The Latent Image

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ABSTRACT
How can we describe a moving image, composed of thousands of successive images, as "an" image? I want to explore the possibility that the coherence of the image is premised on latency. A latent image is one which is captured in photographic film prior to development. It is by nature invisible. Similarly invisible latent states structure lenses, aperture ratios, compositing, grading and edits. Looking at the codec wars currently breaking out in preparation for HTML5, this talk investigates the relationships between the aesthetics and political economy of the image in the 21st century

KEYWORDS
codec, latency, vector, contradiction, political economy

In the present go
nor right nor left;
nor stay
in the middle, where they'll get you
Charles Olson, 'The Song and Dance of', *The Maximus Poems*

The Unholy Image

The Bible prohibits the *graven* image, engraved, we presume, or carved; therefore any depiction printed or sculpted. Casts like the Golden Calf are included (Exodus 34:17), so minting must be (monotheists should not carry money); printing, especially engraving, has to be a variant of carving; and printmaking cannot but include photography, and now cinematic prints; and in the spirit of the law and in accordance with the traditions of iconoclasm, images produced with the palette knife and the pencil, and softened a little further with a brush. It seems unlikely that the jealous God of Genesis will be appeased by sophistical arguments for a discontinuity between analog and digital cinematography.

The study of the image is incompatible with monotheism.

We who do decide to study the image, who love and honour humanity's magic picturing, while we should abandon monotheism, cannot utterly discount the possibility that God may have had a point. There is the possibility, caught in the title of one of Baudrillard's feuilleton's of the 1987, that the evil demon of images has us in her claws, and that the prohibition on imaging is an admirable prophylactic. Giving God the benefit of the doubt, let us ask why he would have been so specific, adamant and clear, repeating twice in Exodus the curse on the descendants of idolaters, and in Leviticus demanding that his people not only refrain themselves but smash the images of their neighbours.

The imaging the God of Genesis knew was a mediation of the eye by the hand – a bodily technology. The image properly speaking, the image of the world, occurs only in the eye and can be observed reflected in it. Should a hand or handheld tool trace that image elsewhere, there is the sin: creating a Platonic simulacrum which both the ancient Greek and the religions of the book prohibit. Does God still punish? Does he hate the photographic plate and negative , or only the print? Does an image downgenerated as a halftone or fax or photocopied image, an image gathered in CCD or CMOS, in camera or scanner, escape the curse on the fourth and fifth generation? Is there anything different about these mechanical or digital modes of printing that might lessen the divinity's hatred? Or – despite the widespread use of photography in fundamentalist news media – are the mechanical and digital media worse than their predecessors, because they give the appearance of instantaneity? Coming into existence, enduring, submitting to and engaging in the perceptual, analytic, interpretive activities of viewers, human, animal and mechanical, transmitting and distributing, changing their scale and grain and texture, and most of all articulating with other images, whether analog or digital, photographic images scatter and proliferate. If the God of Exodus could see the way one image seems to demand another and another, He would be sure he had been right in the first instance.

But then again the image in the apple of the eye, the reflection of the world, is as uncanny as the reflection in the mirror, and as unholy: a vanity, and a thief of souls. Strictly speaking, things are invisible: what we see is not things but light; but the light we see is impure. Pure light is as blinding as darkness. What we see is light's history of reflections and refractions, of bouncing through dust and moisture and the cacophony of things. The sensation of seeing is conditional on the *being-light* of light, but the pure light that that seems to refer to is never visible. What we witness is instead the *becoming-visible* of light. So what then are we looking at when we look at recordings which fix into stability the becoming-visible of invisible light? The problem becomes increasingly urgent when we move from reflected (projection) to emitted light from electronic screens (CRT, LCD, plasma). What happens when we attempt to see chemically or electronically mediated light? when a photosensitive surface reacts to the presence of light by producing a process other than light, such as oxidisation or emitting an electron? When a fluorescent or phosphorescent screen, a DLP or LCOS projector automates the reproduction of light that has been mediated through charge, voltage and logic? Or for that matter through post-production, when the immediate is mediated?

The Unstable Image

Any image is uncertain, just like any translation. Imaging renders perception unstable. The mechanical like the digital image hides its temporality as it occupies and inhabits space. In their production and dissemination, copies of images multiply spaces which in turn overlayer multiple times, occupying time as if it were space, translating time into space. In this it is no more than a mechanisation of the realism of 19th century genre painting, or for that matter of the 17th century still life: a realisation of the fleeting unreality of the material world in the latter, the joy of light's changes caught on the wing in the former.

Time is integral to the image: not just the ontology of a new creation supplementary to God's; but time as the raw material of imaging today, as space was in the renaissance. Dimensionality is most important in the visibility or otherwise of any image, but especially of *The* image. The term suggests that an image is a unity, possessed of autonomy, internally coherent and bounded: discrete from what it is not. Image as whole:the terms 'discrete', 'autonomous', and 'coherent' may describe some images, but they are rare. Most images exhibit, in the nature of the fact that they exhibit themselves, complex spatio-temporal relations. When we deal with ostensibly static and coherent artefacts as diptychs and even more so montages, it is difficult to claim that the thesis of wholeness can be considered axiomatic of all images. In one particular case this is especially clear: what or where is

the unity of the *moving* image? Are we simply lazy to refer to film or video as work with "the" image when clearly they are composed of many?

Alternatively: if all images exist in and through time, so that there is a process of imaging premised on the becoming-visible, rather than a unitary image, then moving images may be the technological proof that no image is discrete or autonomous, that every image takes its place in the succession of images produced and perceived? But if that is the case, is then the sleight of hand that makes apparent motion possible – the manner of erasing each image at the point of its completion in order to replace it – is that magic trick generalisable as a condition of existence of every image? Or is that reading history backwards, deriving the past from the perfection of the present?

But then again, a Heideggerian would here propose the image's lack in being (*manque à être*), the world that is *no longer* a world but a picture (Heidegger 1977). However, it is not the case that, at some indefinite moment in the pre-Socratic past, images existed as plenitude. Plato merely observed what had always been the case, that an image is always a *displacement* of a presence, and is therefore not a presence, not itself fully present to itself. Aristotle – more likely to recognise the dimensional confusion of replacement in time or space –might have added: an image is self-contradictory, an entity of which it cannot be said that it is identical with itself. This concept of the image is not merely logical or definitional: it is a metaphysical argument. The image is incapable of existence because it is internally contradictory.

Against the Heideggerian nostalgia: this is not a loss or a lack in *being* but a condition of *becoming*. The world is not "all that is the case" (Wittgenstein 1961) but rather what is not, or rather (in Bloch's terminology) not-yet, the case (Bloch 1986). Heidegger still accepts the Aristotelean principle of self-identity: A=A. The image teaches us by example that what is most *significant* (what bears meanings, affects and relationships between us) is most often what is not self-identical. The condition describable as lack is not occasioned by something that disappears in the past, as Heidegger wishes it. On the contrary, something struggles toward the brink of existence. An image in time seeks actuality, but in achieving it, becomes again virtual, a fount of other possibilities, possible relations, meanings and affects. It is intrinsically utopian. An image, unlike a thing, is all potential, always already virtual, a leap into becoming other than what it is, enabled by the very flaw in its ontology: that it is non-identical and, to that extent, it does not exist. *Instead it oscillates in its inherent difference from itself*

Confronted with the challenge of number theory, Frege arrived at a curious definition, which would allow him to derive all the numbers from zero. We know from Aristotle that everything that exists is identical with itself. Therefore, he surmised, zero can be defined as that which is not identical with itself. The process can be envisaged as follows. Therte is a blank chalkboard. How many numbers? None. You write '0'. How many numbers now? One. Write '1'. How many now? Two. And so on. The non-identical was for Frege the source of identity – zero the source of the number 1. But the principle that allows us to derive 1 from 0 also inevitably drives us on to generate more and more numbers, an infinity of numbers. The step from non-identity to identity includes the step to multiplicity and infinity. There is no stable Aristotelean union of the one with itself (see Miller 1977/8: 32). So mirroring the other great derivation from infinity, from the endlessness of difference, these paired derivations of unity and the number series may be conceived of as failed attempts to produce unity from multiplicity. The instability of the void is the isomorph of the the instability of the infinite: multiplicity is the difference that oscillates in the non-identical (see Badiou 2008).

The concept of multiplicity as irreducible ontological difference, the difference which foams under the non-identity of the image, has implications for the functioning of images as media of communicative relations. We know from cybernetics that information is 'any difference which makes a difference *in some later event*' (Bateson 1973: 351; original emphasis). That is, zero, infinity, non-identity, difference and information are of a kind, and – when we stress, as Bateson did, the oft-repressed final phrase of his formulation – all are therefore necessarily temporal phenomena. Thus we can understand the motives of the one eternal God in banishing this ontological error from His universe. An image is a crack in the universe that proves its imperfection, the impossibility of unity, the impossibility of eternity.

Now we are in a position to understand the historical role of the moving image in the genesis of contemporary imaging processes. Movement is of the essence in imaging because there is no fullness of the image to itself. The incompleteness of the image not only drives it to become other than the contradictory creature that it is, but requires an oblique glance in order for us to see it at all. There is a problem in vision which compounds the invisibility of light and the incompleteness of the image with passages of absolute difference so coyly screened from our gaze by the whirring shutter. The oblique, distracted glance is insufficient protection against the presence of the represented there where they are not, against therefore the uncanny. Because the unstill image instills motion, it blasphemes against the permanence of Being. God struggles to contain the damage, by turning our eyes away from the evidence of ephemerality and ontological chaos. But alas, too late; we have eaten of the fruit, and will turn our eyes back to the site of absence, the fetish, site where the image hides and reveals the impossible untruth. And yet, because there is contradiction, because there is struggle, there is change, and time and history. That history which is not the history of iconoclasm is a history of struggle over the control or liberty of images.

Latency

A viewer may move past an image; an image may move past a viewer; and an image may move, whether because its light source moves (as candle-light or firelight or sunlight through leaves moves) or because the shadow or the shadow puppet, the wearer of the mask, the priest shaking his icon moves. How could we speak of an image's unity or autonomy? It cannot stand still. A screen image moves, not because one image succeeds another after the passage of a shutter, or because an image interlaces with or replaces the scan lines of the image that precedes it. They move because there is no stillness available to such a contradiction, which must forever pursue and abandon coherence. Coherence, self-identity, is not only a theological category. It is the founding principle of classical rationalism; as unity it is the foundation of commodity exchange; and as individuation it is the formative ground of liberalism and bio-politics. The instability of imaging cannot be countenanced, not by the God of the Old Testament, nor by the contemporary database economy. The image as ontological oscillation risks reason, politics and economics. The struggle to stabilise images has continued for five hundred years in an amazing proliferation of forms. Of all the instruments deployed in the effort to stabilise the impossibly pulsating, percussive movement of the image – frame, perspective, focus, and many more – one stands out because of its intrinsica relation to photography, and because it demonstrates the commonalities between analog and digital imaging. It is to this technology we now turn in the passage from metaphysical to physical speculation.

To say an image is invisible is true only temporarily, and confusing since visibility is of the essence to visual perception. Yet so too is invisibility. The passage through invisibility is as critical as that from photopic to scotopic vision at twilight, and as magical. We need a new term, and photographic practice has it to hand. Latency is the moment of invisibility when a photographic image lies in the negative after exposure but before fixing. The first reaction of the silver salts to light has taken place, but remains incomplete.

The distinctions between analog and digital imaging have been over-emphasised. The claim (made by Kittler [2010] among others) that analog photographs are always visible from exposure to final print is incorrect, as is the claim that analog imaging has a privileged indexical relation to the real. Both lose the image to latency: one to chemical, the other to electrical. In digital imaging, 'latency' refers to an ostensibly different phenomenon: the time it takes a camera to migrate the image from chip to memory, the period when the camera is 'latent', ie cannot take another picture. Consider however what is happening during this process: incoming photons have been converted to electrons, held in the gated grid of p-type and n-type semiconductors. To make the chip ready for another exposure, the electrons must be drained from the chip in the precise order of their layout. This is done by timing their movement from the chip with a clock that ensures each row of charged particles moves down the capacitor array in lockstep. The last capacitor in the array dumps the electrons into a charge amplifier which converts them to voltage. By repeating this process, the controlling circuit converts the entire semiconductor contents of the array to a sequence of voltages, which it samples, digitizes and stores in memory as numerico-logical data. So the digital term latency covers over a process precisely analogous to the latency of wet photography: the delay prior to the camera cleaning itself up ready for the next shot, the time taken to convert charge to voltage, is exactly the same as fixing the chemical image. Both are functionally amplifications of the latent image, which needs to be boosted chemically or electronically from the raw state of the first photo-chemical or opto-electronic reactions. In both processes, there is a distinct moment when the photons have been converted into something else (electrons, silver ions), but that something else is not-yet visible.

The material specificity of the image is not about an imaginarily privileged relation to the real. We could define the real as that presence which is definitionally excluded from its re-presentation in the hyperreal of the image. More guardedly, the common moment of latency should indicate that both analog and digital undergo a critical moment of divorce from the indexical which is so treasured in film theory. Consider how both use the same compound lens designs, coatings and filters to establish spatial relations of unity; how they share the use of light-traps and aperture frames to remove scatter and distortion from the finished picture; how both forms of cinematography employ the same panning, tilting, tracking and dollying, using the same floating-head tripods, the same cranes and steadicams. Consider how they share techniques of editing, matting, over-printing. Pause to consider the importance of the shutter in camera design regardless of whether the light-sensitive element is electronic or chemical. Layers and composites are equally available in post to either or to their hybrid forms. In one of the few real changes to professional practice, grading is now in the edit suite instead of the lab. Outside of animation, it is difficult to see any other major change in the analog-digital transition

As rays of light converge at the objective of a lens, they intersect at a single point where the image vanishes. In analog production, lenses are ubiquitous, especially in optical printing: the image – as it passes from dailies to rough-cut to assembly to final cut to showprint – is constantly vanishing, constantly re-appearing. The same happens in the eye. These are vanishing points, as we say of perspectival images, but as vanishing points orchestrate the emergence of space into the canvas, so the objective of the camera's or the eye's lens projects the image forward (Edgerton 2009), brings it into visibility; is a vanishing-and-becoming-point. Latency then names the disappearance and reappearance of the technical image, a material practice which makes visible, as metaphor, the emergence and evaporation characteristic of the non-identical, and clarifies the observation that no image is ever still. We must then disagree with Coleridge (1965: 172) for whom 'nothing can permanently please, which does not contain in itself the reason why it is so, and not otherwise". Any image is necessarily otherwise than so. The question then arises whether the Romantic aesthetics of permanence are still relevant, or whether, like organic unity, they form part of the struggle to bring the recalcitrant image to heel.

Managing Instability

Wholeness has been central to the conceptualisation of the image, as art and ideology. Yet hardly a single critic has failed to note the non-identity of the mark considered as representation and the same mark considered as gesture or line. We see the components of the image - the technique on one hand, the matter depicted on the other – as simultaneous but distinct qualities. We see that a picture is a pencil drawing at the same time that we see that it is a drawing of a horse. The materiality of the image which brings it to being but is not the representation is the hand-made image's equivalent of latency. The incoherence of the image is then more general, not restricted to the photographic image, but photography teaches us to recognise the latency proper to all images; and prepares us for the unfolding of incoherence, which is both prior to the effort to make the image whole, and recurs after that effort.

The inconsistency of successive, progressive or interlaced images, of scans, layers, collage and montage, have required the deepest efforts of both engineers and artists to create unifying techniques and technologies from perspective to digital grading. Why have they bothered? Why the immense effort to design increasingly complex compound lenses to 'correct' the 'distortions' created by simple lenses – like the ones in our eyes? The creation of coherent images is part of a plan of mastery: mastery of space especially, which has been a hallmark of modernity, a process marked by the gradual eradication of time, the dimension of change. In the triumph of instrumental media (spreadsheets, maps/geographic information systems and databases) the image itself has been spatialised. In its trajectory from renaissance perspective and baroque theatre to compound lenses and composite images, the image has been integrated with the map, (much as imaging instruments have been integrated with the logic of counting in Gallison's analysis).

Integral to these procedures is the development of screen technologies, chipset architectures, workflow managers, colour management systems and codecs. Having achieved a series of innovations designed to maximise wholeness, such as eradicating flicker and increasing apparent resolution, the remaining weaknesses lay in distributing images. Here we begin to see genuine differences between analog and electronic media. Effects of transmission are marginally visible in halftone reproductions of wire photography, two processes which dominated news photography – where realism, instantaneity and geographical reach are most highly prized – throughout the development of 20th century news industries. Lacking the random scatter of both silver halides on negative stock and of the emery-prepared surfaces of lithography, halftone made up for its geometric rigidity by laying its lines down at 45 degrees to the horizontal. The human eye, evolved to see horizons, perceives grids pitched off horizontal as smoother, more graduated. That luxury is not available to the cathode ray tube's electron scan, whose legacy is the raster display now ubiquitous in digital screens (with a single exception to which we will return).

Viewers must be schooled into ignoring the artefacts of transmission, the gaps between images in cinema, the flicker of TV, and the blocky raster effects compression-decompression technologies. Codecs will serve as our example.

The Database Economy

In 1995 Macromedia was beginning its transition from CD-ROM authoring, which it dominated with Director, towards the web, where its Authorware and Shockwave tools had

demanding interfaces inherited from Director. They seized the opportunity to buy a start-up package, FutureSplash, which they shortened to Flash. Flash was a hit with Microsoft, which installed a player in Explorer at a time when it was trying to create web content that would only play in IE, and when it was at what not only with Netscape but with Sun's Java. Adobe, which had been trying to build an alternative player, eventually knuckled down and bought Flash in its 2005 amalgamation with Macromedia, a moment at which all the market-dominant 2D design tools came under a single management (and a powerful workflow manager which still triumphs over open source rivals). Microsoft reacted by attempting to strangle Flash with its alternative, Silverlight, while Apple turned off Flash support in Quicktime, and largely excluded Flash from iOS, and the open source community continued to extend SVG as an alternative to the proprietary Flash format. Where hackers have tried to provide open source Flash functionality, they have been hit with patent infringement suits (Maclean 2008). But developers continue to work up sophisticated Flash sites, and Apple decided in September 2010 to reopen its software developers kit to Flash applications: the Skyfire app, which transcodes Flash for the iPhone, shifted 300,000 downloads in three days of its introduction. Adobe meanwhile has been forced to shift its once dominant .flv video format from the clunky H.261 to the far more functional H.264 codec, a process that involves it paying substantial license fees to the patent holders

The arrival of HTML5 and the argument over which formats will be recognised by its <video> tag have produced strange alliances. Mozilla have put their weight behind open source codecs from Ogg, while Google's February 2010 purchase of On2 technologies led promptly to the adoption of the VP8 codec by Safari, Firefox and Opera, as well as Chrome (Explorer held out, with the exception of a Chrome frame, until in November 2010 Microsoft bowed to the pressure and began to sideline Silverlight [Dilger 2010]). By the 4th of November, Google were reporting that 80 per cent of YouTube content had been migrated to the WebM format based on VP8. However, the move has its opponents: the unlikely alliance of Microsoft and Apple who, as members of the MPEG_LA patent pool, are claiming that open source alternatives in fact breach the pool's patents. [The beginning of the 21st century thus echoing the wars over the Edison MPPA patent pool 1900-1912]

Compression-decompression uses new forms of latency. Aesthetically it moves the production of illusion from the device side to the observer. Like late 19th century optical mixing of colour, the new generation of codecs calculate the inefficiencies of the human eye and run as little data as necessary to fool it into perceiving a clear, clean picture. In the process, such codecs abstract from the full range of data captured in producing the image only those elements needed to reproduce it at the consumption end of the distribution. Thus two processes are involved: one which abstracts from the influx of photons the avarage intensity and wavelength over the duration of the exposure; and a second that extracts from the field composed on the chip to a compressed form which aggregates whole sections of the picture. The doubled abstraction tends to reduce the difference between images on the economic principle that a shoddy version will sell as well as a fine one, if you can fool the purchaser. The result is an increasing equivalence of each image with every succeeding image, an equivalence which echoes the equivalences of exchange value on which commodification depends.

While arguments and lawsuits rage over who owns which elements of the codec (AT&T for example are not members of the MPEG-LA pool but own key patents which have to be licensed separately), proprietary and open source codecs share fundamental concepts. Both employ keyframing, familiar from Flash and earlier cel animation, where the start and end points of a segment are used to automate what happens between them. Both use vector prediction, which averages change over the time between keyframes. To return to the earlier argument that the aesthetic of modernity is fundamentally against time, keyframing spatialises the duration of the clip by segmenting it into units presumed to be unchanging bar some details. Vector prediction, meanwhile, subjects the clip so constructed to a regime in which the frame is divided into blocks, groups of blocks, macroblocks and slices, each of which is presumed not to change unless a pixel of area has moved between opening and closing keyframe. In the new codecs, the choice of which areas of the frame are most actively changing is also automated, with busy areas being treated in greater detail. At the same time, by separating chroma from luma (brightness information), and providing greater detail in luma than in chroma, the codec gives an illusion of increased resolution in those areas (Richardson 2003). The effect is almost exactly equivalent to the short focal length so deeply criticised by Bazin (1971) for diminishing the freedom allowed the viewer's gaze, now directed to the detailed areas and away from any desire to range over the whole of the field of vision.

This formal management of the image through keyframing and vectorisation shares the same diagram as the biopolitical, statistical management of behaviour outlined in Foucault's late lectures (eg Foucault 2007). The new mode of latency here lies in what is removed from the succession of images in compression: the contingent differences – derived from optical contact with the world – which once made a difference. The density of information in the latent image, and the possibility that density raises of interactions and emergent properties in the technical imaging processes, opened up the possibility that unexpected information might change perception. But those propensities are stripped away in the spatialisation process and by the automation of expectation operated by the codecs. The codec wars between MPEG-LA and the open source movement disguise the commonality of compression-decompression: the sacrifice, under the ideological banner of engineering efficiency, of what makes images matter.

This new quality of latency in codecs at last reveals the contradiction between wholeness and equivalence, that is between the disciplining of images and their commodification. Commodifying the intellectual property inherent in compression-decompression disrupts the carefully constructed coherence of the whole image, especially the image in movement, operated by codecs. The superfluity of the image's ontological instability, seemingly constrained in the prison of engineering codes, returns like the repressed as a war between rival schools of thought, rival business models, neither of which however has grasped the illegitimacy of the attempt to stabilise the image as controlled flow.

Vector Prediction vs Vector

We may need to reconsider the image in its materiality, the materiality too often ignored in interpretive humanities, if we are to rescue it from the purposeless delusions of which Exodus and Plato both accused it. Where God once operated, today the law: as the image is not internally coherent, it cannot on that account be owned as object. Image is by definition a medium, always in transmission. As a medium, it is not single but a series of operations and processes, some of which I have tried to detail here, operating in relative autonomy, in repetitive systems which however are open to degradation and interruption, not least from the nodes and termini which they precede and which they define and construct (images are not sent and received: their transit determines who or what is sender and receiver). Images mutate and evolve in concert with the environment they frame and which frames them. When we concentrate on the term "image" we must prepare to sacrifice the accompanying terms "the" and "is", and with them the Law of ownership and objectality. and the principle of individualism on whose primacy the law is premised.

Materialist analysis will embrace not simply the plural (typical defensive mechanism of uncertainty in cultural studies) but the indefinite. An image is in short a vector: it is a vector when we consider it as the trace of light, of photons, and therefore as quantum event, uncertain, leaving its perceiver in the condition of Schrödinger's Cat. Despite the efforts traced here to submit it to power, light is contingent still. This at least is the ideal, the *concept* of the image. Its historical reality is somewhat different.

The image may, because of its incoherent failure to exist, proliferate in sequences; it may hurl itself into the *mise en abyme*, the abyss of proliferating details; or it may produce the dialectic of stillness and movement of the late Picasso, whose vectors, like the lines traced by the protean writhing of the lovers in the 1972 *L'étreinte*, seem to graph our ambivalent decipherings of the ambiguous embrace.

Making pictures is an integral part of how we make order out of the relations between ourselves and our world. But the uncanny nature of picturing becomes the object of a secondary order, mastery of picturing itself, so that picturing has become also a tool of mastery. This is the task of perspective, as it is of the legacy of historical techniques through to those common to digital imaging: the raster display, colour management, coherent light and codecs. This mode of order is different from earlier regimes. It has, as one specific novelty, the way it overwrites the passage of time, creating a field of simultaneous events; and another – the specific mode of coherence which stabilises images as unit wholes, freely exchangeable one for another in a market of images where both information and affect ('sign value'), the semantics of the image, are subsumed within its exchange value – indeed, the term information has shed its Batesonian heritage to become effectively synonymous with exchange.

Enclosing the commons - intellectual or imagistic - is a response to the falling rate of profit; just as the enclosures of European agriculture in the 15th or of colonised agriculture post-1945: public goods like creativity and affect are becoming private property, no longer available to all, much as Verzola (2010)argues of local self-seeding plants substituted with cash crops and GM seeds. One effect of the enclosure of images is the creation of excluded cultures, those which as street, ghetto, slum cultures have been generative of so much of our visual, fashion and musical cultures: but which also point towards the peer-to-peer, distributive economics of an escape from capital. At the same time, the image itself proliferates, not only through multiplication, but internally. The *mise-en-abyme* of the screen accompanied the development of steadicam and the edit-unfriendly zooms of early CGI. Today the travel shot reveals more and more of an imagined or a realist environment; a fractal image whose density encourages multiple viewings in increasing detail. The instability of the image occurs internally as well as externally, in the perpetual refilling of the frame with other images as well as their ordered substitution in metaphoric chains. The problem is that under the regime of the commodity, these images all embroider a single metaphoric trope: the equivalence of all images. As exchange values, images all refer to a single absence, the fetishised relation between people which appears to them under the fantastic guise of a relation between images. That relation is deprived of development, since it is a relation between equal and indifferent values: it is a spatial relation without time. This is why narrative and other games with time are now more important than ever: because they are marginal to a culture dominated by the spatial media of spreadsheets and databases.

The conduct of politics in the network economy is dominated by the commodity's migration from informatic to affective labour (Negri 1986), and the oscillations between biopolitical and protocological management of human populations (Galloway and Thacker 2007), the internet of things, (Bennett 2010) and the increasingly unruly vectors of weeds, pests, microbes and amoebas, Although hidden beneath this layer of territories and flows there lies the real of basic resources, energy and environmental degradation, we have kept these terrible things secret from our images. When Baudrillard (1994) pointed to the desert of the real, he pointed to those excluded from the hyperreal, condemned to experience its exterior of e-waste, industrial toxins, collapsing sewerage infrastructures, and the diseases banished from the gated suburbs of the rich. To these the image bears witness, but their existence is impossible to assimilate to the circulation of indifference which underpins the commodity form. It is not the sublime that marks the edge of representation nor its opposite, the vile, but the shame of sheer indifference, the indifference which brings about no change in any future state.

Indifferent, then, but also contradictory. Colonising affective labour implies messing with the ontological instability of the image in the context of the instability of human subjectivity. Unsurprisingly, there are new symptoms, and they lead out of the imposed stasis towards new modes of actualisation, new modes of action.

Nostalgia for "The Image" is not just a melancholic substitution for the missed act of mourning, our unconcluded mourning for a past composed of terrible devastations of people and planet. It also unveils the dialectic of the image: its inherent virtuality, its orientation toward the future, its hope. Conceptual struggle and struggle over the technical formation of images are part of that history, part of that dialectic. The Image project, conference, journal, activities, are part of that critical process, and it is an honour to be part of it.

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