and the analogue is made only to name the two communicative components that relationally enable bodily awareness and function.

Massumi's ana-logic

In his 2002 essay 'On the Superiority of the Analog', philosopher Brian Massumi juxtaposes a dynamic, transformative analogue mode and a digital mode devoid of life and change:

The analog is *process*, self-referenced to its own variations. It resembles nothing outside itself. ... Sensation, always on arrival a transformative feeling of the outside, a feeling of thought, is the being of the analog. It is matter in analog mode. This is the analog in a sense close to the technical meaning, as a continuously variable impulse or momentum that can cross from one qualitatively different medium into another. Like electricity into sound waves. Or heat into pain. ... *Or outside coming in*. Variable continuity across the qualitatively different: continuity of transformation. ... sensation is the analog processing by body-matter of ongoing transformative forces. ... The digital is a numerically based form of codification (zeros and ones). As such, it's a close cousin to

quantification. Digitization is a numeric way of arraying alternative states so that they can be sequenced into a set of alternative routines. Step after ploddingly programmed step. Machinic habit. (Massumi, 2002: 135, 137)

For Massumi, the technical definition of analogue communication provides a framework for radically rethinking how bodies move and feel in a new media existence. Massumi here collapses the distinction between moving and feeling. Within the mode of the analogue, Massumi asserts, sensation is a type of continuous movement: sensation does not simply give rise to an awareness of bodies and objects but rather references the body's ability to keep up with its 'own variations' or self-deformations. To speak of bodies and objects is thus, in Massumi's logic, to detract from the contemporaneous flux of sensation; continuously variable, shape-shifting 'body-matter' is Massumi's preferred term for describing how the complexity of movement can be more fully comprehended. To understand Massumi's assertion of 'analog processing by body-matter of ongoing transformative forces', we can return to the problem of micro-variations of movement occurring beneath the level of human perception, which Norbert Wiener addressed by controlling these microvariations with a probabilistic theory of cybernetics. Massumi argues that the body is united with its own unquantifiable momenta if it is theorized as an analogue computer: body-matter, as unmotivated variation, can closely 'process' or compute 'ongoing transformative forces' and thus provide a fuller, more accurate understanding of bodily movement and change.

Massumi is implicitly against first-wave cybernetics here. For instance, Wiener's theory that a single movement is constituted in relation to other, alternative movements that might be made, would be viewed by Massumi as being lifelessly programmatic. Massumi would interpret Wiener's claim that bodily intelligibility is produced probabilistically, at a distance from variable movements that cannot be accurately measured, as a 'ploddingly' 'numeric way of arraying alternative states', because for Massumi this theory is incapable of accounting for the movements that occur in between each of the alternative positions it quantifies. In short, within Massumi's logic, first-wave cybernetics is *too digital*: it represents movement by excluding movement as a fully continuous variability.

Although he juxtaposes the mobile fluidity of the analogue and the static clumsiness of the digital, Massumi stresses that the digital is

immobile only insofar as we mistakenly continue to think the digital apart from the analogue, as that which replaces analogue communication. Thus, despite the title of his essay ('On the Superiority of the Analog'), Massumi insists that the question of the analogue and the digital is not one of subordination. In the following passage, Massumi considers the ways in which Internet use refuses the periodization of a digital time:

While it is still true that everything on the Web is [digitally] preprogrammed, the notion of a dictatorship of the [hyper]link carries less weight. ... The open architecture of the Web lends itself to the accumulation of analog effects. The increase in image and sound content alongside text provides more opportunities for resonance and interference between thought, sensation, and perception. A crucial point is that all the sense modalities are active in even the most apparently monosensual activity. ... Given the meagerness of the constituent links on the level of formal inventiveness or uniqueness of content, what makes surfing the Web compelling can only be attributed to an accumulation of effect, or ... momentum, continuing across the linkages. (Massumi, 2002: 140-141)

Here Massumi is claiming that the digital aspects of technological objects are not enough to exemplify the function of bodies in computerized societies. The World Wide Web is architecturally digital, in that it is programmed to anticipate all possible links, but Massumi argues that it is both reductive and deterministic to assume that bodies become digital by participating in this medium. Against this assumption, Massumi asserts that when bodies interact with the Web, the Web's 'programmatically prearrayed' links give rise to the analogue process of 'vagueness' (2002: 140). Vagueness is Massumi's term for the body's continuously unmotivated navigation of cyberspace, produced by cumulatively moving through links that, by virtue of their *multimedia* content, distract conscious reflection and obfuscate the distinction between thought, vision, and sensation. The Web surfer's perceptions, Massumi states, cannot privilege Internet use as a cerebral activity, because the surfer's vision and thoughts are always 'accompanied by a physical sensation of effort or agitation,' whether 'a knitting of the brows, a pursing of the lips' or 'scratching [and] fidgeting' (2002: 138-139). In line with

his definition of the analogue as ‘process ... self-referenced to its own variations’, Massumi describes these sensations of attention and distraction as ‘self-referential actions’ that engulf thought and vision, enacting ‘the turning in on itself of the body’ by not allowing bodily movement an objective motivation (2002: 139). Body-matter’s self-referential variability therefore explains for Massumi why the notion of a digital identity is wholly glib, and also aptly describes the vaguely interesting, compellingly boring activity of Web surfing, whereby momentary attention is fostered by ‘click[ing] ourselves into a lull’ (2002: 139). Massumi’s notion of vagueness thus deconstructs the oppositions of interest/boredom and movement/stasis: a body goes nowhere *because* it is in dynamic flux, in which interest is, to use Massumi’s term, ‘fold[ed]’ (2002: 140) into a more general compulsion for that which does not stimulate.

While we can relate his assertions to Wilden’s theorization, Massumi’s arguments for the analogue draw more explicitly on the work of philosopher Henri Bergson. Bergson’s critique of Zeno’s arrow – the paradox posited by ancient philosopher Zeno whereby the concept of an arrow’s flight confirms that the arrow cannot move at all – exemplifies Massumi’s attempts to theorize beyond digital interventions in analogue continuums:

Take the flying arrow. At every moment, says Zeno, it is motionless, for it cannot have time to move, that is, to occupy at least two successive positions, unless at least two moments are allowed it. At a given moment, therefore, it is at rest at a given point. Motionless in each point of its course, it is motionless during all the time that it is moving. Yes, if we suppose that the arrow can ever *be* in a point of its course. ... But the arrow never *is* in any point of its course. ... To suppose that the moving body *is* at the point of its course is to cut the course in two ... [and to] admit *a priori* the absurdity that movement coincides with immobility. (Bergson, 1911: 325-326, 327)

Thus for Zeno, when an arrow is in flight it moves successively from one discrete position to another discrete position. The problem with conceiving of such a trajectory, Zeno claims, is that between one position and another are infinitely smaller positions; before the arrow can move from one point to another it must take up each of these micro-discrete positions, which are forever divisible and thus

prevent the arrow from moving anywhere (See Massumi, 2002: 7). Also, the arrow is immobilized by its own measurement: at each point it occupies in its trajectory, the arrow is equal to its own length, meaning that the arrow's travel is constituted by the arrow-in-analysable-stasis; put simply, no extra dimensions exist to validate the claim that the arrow moves forward.

Bergson refuses what we can call Zeno's digitization of mobility, arguing that Zeno's crucial error is in conceiving of the arrow as a (digital) *thing-in-movement* rather than as a qualitative (analogue) transformation-in-process. For Bergson, Zeno is never contemporaneous with the arrow's movement as he assumes to be, because Zeno's notion of movement is constituted by positions plotted *after* an indivisible, self-varying flux by which the arrow is qualitatively transformed. The arrow, Bergson argues, is in a state of arrest only once it has hit its target, by which time it has undergone a change in type ('the course of the arrow is its very extension'): it is no longer an arrow but a successfully-shot arrow and thus, however nominally, resists the logic of sameness required by trajectory analysis (See Massumi, 2002: 7). Zeno's concept of movement is thus limited to retrospective possibilities ('A to C' and 'C to B'), by which the arrow's mobility only confirms its inability to transform. Bergsonian movement, which inspires the rhetoric of Massumi, therefore references the analogue compulsion of objects and bodies towards their own undoing as digital things. Massumi invokes the critique of Zeno to extol the virtues of '[f]luidifying with Bergson' within the context of bodies and new media (2002: 6). Massumi's concept of vagueness exemplifies this incitement: when we retrospectively plot our visited links as the sum of our navigation through the World Wide Web, we fail to understand that the fluid 'analogue effects' of this navigation changed the body beyond the recognizable form it maintains when the surfing process is digitized into several stopping points.

Doubting the analogue's superiority

Massumi's calls to fluidify and fluctuate with Bergson bring a sophisticated and important criticism of digitization-as-succession, and of the celebratory and apocalyptic valorizations popularly attached to this notion.⁴ My concern with Massumi's belief in the analogue's superiority/greater mobility, though, is that it seems to posit the digital as an exemplary source of incredulity. In other words, Massumi invokes the digital as that which gives us a false

belief in how bodies move(d). Massumi informs us that, contrary to popular belief, bodies are not digital, bodies do not communicate digitally, and that any digital aspect of a body works only to facilitate a continuous analogue relationship. I too believe in these resistances to full digitization, as a general principle against celebratory rhetoric of technologically determined 'ages'. But the inherent incredulity that Massumi attributes to the digital arguably does nothing to challenge the binaries analogue/digital and continuous/discrete; it privileges the analogue/continuous on account of its greater mobility, and subsequently accords it a privileged status in the analogico-digital. This always-already-secondary function of the digital prevents us from thinking the digital differently, not as the digital with more movement but as the digital rethought in its stasis and as a mode of positioning. What happens, then, when we do believe in the digital, in what the digital shows us? More specifically, what happens when we believe in a theory of the analogico-digital that accords the digital a more important role than that of the analogue's catalyst? Addressing these questions will enable us to subvert the normative temporal frames that persist in the analogico-digital theories encountered thus far.

Philosopher working in the tradition of deconstruction Bernard Stiegler offers an important rethinking of the analogico-digital in his essay 'The Discrete Image'. Stiegler considers the knowledges of movement produced in relation to 'the three kinds of images that have appeared since the nineteenth century – analog, digital, and analogico-digital' (2002: 158). For Stiegler, the exemplary analogue images are those of photography and cinema; the digital image refers to 'the computer-generated image ...: a modelling of the real that can imitate reality quasi-perfectly' (2002: 156); and the analogico-digital image is exemplified by digital photography, and by computer imaging software that catalogues discrete aspects of image transmission.⁵ Because images are, Stiegler affirms, among 'the material supports of the bulk of our *beliefs*' (2002: 149), the advent of each of these types of image both disrupts established beliefs and imposes a new kind of belief, which may be a doubt or form of non-belief. Stiegler begins by discussing the analogue photographic image:

The rule is that every analog photo presupposes that what was photographed was (real). The image-object printed on photosensitive paper as *this was*, Barthes calls the *spectrum*. This spectre is produced by touch – but by a type of touch that is

very singular. Nadar took Baudelaire's picture, and between Baudelaire and myself there is a chain, a *contiguity of luminances*: when I look at this portrait, *I know intimately* that the luminances that come to *touch my eye* touched, that they *really* touched Baudelaire. ... I know that I'm not going to be able to touch Baudelaire by putting my finger on his photographed face: he is dead and gone. And yet, the luminances that emanated from Baudelaire's face at the moment Nadar's camera captured and froze it forever *still touch me, beyond the shadow of a doubt*. This is moving ... (it arouses, in me, a dull movement): the ghostly effect is, in this instance, the sentiment of an absolute *irreversibility* ...: it touches me, I'm touched, but I'm not able to touch. I'm not able to be 'touched' and 'toucher' *Continuity* is the condition of possibility of the ... *this was*: we must have a *sense of continuity*, of the continuity, *not simply of the chain of luminances, but of what is seen as well*. The grain must be effaced in order for the *spectrum* to create unity, in order for it to present itself as individual (indivisible singularity ...), as this here (*this was*) in its unique character in its unique instant, and not to appear to be treatable ... as such. (Stiegler 2002: 76-77)

In accordance with Massumi, Stiegler is suggesting here that we must always refer to the analogue as the domain of the *moving*, implying not only irreversible movement, which supports Massumi's theory of ongoing qualitative transformation, but also being moved or affected. However, Stiegler's analysis of touch alongside these aspects reveals the process whereby the analogue necessarily covers over its prior and inescapable digitization. The analogue image brings movement or rupture, Stiegler suggests, by generating a 'chain of luminances' that irreversibly carries a materiality long dead (which therefore cannot be touched) but which, by virtue of this irreversible movement of light, persistently physically touches those bodies who come, successively, to view the image in the present, and moves these bodies with a 'ghostly effect' that alters belief.

But this untouchable analogue irreversibility, despite bringing rupture, retains a credulity in a mo(ve)ment that happened once as an 'indivisible singularity', a mo(ve)ment ('this was') at the origin of

the analogue chain that was not and thus cannot be digitized, decomposed or 'treat[ed]' (treatment here implying critical analysis, or a critical touch). We find such credulity in Bergson and in Massumi's neo-Bergsonism: both posit movement as an undivided singular continuum untouched or unable to be comprehended by positions plotted and analysed in retrospect. Indeed, we can use Stiegler's discussion of the *this was* to formulate a general principle that compels Bergson's and Massumi's rhetoric: *this was* moving, but we are neither quick nor flexible enough to keep up with its singularity in our digital positions. Stiegler challenges this principle by arguing that the *this was* (moving/a moment) is not an indivisible reality, but is always a 'reality-effect' produced by effacing the discrete elements that constitute the analogue chain at its (non-) origin (2002: 155). Discrete 'grains' – atomic silver halides – constitute that which develops on the photosensitive paper and which will be carried irreversibly as the untouchable *this was*, but the photographic development process both conceals and prevents access to these grains in their discreteness. Furthermore, the analogue image is also constituted by discrete 'framing operations and choices about depth of field'. 'The continuity of the analog image', Stiegler affirms, 'ought not to conceal the fact that *the analog image is always already discrete*' (2002: 155): an indivisible singularity is always already touched/treated by decomposition, irreversible movement by stoppage.

For Stiegler, the analogico-digital image brings this archaic digitization *to light*, insofar as the notion of light is rigorously deconstructed, and can no longer serve as a support for belief in an unmediated taking-place:

What *else* are we afraid of in the analogico-digital?
We are afraid of a *night light*. ... The light of photography comes to us from the night of a past that I didn't live, but once ... this night was day ... It has irreversibly become night, this is what the past is But the day has to have touched the silver halides first. With analog light, the silver luminances still have to do with touch and with life – with a past life. With the digital photo, this light, from out of the night, *no longer comes entirely from the day*, it doesn't come from a past day that would simply have become night In the digital night, touch is blurred, the chain becomes complicated. It [the chain of luminances] doesn't

completely disappear: we're still looking at a photo. But something has intervened – treatment as binary calculation – which renders transmission uncertain. Digitization *breaks* the chain, it introduces manipulation *even into* the *spectrum* Photons become pixels that are in turn reduced to ones and zeros on which discrete calculations can be performed. Essentially *indubitable* when it is analog (whatever its accidental manipulability), the *this was* has becomes essentially *doubtful* when it is digital ... For the imprinting of luminances on the photosensitive support ... the analogico-digital substitutes a deferred time: the time of storage as a calculation that decomposes [discretizes] the *elements* of the spectrum while waiting for the treatments that will end up in the imprinting of *something else* ..., the night in which, analyzed, 'that which was' becomes discontinuous. (Stiegler 2002: 152-153)

A close examination of Stiegler's analogico-digital reveals how a mistrusting of the digital is not superseded by a belief in the analogue. It is worth decomposing Stiegler's theorization in order to demonstrate my point. The analogue, Stiegler argues, is coextensive with credulity in movement (because it effects an uncritical assumption that imprinted movements and moments 'just were'); the digital introduces doubt into movement (because its operations of placing and positioning make it uncertain whether these imprinted moments and movements were true or false). But credulity and doubt are not opposed; in the analogico-digital, they intersect. From the intersection of the analogue and the digital emerges belief. Belief is the effect of the digital mediating the analogue. More specifically for Stiegler, belief is the foundation of an analogico-digital model of representation in which, with conviction, we ask questions of the apparently indivisible origin or source of credulity so crucial to the analogue, whilst still being affected by images that are transmitted digitally to us. Therefore, Stiegler is not inverting (or switching over) an analogue/digital binary; an archaic digital is not a pure digital: as Stiegler makes clear, in digital photography the analogue chain still remains in some capacity, because we are still looking at a photo. We are still touched by light that touched the materiality on display. However, in digitization this light has been made to wait, in storage ('as photons become pixels

that are ... reduced to ones and zeros'), for information that marks its analogue transmission with deferral, alteration and doubt. 'Storage' here does not signify the retarding and misunderstanding of an indivisible mo(ve)ment, or that which the analogue always moves past. Storage is rather the necessary condition of transmission, a transmission broken by questions regarding touch: it is uncertain whether 'the analogico-digital luminances really touch[ed] the sensitive plate *once* ... At the same time, I know this thing has to have touched, but I'm not sure: how much did it touch? To what *point*?' (Stiegler, 2002: 154). These are the kinds of questions asked about the analogico-digital, at the intersection of credulity and doubt.

In the doubtful transmission of the analogico-digital, light no longer grounds a credulity in the indivisible mo(ve)ment but is incompletely shut out, as it were, in storage, where it becomes one with a night that marks not what happened (from 'a past day') but that which possibly never happened, never took place as an intelligible mo(ve)ment. This analogico-digital 'light in the night', as termed by Stiegler, transmitting that which (never) happened, attests to the fact that it 'is always on the basis of the irreducibility of a non-knowledge that a knowledge is constituted' (2002: 154-155). Stiegler argues that because the analogue must always efface its own manipulation while (and as a means of) preserving belief in the *this was*, it carries the danger of exempting manipulation from criticism, denying critical access to discreteness. Analogue belief (or credulity) is politically damaging, Stiegler asserts, because it can engender a form of uncritical doubt or 'panic' (2002: 151). For Stiegler, panic emerges because manipulation must remain untouchable – must be withheld from the viewer – to enable successive analogue transmission, and thus prevents us from *separating* (digitizing) reality from fiction, or from acknowledging the processes by which the two become blurred within the temporal objects of film, photography, and television.

This results not only in the viewer's credulous reception of the sequence unfolding before them, but also in the inhibition of a critical mode for retrieving the very movements and moments that visual media transmits. This inhibition can be explained through reference to the production of panic at both a micro and a macro level. At a micro level, the discrete elements of digital media – such as the pixels of a digital photograph or the individual frames of a digital movie – are overlooked and left behind, because they are transmitted at such speed that one senses only the analogue effects

of this media. At a macro level, the analogue or continuous way in which transmission is traditionally framed in terms of form and genre – for example, 'rolling' or 'round-the-clock' digital news coverage, and broadcasts generally that organize their output to fit the rhythm of the calendar – has instilled in us a credulous investment in succession, whereby the 'next' transmitted movements and moments are expected to be truer (or more likely to lead us to the truth) than the previous ones. In this ana-logic, 'old news' irreversibly becomes night, in Stiegler's terms, making it impossible for us to engage with the discrete operations, actions, and techniques of positioning through which the transmissive chain is effected. My explication of these micro- and macro-productions thus highlights two aspects of the same claim against credulity in the analogico-digital. That is, as long as the analogue aspect of the analogico-digital continues to hold our interest, it will not feel right for us to believe that technological development should stop, break down/separate, and thus multiply the actions it has recorded – a feeling that causes us to shut out completely in the present the (im)possibilities of past movement, and to panic about what is coming next. In response to the threat of panic, Stiegler urges us to believe in the digital within the analogico-digital, in the irreducible non-knowledge that doubts and decomposes the indivisible analogue mo(ve)ment.

Conclusion

Stiegler's belief in the digital, which stresses the importance of (staying in) place in technological space, provides an opportunity for technologies scholars, and cultural theorists in general, to directly engage with a present reality that I think has been significantly under-theorized to date. I am referring to the fact that in a so-called digital nation, the speed with which a body is transported via a broadband Internet connection varies drastically depending on a body's location within that nation. In Britain, only fifty per cent of households have access to the fastest broadband.⁶ We can understand this current situation with recourse to the philosophical digital: 'digital nation' signifies not only a networked territorial whole but also a vast multiplicity of discrete regions, each of which has its own times of contact and communication. By invoking regionality, I do not simply mean that there are different speeds of broadband in different areas of a nation – parts of counties, parts of towns and cities, and so on. There are discrete regions within these areas: connection and navigation speeds can vary

between neighbouring buildings, and can vary within the partitioned areas of a single building, if the hardware and software used in each of these places are not of the same age and specification, and if one place has more hardware connected to the network than another. It can be argued, then, that Britain is more digital (discrete) without the 'digital revolution', which promises to create a perpetually high-speed, continuous, distinctly analogue communicative flow through all territories. We should ask questions about what takes place in these regions, instead of simply anticipating an eventual nation-wide speed-up of broadband technology that will provide all citizens with equal access to the optimum number of megabits per second. I propose that we ignore the hyperbole of the 'digital revolution', and instead study the interpretative relations into which bodies are being moved by their contact with wiring that is likely to break down fifty per cent of the time.

Endnotes

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¹ Wilden describes a key characteristic of the analogue as 'the release of "more or less" of something' ('Analog', p. 156). See <http://www.digitaluk.co.uk> [accessed 10 March 2009].

² This website includes the explanation that 'between 2008 and 2012 the UK is switching to Digital [television] and the old Analogue signal will be switched off': this text is accompanied by the tagline 'Get Set for Digital'.

³ For more on the arrow's immobilization-in-measurement, see Alan Robert Lacey, *Bergson* (London: Routledge, 1989), 32-33.

⁴ Massumi argues that '[a] commonplace rhetoric has it that the world has entered a "digital age" whose dramatic "dawning" has made the analog obsolete. This is nonsense. The challenge is to think (and act and sense and perceive) the co-operation of the digital and the analog, in self-varying continuity. Apocalyptic pronouncements of epochal rupture might sell well, but they don't compute. ... The analog and digital must be thought together,

asymmetrically. Because the analog is always a fold ahead' (2002: 143).

⁵ Stiegler is the founder of the Institute for Research and Innovation (IRI) at the Centre Pompidou, Paris. The IRI has created *Lignes du temps*, an annotation and analysis software that uses a graphical interface to immediately reveal the discrete shots and sequences comprising 'temporal objects' (most notably film), and which 'allows for a synchronized description and analysis' of these discrete elements 'through textual, audio and video comments, images and Internet links'. See

http://www.iri.centrepompidou.fr/res/media/flyer_ldt_en.pdf
[accessed 19 November 2009].

⁶ See The Department for Culture, Media, and Sport's paper 'Digital Britain: Final Report', 2009,

http://www.culture.gov.uk/images/research/TNS-BMRB_DBSupportregionalnews_finalreport.pdf
[accessed 05 January 2010]: 8.

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