GLOSSARIUM: A COLLECTION OF GLOSSES

Kirsten Cooke
Glossarium:
From glossa (“obsolete or foreign word that requires explanation”), from Ancient Greek γλῶσσα (glôssa, “tongue”)
i **Lens** – Synonymous with science and empirical religiosity

**Science:**

‘Much performance art is testament to this correlation between the real, unmediated image, and the claim for a politicized practice, as is the employment of the aesthetics of immediacy in documentary-inspired art. What I’m describing here is the following problem: artistic practice has often sought to imbed itself within certain territories that we might call ‘scientific’ only in a weak sense. It has done this in order to escape the problematic weight of mediation that it carries, so as to better progress towards achievement of what it thinks of as a more pure form.’


**Empirical Religiosity:**
Defined by a belief that science is the gateway to truth without requiring any mediation, empirical religiosity avoids the actual premise of hypothesis in scientific exploration. A hypothesis predetermines what an investigation expects to achieve. It informs the way in which the experiment is set up and the data or facts that it wishes to locate. Constructed by a scientist, the apparatus and scope of the project produces as much as it reveals.

ii **Sand Pillar** – Autogenous production

**Autogenous Production:**
A self-governing phenomenon that starts and ends without the necessity for human intervention:

1. The hotter part of the ground heats up the air above it. This area is now hotter than the air around and
above it and so rises, punching through the cooler air above and creating a vertical column of warm, rising air. Particles around this cooler air, which has been knocked out of the way, circulate vertically. If a gust of wind comes along, it can blow this arrangement on its side, forming a dust devil.

2. The wet hay stimulates microbial growth. These organisms grow and produce heat while drying out the surrounding surfaces of the hay. More drying surfaces produce more microbial growth. When the bale temperature reaches about 150F heat-resistant bacteria, called exothermic bacteria, start a process of chemical change that rapidly increases the temperature to the point of spontaneous combustion.


**iii Exploratory Capsule – Cosmism**

**Cosmism:**

Ambiguous:

1. a) the universe is territorialised as a human horizon reiterated, b) humans imagine and apply their relations to the universe differently, or c) non-terrestrial life prevails.

2. ‘Cosmism accelerates design until its project of insubordination becomes more clearly visible. What is revealed is the irreducibility of design to stated motivations of capital interest, social progress or scientific advance, in place of a programme of incursions across any and all borders, violations of every truce, an insurrection not only against gravity but also human beings, a process by which sociotechnical structures are taken hostage by precisely what they make possible, a process of

iv [...] **Foraminifera – Primordial history**

**Primordial History:**

‘In certain of the sandstones, dynamited and chiselled after boring revealed their nature, we found some highly interesting fossil markings and fragments—notably ferns, seaweeds, trilobites, crinoids, and such molluscs as lingulae and gasteropods—all of which seemed of real significance in connexion with the region’s primordial history. There was also a queer triangular, striated marking about a foot in greatest diameter which Lake pieced together from three fragments of slate brought up from a deep-blasted aperture.’


v **Cellular Architecture – Chemical composition**

**Chemical Composition:**

Cellular human terminals can plug into their networked environment at any point causing infinite and mutating positive feedback loops:

‘Liberal economics produced mutational devices in the organism [that] are active within the biological and cognitive texture of society, in its
chemical composition, and not on superficial forms of behaviour.’


vi **Android** – Protagonist in the orange hemisphere is based on the narrative from the film *Avatar*

*Avatar*, James Cameron (Los Angeles: Twentieth Century Fox, 2010)

vii **Flickering** – Continuum

*Continuum*: is a continuous sequence in which corresponding elements are not perceptibly different from each other but extremes are quite distinct.

viii **Off Screen** – Technological invisibility


ix **Wagged its Body Enthusiastically** – quadruped protagonist in the apple hemisphere is based on the plot of *The Wizard of Oz*


x **Parametricism** – Fluid and sealed architecture

*Fluid*: ‘Parametricism has been heralded as the new avant-garde in the fields of architecture and design—
the next “grand style” in the history of architectural movements. Parametric models enable digital designers to create complex structures and environments, as well as new understandings of space, both real and virtual. Whether as tools for democratic action or tyrannical spectacle; self- and community-building capabilities; a post-humanistic subject; or the mediated politics of our desired futurisms—all these themes are figured and being assembled within the Parametricist discourse.’

*The Politics of Parametricism* (2014) conference at REDCAT, CalArts (Los Angeles) organized by Matthew Poole and Manuel Shvartzberg

**Scaled Architecture:**
Hermetic spaces that control the conditions of their interior surfaces while, simultaneously, creating a radical exteriority.

**Subtractive Interfaces** – Prosumer

Prosumer:

‘Consumers are becoming their own producers, eliminating the distinction. Prosumers will increasingly be able to produce, consume and share their own goods and services with one another on the Collaborative Commons at diminishing marginal costs approaching zero, bringing to the fore new ways of organizing economic life beyond the traditional capitalist market model.’

Anthropocentric:

‘We have intended, then, to say, that all our intuition is nothing but the representation of phenomena; that the things we intuit, are not in themselves the same as our representations of them in intuition […] What may be the nature of the objects considered as things in themselves and without receptivity of our sensibility is quite unknown to us.’


Disambiguation:
Kant’s psychologism asserts that all forms are grounded in, or are derived from, the subject’s ‘a priori’ understanding, which exists prior to experience. All phenomena (all laws, matter and form) are cognized via this knowledge and, therefore, can only exist as the subject’s representation of material and not the thing-in-itself. Through this reasoning, Kant simultaneously affirms that there is a mysterious material or objective other that we can never know. This other is the implicit negative in Kantian reason because humans are limited to only recognising what correlates with the a priori forms stored in the subject’s categories.

Black Maria:
A film studio built by the Edison Company in 1894. The structure shot the first moving images; it was covered in black and had an opening to catch the light. The entrepreneurial Edison Company had managed to create the conditions with which subjects could visualize an active manipulation of their environment.
Intuition – Becoming animal

Becoming Animal:

‘Probably animals do not picture to themselves, beside their sensations, as we do, an external world quite distinct from themselves, which is the common property of all conscious beings.’


Disambiguation:

Bergson claims that the human intellect produces an illusion by spatializing time. Through separating objects or laws, such as time, out in space the human subject thinks that they can see the relations between objects and can categorise or order them. This procedure, which recognises the objects as quantities, enables humans to distance themselves from the quality of the ‘thing-in-itself’. Bergson calls humans to strip themselves of their intellect and embrace intuition so that they can experience the true reality of things.

Technological Wizard – Dark monarch

Dark Monarch:

‘Often viewed as counter Modernism, the careful juxtaposition and selection of works on display suggests that these products of illusion and delusion in fact belong to modernity.’

*The Dark Monarch: Magic and Modernity in British Art*, curated by Michael Bracewell, Martin Cook and Alun Rowlands (St Ives: Tate St Ives, Oct 2009 – Jan 2010)
Outside – Subject centric and anthropocentric authorship

Subject Centric:

‘[…] if we take away the subject, or even the subjective constitution of our sense in general, then not only the nature and relations of objects in space and time disappear; and that these, as phenomena, cannot exist in themselves, but only in us. What may be the nature of objects considered as things in themselves and without receptivity of our sensibility is quite unknown to us.’

Kant, *Critique of Pure Reason*, p. 35.

Anthropocentric Authorship:
Giving an account of totality but then negating the theory’s ability to create a holistic account, is what Theodore Adorno theorizes as amounting to the Kantian block. This block is created by the fact that (as Adorno states) ‘subject and object do not seamlessly fit’, which sets up a negative dialectic of self and other. The Kantian block, despite its title is actually a process, which maps the terrain that produces the limits of the self. This in turn creates an author who sets subject-centric limits and then transcends this topology, in order to locate the boundary in the professed totality. In light of this, Kantians and Neo-Kantians claim to provide the ground for science by castrating its scope, which translates into a theology of the limits of the self at the edge of the abyss.


Composition – Infrastructure

Infrastructure:
Second Industrial Revolution societies require a massive infrastructure for production, communications, transport and
economics. Companies are set up that have vertical management systems in order to coordinate the logistics of beginning-to-end production lines by the most efficient means. These systems are like pyramid structures: positioning workers at the bottom and founders or shareholders at the top. The main agents in this structure are automated and algorithmic technologies.

**Posthuman:**
A posthuman horizontal infrastructure (Third Industrial Revolution) could be on the horizon, in which most humans are no longer needed to perform tasks and only a few technically versed individuals will oversee the production of code.

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**Data Fluid** – The internet of things

**The Internet of Things:**

‘The Internet of Things will connect everything with everyone in an integrated global network. People, machines, natural resources, production lines, logistics networks, consumption habits, recycling flows, and virtually every other aspect of economic and social life will be linked via sensors and software to the IoT platform, continually feeding Big Data to every node—business, homes, vehicles—moment to moment in real time.’


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**Solitary Realms** – Connectivity as opposed to collectivism

**Connectivity as Opposed to Collectivism:**
Humans become cells in both the sense that their very subjective make-up is wired and altered by the flows of capital but also because they become cellular in nature: subjectivities
become singular rather than collective, as online work (pro-
suming) is often an individual endeavour. Even if this singular
deadavour produces a global consciousness, it is a bio-digital
network that is created, which exists as connectivity but not as
collectivism. Connectivity creates connections between
individuals and local systems, whereas collectivism is
historically related to the construction of new hybrid forms in
which the meta-system itself might change.

Titanium White Buoyant Seeds –
Subterranean consciousness
Subterranean Consciousness:

‘But if, digging below the surface of contact between
the self and external, we penetrate into the depths of
the organized living intelligence, we shall witness the
joining together or rather blending of many ideas
which, once associated, seem to exclude one another
as contradictory terms.’


Disambiguation:
Bergson suggests that beneath the conscious ordering practices
deployed by human subjects there is a universal intelligence
that unites all things through pure duration. Pure duration
can be accessed through the human subject’s intuition,
one once individuals have sacrificed their conscious processes.
Bergson theorises an osmotic relationship between subject
and world, through de-centring the subject and activating
material consciousness.

Pure Duration – Forever temporal
Forever Temporal:

‘Hence the triplicity of fluxes, our duration (the
duration of the spectator) being necessary both as flux and representative of Time in which all fluxes are engulfed.’


Disambiguation:
Each materiality (subject or object) has its own duration and there are fluxes and qualitative becomings that exist separately from the subject. In contrast with the Kantian theory of time, a time that can only inhere in the subject, Bergson states that duration is the ground of all reality and so does exist in matter. These differentiated durations are then fused together again because in Bergsonism there is also a concept of an overall virtual time, or continuum, which enables the viewer to tap into and experience the differences in other materials. This virtual or monistic Time amalgamates the plural material existences so that a subject can access the different durations.

Google Effect – Google effect, geospatial entity ranking and extramission

Google Effect:
Is a belief in the democratic mechanisms of an internet search engine without acknowledging that the technology privileges certain sites over others in the matrix: in an infinite and horizontal system, each new site needs to create links with an older site, in order to create bridges and direct footfall towards their interface. Google promotes the most popular sites (most linked, visited or those that pay for adverts - the latter are signposted with the tag ‘ad’) when anybody deploys their search engine, which of course further promotes the most established interfaces. This creates and perpetuates a conservative system of hierarchical clusters, which are rooted in directing viewers to the most traditional (long-standing) sites.
Geospatial Entity Ranking:
When you type ‘How does google prioritize search results’ in the google search engine a link to ‘How Google Works’ comes up, which of course suggests that it is a very transparent mechanism; under the latter heading google lists its search engine as using the following algorithms:

- Googlebot, a web crawler that finds and fetches web pages
- The indexer that sorts every word on every page and stores the resulting index of words in a huge database
- The query processor, which compares your search query to the index and recommends the documents that it considers most relevant

PageRank is the term google uses for the device that considers what the most relevant pages are and then delivers them vertically in the search. PageRank uses a system to rank the pages that it deems most important (producing value in a horizontal system to make it accessible) and the most significant are delivered at the top of the list. PageRank considers over a hundred factors but google lists three:

- Popularity of the page
- The position and size of the search terms in the page
- The proximity of the search terms to one another on the page

A total score for each geospatial entity is configured and then they are ranked. The ranked data is transformed into place mark layers, with those that are paid for, most popular, repetitive in terminology and generous in word size gaining the most priority.
Extramission:
In an inversion, for extramission was actually replaced by intromission theory, Lindsay Seers’ protagonist in her video work *Extramission 6 (Black Maria)* (2009) rejects the notion that visual perception comes from something representative of the object (rays of light reflected from its surface) entering the eyes. When Seers protagonist (presented as herself: fictional/autobiographical account) embodied the camera obscura model earlier in the film she embraced the metaphor of the camera as standing in for the mind. In this model the Kantian a priori is deployed as the space in the camera (mind), which holds a small person that inspects and orders the images as they receive them. In her rejection of this form of passive knowledge and interaction with phenomena, Seers adorned a projector and was able to interfere with the world around her:

‘If Seers turning herself into a camera renders literal the metaphor of the body as a melancholic crypt for images, her turn as a projector replaces the tomb with a quest and in Extramission 6 we are given images of ships which signify the role of travel in her narratives.’


The visual allegory of the ships affirms Michel Foucault’s reading of the Kantian subject who infinitely creates the possibility of the phenomena around them. It is the ability to know the interior and exterior (a priori and anthropological) that enables the subject to tap into and employ the immanent rather than determined power.

‘As for the Characteristic, it shows that the ensembles of phenomena – the body, the couple, the race, the species – are not closed in upon themselves, given once and for all, but are what relates the apparently
immobile truths of phenomena back to those radical possibilities that give them meaning and movement; it allows us to go from sign to power.’

Michel Foucault, *Introduction to Kant’s Anthropology*, trans. by Roberto Nigro and Kate Briggs, Los Angeles: semiotext(e) | a history of the present, 2009, p. 4.

*Extramission 6* and Foucault claim that there is a process from within the system of circulatory power, a sort of ‘get-out clause’, which enables the subject to define him- or herself differently. When a subject builds a semi-autonomous world they can become infinitely creative, as opposed to being restricted by societal chains. This opens up the opportunity of the material and relational realms and concurrently creates a world for the subject. Seers’ *Extramission 6* and Foucault’s reading of Kant’s Anthropology demystify the material other (thing-in-itself) by presenting it as existing for, and as being endlessly manipulated by, the subject. Their Neo-Kantian subjects are the origin of perception and castrate the world of its things-in-themselves, in order to manufacture a theory of subjective creativity. Through this process the Kantian subject-centric circle has been clad in iron: the world’s potential to construct novel forms originates in the human subject’s power without exteriority.

**Annexed — Spatial boundaries**

*Spatial Boundaries:*

Capitalism simultaneously produces a global interconnectivity and a preoccupation with national borders:

‘A Sudanese national has been charged after allegedly walking nearly the full 50.5 km (31-mile) length of the Channel Tunnel towards the UK […]'

"We have done a lot in recent days to improve the situation but there's a lot more to do," the prime minister said during a visit to Betws-y-Coed in Conwy.
"So we've got more fencing, we've got more police officers, more sniffer dogs, more guards, better security and we're making progress. "Myself and the team of ministers I've put in place, we will oversee these improvements and they will take place in the coming weeks and days." [...] There were about 550 attempts by migrants to enter the terminal at Coquelles overnight on Thursday, according to Eurotunnel."

BBC News website [accessed 7 August 2015]

xxiii Finite – Identity and non-identity
Identity and Non-identity:

‘And what the concepts express is that by establishing identity they are simultaneously compelled to acknowledge the fact of non-identity.’

Adorno, Kant’s Critique of Pure Reason, p. 234.

Disambiguation:
This negative dialectic has a hierarchy according to materiality, consciousness and intellect, which puts inorganic objects on the side of non-identity. This negative reading of the object frames the artwork as having no power in-itself. Art is posited as either a conduit for meaning produced by its author and viewers or as a marker that allows the viewer to experience the limits of human knowledge (mysticism).

xxiv In Kind – Scratching of the back
Scratching of the Back:
In the art world ‘in kind’ support signifies an unwritten or formal contractual relationship between an artistic practitioner and the gallery to delineate the free production (labour, skills, space and resources etc.) that they will put towards the exhibition, event or publication. It is deployed in
funding applications to highlight the commitment of parties to the project; this often leads towards unpaid labour and space in favour of the final production of the interface (exhibition etc.) and its relation to the audience.

**Debt – Leverage**

Leverage:

‘Debt can be used as leverage to exponentially multiply your returns. What is leverage exactly? Leverage is using borrowed money to increase your return on investment. Leverage can allow you to achieve returns that you thought were impossible, but at a greater risk of losing your capital.’

Investopedia website [accessed 7 August 2015]

**Pure Present Solute – Osmosis**

Osmosis:

‘Our body is the actual point where the present advancing into the future is becoming the past, and at this point perception makes a cut across the universal flow. The present reality is matter.’


Practical Osmosis:

‘[…] a vision which is less concerned with the artificial or exaggerated act of spectatorship (seeing and knowing from the outside) and more with the osmotic relationship between the self and world.’

Richard Wright speaking on the Tate website about the exhibition
'Liverpool Biennale: Touched' (2010) at Tate Liverpool, chief curator Lorenzo Fusi [accessed 20th September 2011]

Disambiguation:
It is claimed that the subject can, through intuition or ‘osmosis’, access the materiality of the artworks on display. An osmotic process collapses art, human life and world. Such a methodology has a repercussion for any form of fabrication, as it attests to a belief that there is no need for mediation at all. Images and their staging are no longer required because humans can access materiality directly and in fact any mediation produces spectatorship and an erroneous ordering of time (of the encounter) in space.

Communicate with Other Life Forms – Holistic identity

Holistic Identity:

‘It is an illusion to imagine that we can pass out of reality. Unreality, nothing, means the absolute non-existence of everything, but the absence of the reality we want by reason of the presence of a reality that does not interest us.’

Carr, Henri Bergson, p. 91.

Disambiguation:
There is no outside to reality so there is no non-identity, everything is identity because everything is knowable or at least everything can be experienced or resonated with via intuition and pure duration. Carr’s supposed demystification of the illusion of unreality (non-identity or exteriority) creates another illusion by asserting that there is a universal intelligence. It is only a universal intelligence that can unite all identities and thus not produce any exteriority. But a holistic entity can only ever be a projection of the subject’s consciousness. Carr’s Bergsonian holistic entity is mapped
from the subject onto matter, a form of Pan-psychism in which subjective consciousness exists in everything. This actually monopolises the objective realm and reduces it to human thought, as opposed to the original intention of stripping thought procedures so that humans can interact more purely with their milieu. An obsession with an original or grounding subterranean real beneath the artificial reality, constructed by humans, consequently results in an inversion of this structure. In order to forge a network that unites all things so that they can communicate beyond ordering or commodity fetishism, the artificial reality (consciousness) is inserted into a constructed, yet naturalised, universal ground.

**Controlled – A one-sided symbiosis**

A One-Sided Symbiosis:

‘It is when we grasp the true nature of our experience of time, and distinguish it from the representation of it… that the real nature of free will appears.’

Carr, *Henri Bergson*, p. 60.

**Disambiguation:**
Carr states that it is pure action without deliberation, which taps into the true nature of free will. Intellect delays and weakens action through its processing of quantity and choice. This notion of free will invests in the belief that the process of collapsing representation with life can create a purer and more efficient form of action and politics. This excludes other organic and inorganic objects from the Bergsonian holistic register and thus creates another realm above the universal order. This premise, by extension, also naturalises politics: it suggests that humans have just evolved to be active and their intuition is either political or eradicates a need for politics because Carr’s account invests in a universal symbiosis. It also undermines the theory of an osmotic subject by producing an active subject who is capable of progress. This then creates a
figure above a ground, a surface that was previously theorised as being horizontal and democratic.

‘On many lines the progress has been arrested and turned back, but along two main lines it has found free way, the line of the vertebrates at the end of which we find ourselves and the line of the anthropods that has found its highest expression in the ants and bees. In these two lines of evolution we find the perfecting of two modes of activity, instinct and intelligence.’

Carr, *Henri Bergson*, p. 79.

Ant and bee colonies exemplify a theory of natural evolution because they developed into highly organised societies. Carr is suggesting that Bergson’s philosophy of intuition will produce a natural evolution, as opposed to the artificial and technical evolution currently being undertaken by humans. In pursuing this line of progress, Carr is both validating vertical societies (with workers at the bottom) and assuming that technology is particular to humans and not also present in nature. Ironically, his example of ant and bee colonies highlights that human culture is not the only model of a highly organized society. This also entails that human consciousness is not the only form found in nature that orders, or spatializes time in space. Carr ignores the fact that hierarchical societies do occur in nature and advocates the negation of mediation in his theory, in order to suggest that human societies should be more natural, or intuitive. This naturalises the stage of politics and testifies to a belief that there could be a pure system, in which there are no subjective or objective positions that are more vulnerable than others. Or, even if there are exploited positions, in or outside human culture, then it doesn’t matter because they will be produced by a pure and natural flux. This echoes the theory of the ‘survival of the fittest’, a term coined by Herbert Spencer, an author who applied Charles Darwin’s
biological theories of evolution to economics. After initially supporting the term, Charles Darwin critiqued it latterly in his career as deviating from his theory of natural selection. Carr’s claim for progress does not sound unlike Spencer’s argument for delimiting the market in order to liberate capitalism so that it can follow its natural course, perfect competition, with the assumed result being financial equilibrium.

**Dilation** – Relaxation/contraction and film

Relaxation/Contraction:

‘...if our present, through which we place ourselves inside matter, is the most contracted degree of our past, matter itself will be like an infinitely dilated or relaxed (*déstendu*) past (so relaxed that the preceding moment has disappeared when the following appears).’

Deleuze, *Bergsonism*, p. 74.

**Disambiguation:**
In the Deleuzian reading of Bergson’s duration the subject enters materiality through the most contracted degree of their past, which is the pure present. A ‘difference-in-degree’ exists between materiality but a communion between entities is facilitated by a virtual and all-encompassing Time, which allows them to register each other. This theory could be advocating two processes: immersion, in which a subject enters matter, and absorption, in which materiality enters the subject. In contrast to the apparently dynamic flows of this fluid system stands the process of penetration, which appears to occur one way without feedback: conscious subjects enter matter and not the other way round. Matter is the relaxed or passive form that immerses the subject but does not absorb them, as they remain intact. Thus humans can feel more engaged in their environment, while being secure in the
knowledge that their protective sensorial sack will not be breached and their mental structure unpolluted.

Film:
Film can be construed as enabling subjects to understand time through time. While watching a documentary focused on the slow motion of a hummingbird’s wings, a friend of mine exclaimed, ‘see – we’ve already invented time travel’. Camera techniques can picture movements, which our eyes cannot register unless reduced to our own perceptible duration. Slowing down movements in an image does not necessitate that we are expanding time and can enter or eek more out of it because we still experience it in our subjective real time. We cannot experience time in a more pure state because what we are in fact registering is the mediation of movement. Technical apparatus create a different temporality by documenting an object’s movement through space: this is not the duration of the original object and does not index its teleological affects. By assuming that movement is produced by time, it is presumed that time (like gestures) can be broken down into smaller and smaller durational fragments. Accelerating or decelerating film creates the illusion that time can be divided into points, when it is actually placing movements into a human timeline. Filmic operations also frame the moment and so provide varying durations of the image but cannot enable access to the overarching pure duration of Bergson’s Time. An image of time travel has been created but this may not be the way in which time actually functions.

xxx System’s Code – Dominion and programming language
Dominion:
Systems coding increasingly creates the domains in which we live and work. It thus produces the question: who is
constructing the algorithms and from which demographic and political orientations do they come?

**Programming Language:**
Ada Lovelace is considered to have produced the earliest form of programming language due to her production of an algorithm, which she wrote for the operations of Charles Babbage’s early general computer entitled the ‘Analytical Engine’. Charles Babbage had designed the machine but could only construct a small segment of it before his death in 1871.


**Probes – Sensors**

Sensors:

‘In 2007, there were 10 million sensors connecting every type of human contrivance to the Internet of Things. In 2013, that number was to exceed 3.5 billion, and even more impressive, by 2030 it is projected that 100 trillion sensors will connect to the IoT. Other sensing devices, including aerial sensory technologies, software logs, radio frequency identification readers, and wireless sensor networks, will assist in collecting Big Data on a wide range of subjects from the challenging price of electricity on the grid, to logistics traffic across supply chains, production flows on the assembly line, services in the back and front office, as well as up-to-the-moment tracking of consumer activities.’

Rifkin, *The Zero Marginal Cost Society*, p. 73.
Correlate – Relational stratagems

Relational Stratagems:

Kant’s a priori knowledge functions similarly to shape sorters, which children use to develop their spatial and correlative skills by matching an object or block with its equivalent, cut-out shape. In the Kantian understanding there are a series of categories (which in this analogy are the carved negatives) and they match the objects of experience (symbol blocks). This necessarily entails that a priori knowledge has all the possible outcomes of experience already embedded in the human mind so that the subject is capable of interacting with their environment. Nothing encountered in experience will be alien to the human mind but this curtails subjective thought by providing a limit to it: anything that exists outside the categories (the shapeless thing-in-itself) will not fit the slots so cannot be experienced or known. Kant emphasises the importance of objects and experience, which stimulate the mind as it has to sort them and even creatively improve them, alongside producing a schism between those objects that the subject can experience and those that they cannot:

‘Understanding and sensibility, with us, can determine objects only in conjunction. If we separate them, we have intuitions without conceptions, or conceptions without intuitions; in both cases, representations, which we cannot apply to any determinate object.’

Kant, Critique of Pure Reason, pp. 166–7.

Kant states that the subject’s a priori understanding (cut-outs) and their sensibility (blocks of experience) work together because if separated there would be experiences subjects couldn’t comprehend and concepts that do not correlate to experience. Neo-Kantian theories can ignore this premise and produce human artefacts by unleashing subjects from any
relation to other entities. This is attempted in order to free
subjects from the restraints of society so that they can deploy
their inherent (a priori) creative powers. But a temptation to
sever the subject off from all experience reifies humans by
leaving them to stagnate in their own circle (mind).

xxxiii **Representation – Manifest image of man**

**Manifest Image of Man:**

‘The 'manifest' image of man-in-the-world can be
categorized in two ways, which are supplementary
rather than alternative. It is, first, the framework in
terms of which man came to be aware of himself
as man-in-the-world. It is the framework in terms of
which, to use an existentialist turn of phrase, man first
encountered himself—which is, of course, when he
came to be man. For it is not merely an incidental
feature of man that he has a conception of himself
as man-in-the-world, just as it is obvious, on reflection,
that 'if man had a radically different conception of
himself he would be a radically different kind
of man’.’

Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, London:

**Disambiguation:**

Kant’s manifest image of man precedes but also coheres with
Sellars’ description, as his theory states that everything
correlates to the subject’s conception of him/herself in the
world. In contrast, Kantian thought does not allow for the
conception that there could be a different idea of ‘humans-in-
the-world’ because his a priori understanding prefigures that a
subject will not differ from its original nature. In the Kantian
scenario, experience is a mirror that reflects the subjective
forms, which already exist in their a priori understanding.
Kant’s manifest image of man suggests that subjects produce
their environment, as opposed to the objective realm being able to change the human conception of their relationship to the world.

**Take Up Space – Data servers**

Data Servers:

*Google Data Center*- Google has around 13 data centers all throughout the world. And by 2014, three such facilities are going to be added to this list. As per the recent estimate conducted by Microsoft, Google has around 900,000 servers in all its data centers based in the world. Google’s data centers use around 260 million watts of power, which accounts to 0.01% of global energy. This power is enough to consistently power 200,000 homes.

*Facebook Data Center*- Facebook, a leading social networking website with around 1 billion users has its own server farms, designed and built by its engineers as per the norms of its open compute project. In the year 2012, Facebook has come up with its Prineville data center which is 62,000 square feet in dimension. It houses around 500 cold storage racks, which can hold around 2TB of data and each rack uses around 2 Kilowatts of power. It is estimated that Facebook servers process around 2.4 billion pieces of content and 750TB of data every day. The standard storage rack in Facebook data center facility uses 8 Kilowatts of power. Facebook has data worth over 100 PB capacities in its facility which is derived from a three tiered storage system. As per the recent press release, Facebook has admitted that its users utilize around 7PB of photo storage from its facility every month.

*Amazon Data Center*- Amazon has around 450,000 servers in its data centers sited in 7 locations in the world. And from the year 2008 the company has spent around $86 million on its servers. It stores
around 40 billion objects on it and is basically into the cloud storage business. Amazon Web Services has around 40,000 servers dedicated to its cloud customers and gets around 17 million monthly visitors who access 410TB of data from its platform. Around 30 million of Amazon users stream around 40 PB of videos per month.

**Microsoft Data Center**- With a count of 1 billion users and 100,000 servers, Microsoft has so far spent around $23 billion on its data centers. In the year 1989, Microsoft came up with its first data center that was 89,000 sq feet. In the year 2006, it designed its own data center with 500,000 sq ft and in the year 2013 came up with a $112 million facility.’


**Collective Memory** – Living archive

*Living Archive:*

‘[…] we penetrate into the depths of the organized living intelligence.’


**Disambiguation:**

Bergsonism wants to facilitate a communication between all things, an operation that requires an organized living intelligence through which this connection can happen. It is through pure duration and intuition that this is possible. Ramifications of this process are that the subject can only ever commune with the past and present, completely cutting any active relationship with the future from a Bergsonian networked archive. A Bergsonian living archive produces a past becoming present (or conservative) subject because
human intuition is only ever plugged into what is already in existence.

xxxvi **Vortices** – Cyclical power

**Cyclical Power:**

‘We can now see why, in a single movement, characteristic of the thinking of our time, all knowledge of man is presented as either dialecticized from the start or fully dialectizable – as always invested with a meaning which has to do with the return to the origin, to the authentic, to the founding activity, to the reason why there is meaning in the world.’

Foucault, *Introduction to Kant’s Anthropology*, p. 123.

**Disambiguation:**

Foucault criticizes people for always returning to a belief in an original or authentic basis for reality. An original foundation for the current state of affairs is a fiction, which has been created out of an investment in the teleological relationship between cause and effect (that one necessitates the other). Through his historical genealogies, such as *The Will to Knowledge: The History of Sexuality* (1976) Foucault highlights that causes can only be defined by reading back from their effects. This is an erroneous move because a cause could a) create a multitude of effects (not just a single linear narrative but many plots); b) fabricate phantom effects; and c) there are also effects produced by other phenomenon to which the cause bares no relation. In response to this lack of original efficacy, Foucault suggests that subjects should not be preoccupied with the concept of what it is to be a human in the world but, like Friedrich Nietzsche, set the trajectory towards asking what is beyond man. This is the only way to evade the trap of cyclical power that Foucault himself has located and, therefore, also set. For, if power has always
existed, it then becomes the original force that Foucault himself critiqued and this negative relation can only produce sadist and masochistic relationships, which stratifies society into hierarchical positions. To circumvent this spiral, Foucault suggests that we break with social relations and become reified artefacts, in order to invoke the possibility of our future escape from the cycle of power. A ramification for Foucault’s pursuit of Nietzsche’s ‘over man’ is that an ideal and conservative image of man could be produced.

xxxvii Matter – Scientific image of man

Scientific Image of Man

‘The scientific image of man-in-the-world is, of course, as much an idealization as the manifest image – even more so, as it is still in the process of coming to be. It will be remembered that the contrast I have in mind is not that between an unscientific conception of man-in-the-world and a scientific one, but between that conception which limits itself to what correlational techniques can tell us about perceptible and introspectible events and that which postulates imperceptible objects and events for the purpose of explaining correlations among perceptibles.’

Sellars, Empiricism and the Philosophy of Mind, p. 19.

Disambiguation:

Sellars’ scientific image of man could be the downfall of the Kantian correlation because the latter theorises the real as being built out of what humans can conceive. Contemporary science professes that imperceptible objects can be known and are in fact the molecular DNA out of which the universe is constructed. A scientific universe includes humans, not the other way around, and so these atoms also construct the material elements of the subject. These molecular objects could be correlated back to man, as his invention, but if they
existed prior to and would continue to exist even without subjective a priori knowledge (as a-human elements) then the scientific image of man breaks with Kant’s view of humans-in-the-world.

xxxviii Authority – Enforced democracy

Enforced Democracy:

‘Yet it is vaccination – and not hygiene – that we continue to regard as the most interventionist feature of state medicine. It is not hard to understand why. Vaccination involves forcible restraint and handling of the body; it may have perceptible physiological effect; and often a scar will remain. Before bacteriologists expanded their understanding of the role of the body in the transmission of disease organisms, vaccinators were the health officers most likely to track down and inspect the local populations. Health departments were sending inspectors into schools to check on unvaccinated children long before they sought to detect children with communicable diseases. So there are plausible phenomenological and historical reasons to view vaccination as an especially egregious state intervention.’


xxxix Neural Pathways – Fibre optics

Fibre Optics: Fiber optic cable is a high-speed data transmission medium. It contains tiny glass or plastic filaments that carry light beams. Digital data is transmitted through the cable via rapid pulses of light. The receiving end of a fiber optic transmission translates the light pulses into binary values, which can be read by a computer.
Apolitical – Chicago boys

Chicago Boys:
Economist Milton Friedman and his Chicago Boys theorise that if the market has free reign, and is not limited by government intervention, then it will become apolitical. A religion of the ‘free market’ gives total liberty to the financial sector and favours deregulation. This opposes the model set by traditional religions, which sought to lay down precepts for regulation. This assertion that a free market is apolitical, in the sense that it has escaped governance, is contradicted through the actual processes of a free market, which does govern individuals and so has political effects. Friedman and his Chicago Boys deploy the term ‘free’ as a stratagem to naturalise the market, in order to make it appear like it is the only game in town rather than identifying it as one of the many forms of political enterprise.

Rhizome – Assemblage

Assemblage:
A self-determining system, in which every point is linked to any other; it can be a sprawling matrix of interconnected fibrils or a dense structure. Multiplicity is always negative because subtraction evades constructing a holistic system and the one (all-encompassing doctrine) is in fact a discrete element of the rhizome not its total structure. In this system there can be no transgression because it is infinitely connected, so there are no identities to contest or barriers to be crossed. Any attempt at a weak form of polluting (transgression) can quite easily be accepted by the system it wishes to critique, as its impetus is to keep on producing, or they can be lost in the ever evolving mass of data:

‘The multiple must be made, not by always adding a higher dimension, but rather in the simplest of ways, by dint of sobriety, with the number of dimensions
one already has available—always n-1 (the only way the one belongs to the multiple: always subtracted). Subtract the unique from the multiplicity to be constituted; write at n - I dimensions. A system of this kind could be called a rhizome. A rhizome as subterranean stem is absolutely different from roots and radicles. Bulbs and tubers are rhizomes. Plants with roots or radicles may be rhizomorphic in other respects altogether: the question is whether plant life in its specificity is not entirely rhizomatic. Even some animals are, in their pack form. Rats are rhizomes. Burrows are too, in all of their functions of shelter, supply, movement, evasion, and breakout. The rhizome itself assumes very diverse forms, from ramified surface extension in all directions to concretion into bulbs and tubers. When rats swarm over each other. The rhizome includes the best and the worst: potato and couchgrass, or the weed. Animal and plant, couchgrass is crabgrass.’


**Foreground – Redemption and architecture**

**Redemption:**

In his book *The Culture of Redemption* (1990) Leo Bersani identifies contemporary society’s obsession with the idea that art can redeem its inadequacies. This not only limits and perhaps is misguided in the expectations that it creates for art, in that it should fulfil a social function, but this redemptive belief also hides a deep-rooted fallacy. Redemption itself cannot save society; critiquing or revealing the mechanisms of a complex organization is not enough to ensure change but can actually strengthen the existing system by proving it is the only plausible infrastructure. Redemption preempts a sin from
which we need to be absolved, so it is a detractive process and cannot create new platforms for resistance.

Architecture:

‘Well, I could say that I must aspire to build for my client the most comfortable, the most logical, the most beautiful house that can be built. I could say that I must try to sell him the best I have and also teach him to know the best. I could say it, but I won’t. Because I don’t intend to build in order to serve or help anyone. I don’t intend to build in order to have clients. I intend to have clients in order to build.’


Re-enter the Program – Red and blue pills

Red and Blue Pills:

In the film *The Matrix* (1999), directed by The Wachowskis, Neo is presented with a choice (by Morpheus) between the red or blue pill. Dialectically opposed, the red pill represents accepting the supposedly painful truth of reality and the blue pill symbolises the ‘willing suspension of disbelief’ or a concerted effort to be ignorant. This constructs a fictional coin with two faces, one in which we exist in an artificial reality and the other that pictures the real below the surface of these representations. A coin that conjures the image of the spinner at the end of the film *Inception* (2009), directed by Christopher Nolan, which is hovering between an infinity of smooth rotations (symbolising the protagonist’s entrapment in the unreality of his subconscious) and the suggestion of a hesitation that would imply it succumbing to the laws of physics (and his return to reality and consciousness). If no viable alternative is proposed but society invests in the existence of a redemptive reality, then all subjects are taking
the blue pill with the red pill hanging over us as a phantom real somewhere beyond the contemporary horizon.

xlv Circle – Sealed
Sealed:
A complete, finite and closed form, in which nothing exterior can interfere with its boundaries: an entity that allows for no porosity or infection because everything is sealed. Anything that threatens to break the circle is simply related back to it. Nothing can exceed or burst through the shape’s circumference.

xlv Organic Skin – Technological mimesis
Technological Mimesis:
Once put inside a screw-lid jar an octopus can utilize its body and tentacles to open it, after achieving such a feat it then can decide to stay in the jar and carry it around for protection: please see the following youtube clip <https://www.youtube.com/watch?v=IvvjcQJJnLg> Some octopods in captivity have managed to navigate a complex system of tubes to get from their tank into the corresponding one containing fish. Not only does this often occur at night, when there is little chance that the octopods can get caught but in the morning they are found in their own tank. Leaving skeletons in the next door tank, the octopods have enough of a relation to the world outside them that they repeatedly choose not to remain at the scene of the crime.

xlvi Single Fluid Moment – High frequency trading
High Frequency Trading:
‘Whether one accepts [Paul] Virilio's analysis or his predictions, it is clear that speed and velocity are the main aspects of a new finance capitalism that operates at the speed of light based on sophisticated ‘buy’ and
‘sell’ algorithms. Already researchers have demonstrated that data transfer using a single laser can send 26 terabits per second down an optical fiber and there are comparable reports that lasers will make financial ‘high-frequency’ trading even faster.’


**Meditative State – Dreams**

**Dreams:**

During The Otolith Group’s talk and screening of their video work *Anathema* (2011), at no.w.here (April 2012), the authors claimed that the liquid crystals, which are utilised to depict a digital image, can create a dream-state in the subject. Disintegrating the image down to its constituent parts is meant to destabilise the subject and prevent the viewer from interacting with their usual consumer operations. Decentred by *Anathema*’s ability to induce a dream state, the viewer is encouraged to listen and ask, ‘What do the liquid crystals want from us?’ The Otolith Group suggest that by paring back and communing with capitalism’s material DNA, which in this scenario is located as the desire or ‘seduction’ in liquid crystals, the viewer can isolate and understand its operations. Supposing that the liquid crystals are conscious, which they would have to be in order to communicate these operations in a language humans understand, they are not a purer form of capitalism. Rather, like the layers of a digital image, the liquid crystals are just another mode of capitalist production and subjects are its complicit naïve (or professional) programmers.
Change in State – Differences in degree and kind

Difference in Degree and Kind:

‘We find differences of nature in the world through empirical investigation, but we find internal differences directly only within ourselves and our immersion in duration. These differences, between differences in kind and differences in degree, cannot be understood as differences in nature, as external to each other for, as Bergson makes clear, different things, differences in nature turn out, in the end, to be merely the modes of expansion or actualization of internal difference: they turn out to be, the lowest degree, the slowing down, of differences of degree. And in turn, differences of degree can be seen as the acceleration and expansion of differences in nature or kind. Each becomes the slower or faster, compression of one and the same pulsating unbecoming.’


Disambiguation:
Bergsonian differences in kind are virtual and continuous with duration, which also entails that they are purely qualitative and can only be accessed by intuition. Differences in degree are material and quantitative because they occupy a position in space, which means that they are discontinuous with duration and can be accessed by the intellect. A physical metaphor deployed by Bergson to illustrate this terminology is that of a sugar cube: a sugar cube in its solid state is a difference in degree because it is consistent spatially and so can be observed in relation to other materials, whereas a difference in kind occurs when the sugar is dissolved and
deconstructed. Differences in kind are created through ‘unbecoming’, which is actually the untying of binary terms through the production of the new via more difference. A difference in degree is a temporary ‘becoming’ into materiality, which will dissolve back into the pervasive time, but is continuous with the duration through which it is produced.

Bergsonian theory asserts that difference is an ontological reality, which is articulated through the ground of pure duration. Matter is the opposite of duration because it spatializes and, according to Bergsonism, stabilizes becoming. Even though the study of materiality is reduced to the scientific paradigm (which Bergson accuses of analyzing objects as closed systems, as opposed to being part of a process) they still carry duration or flux in them. Art is precarious in this structure because Bergsonism situates philosophy as the only mode that is capable of providing the potential for differences in kind. Bergsonism acknowledges that art and science are important disciplines but they are also ones that privilege matter (differences in degree). Bergsonism pictures art as being restricted by the frame it requires to function as art and not life, so ultimately a theory of becoming requires the complete dissolution of the image that stabilizes becoming.

Paradoxically, Bergsonian virtual time can only become manifest if it enters the physical and spatializing realm, in order to destabilize and enable something new to come into being. This novel and concrete form is then, simultaneously, chastised for only being a difference in degree. Art has no place in a Bergsonian system, which privileges going deeper into reality, because its spatializing frame is seen as preventing this access to the virtual (pure duration) and becoming. In contrast to art, dumb matter is described as being able to act as a conduit for becoming through the evolutionary process. It is through evolution that matter can act as a difference in
degree while still aiding durational flux. Evolutionary theories validate Bergson’s model because differences are produced through the progression of degrees in an overarching Time. Matter proceeded life, which Bergson relates to consciousness, and so it already housed the seeds of consciousness in itself and these have proceeded to grow through the difference in kind disrupting and producing new differences of degree (species). There are a few issues that arise here in terms of matter being merely a vessel for a virtual force that produces difference in kind: 1. What is this virtual vital force and holistic time, is it similar to a God?, 2. Why is matter required at all, as it would seem more expedient for pure duration to remain virtual rather than wasting energy on becoming real?; and 3. If time does not have a direct telos of cause and effect but rather exists in contingency then would this process be undermined, as there would be no nascent life in matter or a necessarily evolving future? Duration appears to be a virtual consciousness that conflates into its background to forge a pure communion with itself, so in fact there is no need for matter (an obstacle) or communication (would only be required if there are different positions in space) at all.

xlix  **Equatorial Zones — Mirrors**

**Mirrors:** Reflective surfaces that create a bilateral inversion of the opposite zones or coordinates: each spiral, strip, surface, or hemisphere is reflected in the place of the other’s actual position.

**Disambiguation:** A Neo-Kantian realm that consists of subjective images without any objects (things-in-themselves) and a Bergsonian dominion of pure consciousness without matter (difference in kind) conflate to create a subject-centric globe, in which the realm of materiality ceases to exist. This affects the platforms of art and politics, which often take these two positions to be
radically different. A conflation of the two suggests that the staged opposition set up between Neo-Kantian and Bergsonian thought is actually constructed not given. In this scenario, art exists in purgatory and is over-shadowed by either being a surface (Neo-Kantian) for subjective projections or a conduit (Bergsonian) of subjective consciousness. In both cases art (globe) does not exist in-itself but only through and for subjects. This has repercussions for the subject because there is no objective realm anterior to their projections, so there is an inability to change or alter the current state of affairs: entailing that subjectivity is conserved and preserved.

Contrary to this reading, Kant’s territory of subjects actually creates a mystical world outside the subject that cannot be known. Counter-intuitively, this provides more possibility for art and politics than a Bergsonian jurisdiction because an object can have autonomous (albeit magical) power. In Bergsonian thought art freezes becoming and so images should be dematerialized and conflated into life, which is the pure form through which to experience duration. Collective and unmediated performance would be the only way that this could be manifested in art but this would naturalize the mediation that actually occurs in this form. Performances are staged collective relations because they have to be arranged or organized at some point, rendering a rigid aesthetic rather than a fluid becoming. In Kantian thought, art can have power but it is one that may never correlate with the subject’s a priori knowledge and so it may not be experienced or known. This begs the question: if we all tend towards Kantian processes and map our thoughts onto spatialized objects, then how do we think about this anterior realm without correlating it back to subjects or invoking a material or subterranean mysticism?
According to Jeremy Rifkin the Internet of Things will provide the total infrastructure for the Third Industrial Revolution: a system in which each organic and inorganic terminal is connected to the other and can actively monitor and advise the system. While the I of T provides the potential ability for energy to be coordinated more efficiently, zero marginal cost for online education and 3D printed goods etc. it is very much a total system. The I of T is not only a horizontal but an all-encompassing and centralising system because all the information about everyone is pooled together. This system will be built on ‘trust’ and will function on the transparency of each of its users. These users will have to disclose all of their movements, so that the system can make them more economically and environmentally efficient, and their peers will be encouraged to survey each other through peer reviews, which is already occurring on ‘Air B&B’ and other sites. The most successful users of the I of T will have to abide by behavioural norms, in order to gain the trust of the other users. For it is a system that encourages every subject to police and comment on the next. It requires trust, which like current interfaces that operate in this way, actually relies on ‘word of mouth’ (statement/score) to certify that a person has behaved appropriately while utilizing the other’s materials.
Cut – Abstraction

Abstraction:

‘If abstraction is more than simply an effect of capitalist systems, structures, and processes, being instead the very substance of modernity, we ought to disabuse ourselves of all notions of prelapsarian return to an intrinsically tractable world of organic whole-ness. In its place, we must arrive at a coming to terms with abstraction itself. This is to say that a new politics, and indeed a new aesthetics, must aim towards an overcoming of the negative relationship to processes of alienation which are simply the indicative hallmark of our increasing ability to transcend the limits imposed on us by our evolutionary heritage.’
