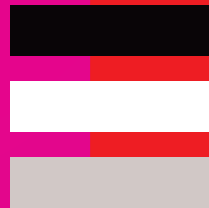


RIZOSFERA

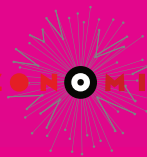
DIGITAL NEUROLAND

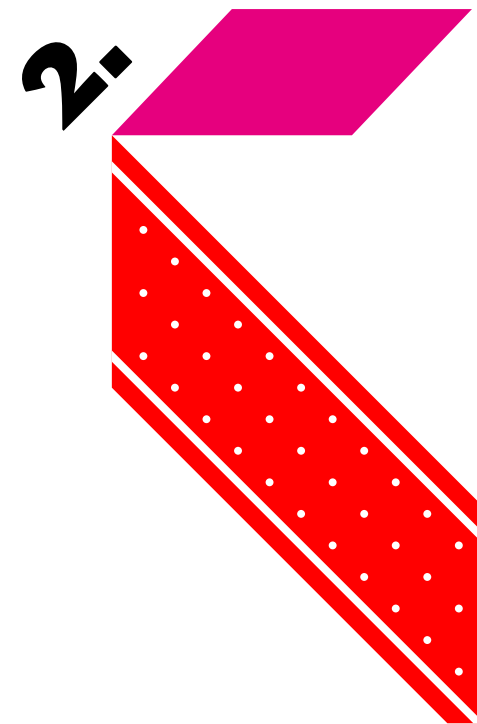
2.

An interview with
Tony D. Sampson



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An interview with Tony D. Sampson

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Introduction by Rizosfera

Tony D. Sampson is reader in digital media culture and communication based in East London, and deals with philosophy, digital culture and new media. His work focuses on an unconventional intersection where political analysis meets the theoretical aspects of digital media and social behaviour, shaping the world of our contemporary era. Writing on substantial components like viruses, virality in communication, contagion and behavioural imitation, the brain and neuroculture in this “rotten world” built on an accelerated bond of technology and ideology of value and profit driven markets, Sampson catches, with a forward looking attitude, some “substantial issues” of the clash between control and technology, society and individual or collective freedom, shaping him not only as a brilliant new media theorist but as an essential political thinker as well. To scan his new book ‘The Assemblage Brain’ (Minnesota Press, 2017) is therefore urgent to understand the important challenge we will face in a very near future.

Digital Neuroland.

An Interview with Tony. D. Sampson

by *Rizosfera*

@ Obsolete Capitalism blog

*1) Let's start with your first book, published in 2009, *The Spam Book* edited in collaboration with Jussi Parikka, a compendium from the *Dark Side of Digital Culture*. Why did you feel the urge to investigate the bad sides of digital culture as a writing debut? In the realm of "spam" seen as an intruder, an excess, an anomaly, and a menace, you have met the "virus" which has characterized your research path up until today.*

As I recall Jussi and I jokingly framed *The Spam Book* as the antithesis to Bill Gates' *Road Ahead*, but our dark side perspective was not so much about an evil "bad" side. It was more about shedding some light on digital objects that were otherwise obscured by discourses concerning security and epidemiological panics that rendered objects "bad". So our introduction is really about challenging these discursively formed "bad" objects; these anomalous objects and events that seem to upset the norms of corporate networking.

We were also trying to escape the linguistic syntax of the biological virus, which defined much of the digital contagion discourse at the time, trapping the digital anomaly in the biological metaphors of epidemiology and Neo-Darwinism. This is something that I've tried to stick to throughout my writings on the viral, however, in some ways though I think we did stay with the biological metaphor to some extent in *The Spam Book*, but tried to turn it on its head so that rather than point to the nasty bits (spam, viruses, worms) as anomalous threats, we looked at the viral topology of the network in terms of horror autotoxicus or autoimmunity. That is, the very same network that is designed to share information becomes this auto-destructive vector for contagion. But beyond that, the anomaly is also constitutive of network culture. For example, the computer virus determines what you can and can't do on a network. In a later piece we also pointed to the ways in which spam and virus writing had informed online marketing practices. (1)

In this context we were interested in the potential of the accidental viral topology. Jussi's *Digital Contagions* looked at Virilio's flipping of the substance/accident binary and I did this Transformations journal article on accidental topologies, so we were, I guess, both trying get away from prevalent discursive formations (e.g. the wonders of sharing versus the perils of spam) and look instead to the vectorial capacities of digital networks in which various accidents flourished.

2) *Virality, Contagion Theory in the Age of Networks* came out in 2012. It is an important essay which enables readers to understand virality as a social theory of the new digital dominion from a philosophical, sociological and political point of view (with the help of thinkers like Tarde and Deleuze). The path moves from the virus (the object of research) to the viral action (the spreading in social network areas to produce drives) to the contagion (the hypnotic theory of collective behaviour). How does the virus act in digital field and in the web? And how can we control spreading and contagion?

Before answering these specific questions, I need to say how important Tarde is to this book. Even the stuff on Deleuze and Guattari is really only read through their homage to Tarde. His contagion theory helped me to eschew biological metaphors, like the meme, which are discursively applied to nonbiological contexts. More profoundly Tarde also opens up a critical space wherein the whole nature/culture divide might be collapsed.

So to answer your questions about the digital field and control, we need to know that Tarde regarded contagion as mostly accidental. Although it is the very thing that produces the social, to the extent that by even counter-imitating we are still very much products of imitation, Tarde doesn't offer much hope in terms of how these contagions can be controlled or resisted. He does briefly mention the cultivation or nurturing of imitation, however, this is not very well developed. But *Virality* adds affect

theory to Tarde (and some claim that he is a kind of proto-affect theorist), which produces some different outcomes. When, for example, we add notions of affective atmospheres to his notion of the crowd, i.e. the role of moods, feelings and emotions, and the capacity to affectively prime and build up a momentum of mood, a new kind of power dynamic of contagion comes into view.

While we must not lose sight of Tarde's accident, the idea that capricious affective contagion can be stirred or steered into action in some way so as to have a kind of an effect needs to be considered. Crudely, we can't cause virality or switch it on, but we can agitate or provoke it into potential states of vectorial becoming. This is how small changes might become big; how that is, the production of a certain mood, for example, might eventually territorialize a network. Although any potential contagious overspill needs to be considered a refrain that could, at any moment, collapse back into a capricious line of flight.

The flipside of this affective turn, which has, on one hand, allowed us new critical insights into how things might potentially spread on a network, is that digital marketers and political strategists are, on the other hand, looking very closely at moods through strategies of emotional branding and marketing felt experiences. The entire "like" economy of corporate social media is, of course, designed emotionally. Facebook's unethical emo-

tional contagion experiment in 2014 stands out as an example of how far these attempts to steer the accidents of contagion might go.

*3) Five years after the release of *Virality*, *The Assemblage Brain* is published in 2017. A year that has seen a new political paradigm: Trump has succeeded Obama in the United States, a country which we could define as the benchmark of the development of today's western élites and as a metaphor of power. Both have used the social networks to spread their political message, political unconscious as you would say. As an expert of contagion, and political use of the social networks, what lesson can we learn from such experience?*

In the UK we're still arguing over what kind of dystopia we're in: 1984, Brave New World? So it's funny that someone described the book to me as a dystopian novel.

"Surely all these terrible things haven't happened yet?"

"This is just a warning of where we might go wrong in the future."

I'm not so sure about that. Yes, I make references to the dystopian fictions that inspired Deleuze's control society, but in many ways I think I underestimated just how bad things have got.

It's a complex picture though, isn't it? There are some familiar narrative emerging. The mass populist move to the right has,

in part, been seen as a class based reaction against the old neoliberal elites and their low wage economy which has vastly enriched the few. We experienced the fallout here in the UK with Brexit too. Elements of the working class seemed to vociferously cheer for Farage. Perhaps Brexit was a catchier, emotionally branded virus. It certainly unleashed a kind of political unconsciousness, tapping into a nasty mixture of nationalism and racism under the seemingly empowering, yet ultimately oppressing slogan “We Want Our Country Back.” Indeed, the data shows that more Leave messages spread on social media than Remain.

But those quick to blame the stupidity of white working class somnambulists rallying against a neoliberal elite have surely got it wrong. Brexit made a broad and bogus emotional appeal to deluded nationalists from across the class divide who feared the country had lost its identity because of the free movement of people. This acceleration towards the right was, of course, steered by the trickery of a sinister global coalition of corporate-political fascists – elites like Farage, Brexiteers like Johnson and Gove, and Trump’s knuckleheads in the US.

What can we learn about the role of digital media played in this trickery? We are already learning more about the role of filter bubbles that propagate these influences, and fake news, of course. We also need to look more closely at the claims surrounding the behavioural data techniques of Cambridge Analytica and

the right wing networks that connect this sinister global coalition to the US billionaire, Robert Mercer. Evidently, claims that the behavioural analysis of personal data captured from social media can lead to mass manipulation are perhaps overblown, but again, we could be looking at very small and targeted influences that leads to something big. Digital theorists also need to focus on the effectiveness of Trump supporting Twitter bots and the affects of Trump’s unedited, troll-like directness on Twitter.

But we can’t ignore the accidents of influence. Indeed, I’m now wondering if there’s a turn of events. Certainly, here in the UK, after the recent General Election, UKIP seem to be a spent political force, for now anyhow. The British Nationalist Party have collapsed. The Tories are now greatly weakened. So while we cannot ignore the rise of extreme far right hate crime, it seems now that although we were on the edge of despair, and many felt the pain was just too much to carrying on, all of a sudden, there’s some hope again. “We Want Our Country Back” has been replaced with a new hopeful earworm chant of “Oh Jeremy Corbyn!”

There are some comparisons here with Obama’s unanticipated election win. A good part of Obama love grew from some small emotive postings on social media. Similarly, Corbyn’s recent political career has emerged from a series of almost accidental events; from his election as party leader to this last elec-

tion result. Public opinion about austerity, which seemed to be overwhelmingly and somnambulistically in favour of self-oppression, has, it seems, flipped. The shocking events of the Grenfell Tower fire seems to be having a similar impact on Tory austerity as Hurricane Katrina did on the unempathetic G.W. Bush.

It's interesting that Corbyn's campaign machine managed to ride the wave of social media opinion with some uplifting, positive messages about policy ideas compared to the fearmongering of the right. The Tories spent £1million on negative Facebook ads, while Labour focused on producing mostly positive, motivating and sharable videos. Momentum are also working with developers, designers, UI/UX engineers on mobile apps that might help galvanize campaign support on the ground.

4. Let's now turn to your book, The Assemblage Brain. The first question is about neuroculture. It is in fact quite clear that you are not approaching it under a biological, psychological, economic or marketing point of view. What is your approach in outlining neuroculture and more specifically what do you define as neurocapitalism?

The idea for the book was mostly prompted by criticism of fleeting references to mirror neurons in *Virality*. Both Tarde and Deleuze invested heavily in the brain sciences in their day and I suppose I was following on with that cross-disciplinary trajectory. But this engagement with science is, of course, not without

its problems. So I wanted to spend some time thinking through how my work could relate to science, as well as art. There were some contradictions to reconcile. On one hand, I had followed this Deleuzian neuro-trajectory, but on the other hand, the critical theorist in me struggled with the role science plays in the cultural circuits of capitalism. I won't go into too much detail here, but the book begins by looking at what seems to be a bit of theoretical backtracking by Deleuze and Guattari in their swansong *What is Philosophy?* In short, as Stengers argues, the philosophy of mixture in their earlier work is ostensibly replaced by the almost biblical announcement of "thou shalt not mix!" But it seems that the reappearance of disciplinary boundaries helps us to better understand how to overcome the different enunciations of philosophy, science and art, and ultimately, via the method of the interference, produce a kind of nonlocalised philosophy, science and art.

What is Philosophy? is also crucially about the brain's encounter with chaos. It's a counter-phenomenological, Whiteheadian account of the brain that questions the whole notion of matter and what arises from it. I think its subject matter also returns us to Bergson's antilocutionist stance in *Matter and Memory*. So in part, *The Assemblage Brain* is a neurophilosophy book. It explores the emotional brain thesis and the deeply ecological nature of noncognitive sense making. But the first part traces a neuropolitical trajectory of control that connects the neuro-

sciences to capitalism, particularly apparent in the emotion turn we see in the management of digital labour and new marketing techniques, as well as the role of neuropharmaceuticals in controlling attention.

So neurocapitalism perhaps begins with the G.W. Bush announcement that the 1990s were the Decade of the Brain. Thereafter, government and industry investment in neuroscience research has exceeded genetics and is spun out to all kinds of commercial applications. It is now this expansive discursive formation that needs unpacking. But how to proceed? Should we analyse this discourse? Well, yes, but a problem with discourse analysis is that it too readily rubbishes science for making concrete facts from the hypothetical results of experimentation rather than trying to understand the implications of experimentation. To challenge neurocapitalism I think we need to take seriously both concrete and hypothetical experimentation. Instead of focusing too much on opening up a critical distance, we need to ask what is it that science is trying to make functional. For example, critical theory needs to directly engage with neuroeconomics and subsequent claims about the role neurochemicals might play in the relation between emotions and choice, addiction and technology use, and attention and consumption. It also needs to question the extent to which the emotional turn in the neurosciences has been integrated into the cultural circuits of capitalism. It needs ask why neuroscientists, like Damasio, get

paid to do keynotes at neuromarketing conferences!

5) A Spinozian question. After What can a virus do? in Virality you have moved to What can a brain do? in The Assemblage Brain. Can you describe your shift from the virus to the brain and especially what you want to reach in your research path of Spinozian enquiry What can a body do? What creative potential do you attribute to the brain? And in Virilio's perspective how many "hidden incidents in the brain itself" may lie in questioning: What can be done to a brain? How dangerous can the neural essence be when applied to technological development? The front line seems to be today in the individual cerebral areas and in the process of subjectivity under ruling diagrams of neural types...

Yes, the second part of the book looks at the liberating potential of sense making ecologies. I don't just mean brain plasticity here. I'm not so convinced with Malabou's idea that we can free the brain by way knowing our brain's plastic potential. It plays a part, but we risk simply transferring the sovereignty of the self to the sovereignty of the synaptic self. I'm less interested in the linguistically derived sense of self we find here, wherein the symbolic is assumed to explain to us who we are (the self that says "I"). I'm more interested in Malabou's warning that brain plasticity risks being hijacked by neoliberal notions of individualised worker flexibility.

Protevi's Spinoza-inspired piece on the Nazis Nuremburg Ral-

lies becomes more important in the book. So there's different kinds of sensory power that can either produce more passive somnambulist Nazis followers or encourage a collective capacity towards action that fights fascism. Both work on a population through affective registers, which are not necessarily positive or negative, but rather sensory stimulations that produce certain moods. So, Protevi usefully draws on Deleuze and Bruce Wexler's social neuroscience to argue that subjectivity is always being made (becoming) in deeply relational ways. Through our relation to carers, for instance, we see how subjectivity is a multiple production, never a given – more a perpetual proto-subjectivity in the making. Indeed, care is, in itself, deeply sensory and relational. The problem is that the education of our senses is increasingly experienced in systems of carelessness; from Nuremburg to the Age of Austerity. This isn't all about fear. The Nazis focus on joy and pleasure (Freude), for example, worked on the mood of a population enabling enough racist feelings and a sense of superiority to prepare for war and the Holocaust. Capitalism similarly acts to pacify consumers and workers; to keep "everybody happy now" in spite of the degrees of nonconscious compulsion, obsolescence and waste, and disregard for environmental destruction. Yet, at the extreme, in the Nazis death camps, those with empathy were most likely to die. Feelings were completely shut down. In all these cases though, we find these anti-care systems in which the collective capacity to power is closed down.

Nonetheless, brains are deeply ecological. In moments of extreme sensory deprivation they will start to imagine images and sounds. The socially isolated brain will imagine others. In this context, it's interesting that Wexler returns us to the importance of imitative relations. Again, we find here an imitative relation that overrides the linguistic sense of an inner self (a relation of interiority) and points instead to sense making in relation to exteriority. Without having to resort to mirror neurons, I feel there is a strong argument here for imitation as a powerful kind of affective relation that can function on both sides of Spinoza's affective registers.

6) Let's talk about specialized Control and neurofeedback: the neurosubject seen as the slave of the future of the sedated behaviour. Is it possible to train or to correct a brain? Let's go back to the relation between politics and neuroculture. Trump's administration displays neuropolitics today: for example "Neurocore" is a company where Betsy DeVos (current Trump's US Secretary of Education) is the main shareholder. It is a company specialised in neuro-feedback techniques where one can learn how to modulate and therefore to control internal or external cerebral functions like some human-computer interfaces do. Neurocore affirms that they are able to positively work the electric impulses of the cerebral waves. What can we expect from mental wellness researches through neurofeedback and from self-regulated or digitally self-empowered cerebral manipulations, in politics and in society?

Of course, claims made by these brain training companies are mostly about gimmicky, money spinning, neuro-speculation. But I think this focus on ADHD is interesting. It also addresses the point you made in the previous question about being neurotypical. So Neurocore, like other similar businesses, claim to be able to treat the various symptoms of attention deficit by applying neuroscience. This usually means diagnosis via EEG – looking at brainwaves associated with attention/inattention – and then some application of noninvasive neurofeedback rather than drug interventions. OK, so by stimulating certain brainwaves it is perhaps possible to produce a degree of behavioural change akin to Pavlov or Skinner. But aside from these specific claims, there's more a general and political relation established between the sensory environments of capitalism and certain brain-somatic states. I think these relations are crucial to understanding the paradoxical and dystopic nature of neurocapitalism.

For example, ADHD is assumed by many to be linked to faulty dopamine receptors and detected by certain brainwaves (there's a FDA certified EEG diagnosis in the US), but the condition itself is a paradoxical mix of attention and inattention. On one hand, people with ADHD are distracted from the things they are supposed to neurotypically pay attention to, like school, work, paying the bills etc., and on the other, they are supposed to be hyper-attentive to the things that are regarded as distractions, like computer games, and other obsessions that they apparently

spend disproportionate time on. There is a clear attempt here to manage certain kinds of attention through differing modes of sensory stimulation. But what's neurotypical for school seems to clash with what's neurotypical in the shopping mall. Inattention, distractibility, disorganization, impulsiveness and restlessness seem to be prerequisite behaviours for hyper-consumption.

Not surprisingly then, ADHD, OCD and dementia become part of the neuromarketer's tool bag; that is, the consumer is modelled by a range of brain pathologies e.g. the attention-challenged, forgetful consumer whose compulsive drives are essential to brand obsessions. All this links to the control society thesis and Deleuze's location of marketing as the new enemy and the potential infiltration of neurochemicals and brainwaves as the latest frontier in control.

What I do in the book is look back at the origins of the control society thesis, found explicitly in the dystopias of Burroughs and implicitly in Huxley. What we find is a familiar paradoxical switching between freedom and slavery, joyful coercion and oppression. In short, the most effective dystopias are always dressed up as utopias.

7) What then is an assemblage brain? It seems to me that a precise thought line passing from Bergson, Tarde, Deleuze, Guattari, Whitehead, Ruyer and Simondon has been traced here. You write: Everything is

potentially «becoming brain». Why? And which difference is there with the cybernetic model of brain, prevailing today?

Although I don't really do much Whitehead in the book, I think his demand for a nonbifurcated theory of nature is the starting point for the assemblage brain. Certainly, by the time I get to discuss Deleuze's *The Fold*, Whitehead is there in all but name. So there's this beautiful quote that I've used in a more recent article that perfectly captures what I mean...

[W]e cannot determine with what molecules the brain begins and the rest of the body ends. Further, we cannot tell with what molecules the body ends and the external world begins. The truth is that the brain is continuous with the body, and the body is continuous with the rest of the natural world. Human experience is an act of self-origination including the whole of nature, limited to the perspective of a focal region, located within the body, but not necessarily persisting in any fixed coordination with a definite part of the brain. (2)

This captures the antilocationist stance of the book, which rallies against a series of locationist positions in neuroculture ranging from what has been described as fMRI-phrenology to the neurophilosophy of Metzinger's Platonic Ego Tunnel. The cybernetic model of sense making is a locationist model of sense making writ large. The cognitive brain is this computer that stores representations somewhere in a mental model that seems

to hover above matter. It communicates with the outside world through internal encoding/decoding information processors, and even when this information becomes widely distributed through external networks, the brain model doesn't change, but instead we encounter the same internal properties in this ridiculous notion of a megabrain or collective intelligence. We find a great antidote to the megabrain in Tarde's social monadology, but *The Fold* brilliantly upsets the whole notion that the outside is nothing more than an image stored on the inside. On the contrary, the inside is nothing more than a fold on the outside.

To further counter such locationist perspectives on sense making – Whitehead's limitations of the focal region - we need to rethink the question of matter and what arises from it. For example, Deleuze's use of Ruyer results in this idea that everything is potentially becoming brain. There are, as such, micro-brains everywhere in Whitehead's nonbifurcated assemblage – the society of molecules that compose the stone, e.g. which senses the warmth of the sun.

There's evidently politics in here too. The ADHD example I mentioned is a locationist strategy that says our response to the stresses and disruptions experienced in the world today can be traced back to a problem that starts inside the head. On the contrary, it's in our relations with these systems of carelessness that we will find the problem!

8) You declare that the couple “mind/brain” is insolvable. Against the ratio of the scientific concept of the «mind» you counterpose the chaotic materiality of the «brain» writing that the brain is the chaos which continues to haunt science (p.195). Can we say that such irreducible escape from chaos expressed in your metaphor of Huxley’s escape from Plato’s cavern, shows your preference for *What is Philosophy* by Deleuze and Guattari rather than *A Thousand Plateaus* where the assemblage theory is displayed?

So yes, in *The Fold* there is no mind/brain distinction, just, as *What is Philosophy* continues with, this encounter between matter and chaos. The brain simply returns or is an exchange point for the expression of chaos – Whitehead’s narrow “focal point” of the percipient event. This is, as Stengers argues, nothing more than a mere foothold of perception, not a command post! Such a concept of nature evidently haunts the cognitive neurosciences approach that seeks, through neuroaesthetics, for example, to locate the concept of beauty in the brain. We might be able to trace a particular sensation to a location in the brain, by, for example, tweaking a rat’s whisker so that it corresponds with a location in the brain, but the neurocorrelates between these sensations and the concept of beauty are drastically misunderstood as a journey from matter to mental stuff or matter to memory.

I think the metaphor of Huxley’s acid fuelled escape from Plato’s cave, which is contrasted with Dequincy’s opiated journey

to the prison of the self, helps, in a slightly tongue-in-cheek way, to explore the difference between relations of interiority and exteriority or tunnels and folds. The point is to contrast Dequincy’s need to escape the harsh world he experienced in the early industrial age by hiding inside his opiated dream world with Huxley’s acid induced experience of “isness.” Huxley was certainly reading Bergson when he wrote *Doors of Perception*, so I think he was looking to route round the kind of perception explained by the journey from matter to the mental. My attempt at a somewhat crude lyrical conclusion is that while Dequincy hides in his tunnel Huxley is out there in the nonbifurcated fold...

9) *One last question (maybe more ethical than what we would expect from new media theorists today) involves the aspect of a meeting between a virus and a brain. Which ethical, biological, political, social and philosophical effects may occur when viruses are purposely introduced/inoculated into human brain, as with «organoid» derived from grown cells in research laboratories? Growing a brain from embryonic cells and wildly experimenting modifying its growth can take the zoon politikon to a critical edge? Neither machines, or men or cyborg, but simple wearable synthetic micro-masses. Are we approaching in huge strides the bio-inorganic era that Deleuze defined in his book on Foucault, as the era of man in charge of the very rocks, or inorganic matter (the domain of silicon)?*

One way to approach this fascinating question might be to again compare Metzinger’s neuroethics with an ethics of *The Fold*.

On one hand, there's this human right to use neurotechnologies and pharmaceutical psychostimulants to tinker with the Ego Tunnel. It's these kind of out of body experiences that Metzinger's claims will free us from the virtual sense of self by enabling humans to look back at ourselves and see through the illusion of the cave brain. On the other hand, the ethics of *The Fold* suggests a more politically flattened and nonbifurcated ecological relation between organic and inorganic matter. The nightmare of the wearable micro-masses ideal you mention would, I suppose, sit more concretely in the former. Infected with this virus, we would not just look back at ourselves, but perhaps spread the politics of the Anthropocene even further into the inorganic world. In many ways, looking at the capitalist ruins in which we live in now, we perhaps already have this virus in our heads? Indeed, isn't humanity a kind of virus in itself? Certainly, our lack of empathy for the planet we contaminate is staggering. I would tend to be far more optimistic about being in the fold since even though we still have our animal politics and Anthropocene to contend with, if we are positioned more closely in nature; that is, in the consequential decay of contaminated matter, we may, at last, share in the feeling of decay. I suppose this is again already the case. We are living in the early ruins of inorganic and organic matter right now, yet we seem to think we can rise above it. But even Ego Tunnels like Trump will eventually find themselves rotting in the ruins.

Notes

- 1) Tony D Sampson and Jussi Parikka, "Learning from Network Dysfunctionality: Accidents, Enterprise and Small Worlds of Infection" in *The Blackwell Companion to New Media Dynamics*, Hartley, Burgess and Bruns (eds.), Wiley-Blackwell, 2012.
- 2) Whitehead cited in Dewey, J "The Philosophy of Whitehead" in Schilpp, P.A (ed.) *The Philosophy of Alfred North Whitehead*. Tutor Publishing Company, New York, 1951.

Contagion Theory Beyond the Microbe

By *Tony D. Sampson*

@ CTheory (2011)

INTRODUCTION: FOUR INTERVENTIONS

Log on to the internet or visit a militant Islamic bookshop and within a few minutes you will find enough inspiration in CDs, ranting sermons, DVDs, for a hundred suicide bombs. It swirls across the Islamic world as an expression of rage against the West for the invasion of Iraq, support for Israel, and for Western dominance of the world economy... It is only when the vast majority of law-abiding Muslim societies reject the cultural virus of suicide bombing and cease to glorify it that this plague will burn itself out. [\[1\]](#)

In this so-called age of networks, human communication is, it seems, increasingly redefined as a media virus. In the military rhetoric of former CIA operative, Robert Baer (above), it is indeed difficult to tell apart the medium from the virus. The

greatest information network of all, the internet, has become, as Baer tells us, part of a “deadly virus” that spreads radicalization far and wide by way of a somewhat mysterious, “inspirational” connection with the societies it infects. Even old ways of doing communication are becoming part and parcel of this swirling viral media ecology. The fearsome biological analogies and medical metaphors Baer, and other propagators of the *War on Terror*, readily exploit are nonetheless part of a far wider and potentially divisive epidemiological social paradigm. In computer network security, for example, there is a comparable (and interwoven) *War on Viruses* which has transformed the internet into an immunological network infrastructure that defines to a great extent what you can and can’t do online. [2]

Significantly though, not all media viruses are dependent on fear and anxiety. In marketing circles, specifically those dedicated to digital networks, virals and memes are the buzzwords of choice. The success of *YouTube* videos and social gaming on *Facebook* are, for example, measured in terms of a virality based on joyful encounters, sometimes verging on obsessive and compulsive engagement. Indeed, network scientists and marketers claim to have learnt lessons from observing biological and digital viruses: lessons that some claim exceed mere analogical or metaphorical relations and point toward new universal models of contagious social influence and infectable consumer mood. [3] Evidently, the problem for communication theory is how to

approach the many dimensions of the universal media virus. Intuitive as it may seem, its virality lacks substance. It is like a noise that contaminates the binary opposites of the established communication model without prejudice. In the age of networks, senders and receivers and information and meaning are all susceptible to contagion.

Recently however, in network theory, the notion of *microbial contagion* has offered a refreshing alternative to established communication theory insofar as the non-human microbe is reckoned to be synonymous with the network humans connect to. To be sure, it is the microbe that links up the individual nodes of the network transforming them into a collective social body. [4] Yet, problematically the microbe may not go far enough in terms of grasping the virality of communication. It certainly shares a lot in common with Baer’s deadly virus in as much as it relies on an indistinct and divisive biological analogy to explain how non-human virality connects to an intensely human social medium.

This essay presents four interventions intended to redirect theoretical attention away from the medical discourses that underpin microbial contagion theory. [5] Although ostensibly discrete, each intervention is intended to probe the analogical artifice between the human and nonhuman by way of a Tardean monadological understanding of “social form” composed of emotional vectors and affective contagious encounters. The first intervention concerns what it is that spreads through infectable

social media. Here both Gabriel Tarde's refusal to analytically separate psychological and biological realms from the wider social-physical world (of which they are both a part), and a more recent neurological understanding of the political unconscious, come together to foreground the importance of shared feelings in determining social influence. Yet, although *feeling fear* seems to be endemic to recent politically motivated contaminations of a population, there are other much-overlooked affects, like love, which are equally catching. Secondly, the essay confronts the deterministic thinking which seems to underline decidedly mechanistic interpretations of what spreads. This is equally evident in the analogical focus on microbes and memes as it is in a tendency in network theory to award agency to an emergent collective social consciousness.

The third intervention questions the validity of the network as an appropriate epidemiological diagram when evidently its standardization of space through nodes and edges tends to freeze out the temporality of epidemic events and accidents. This is, I contend, a "diagrammatic" problem at the center of contagion theory which can be interestingly re-approached via Tarde's insights into economic crisis and celebrity culture. Lastly then, the essay focuses on a distinctive Tardean trajectory evident in contemporary capitalist business enterprise which looks set to exploit consumer mood and guide intention by targeting the mostly unconscious neurological absorption of human and non-human affective contagions.

These four interventions draw upon a resuscitation of crowd contagion theories dating back to the late nineteenth century. Such a revival is not without its problems, not least because of the negative notions it attaches to social collectivity, conformity, obedience and vulnerability. However, unlike the extreme conservatism of his contemporary, Gustave Le Bon, in a series of publications, Tarde forwarded an epidemiological diagram which arguably provides a much clearer understanding of social relation outside of the reductive limitations of organic social category, and at the same time probes between the artifice that divides biological and psychological phenomena from social theory. [6] In these texts Tarde sets out an approach that would go on to greatly influence Gilles Deleuze and Bruno Latour (among others). But as I aim to show in my work, he is much more than a mere footnote to assemblage and actor network theory.

1. WHAT SPREADS?

Feeling Fear

Although positioning microbial contagion as a distinctly non-human affair, Eugene Thacker suggests an intriguing and perhaps purposefully indistinct human relation to it insofar as he draws our attention to how "we humans" *feel* about becoming

infected. [6] The most apparent of these feelings is triggered by our contagious encounter with the microbe, which tends to “elicit” the negative emotions of “fear” and “anxiety”. [8] As Thacker seems to infer, contagion is generally grasped within a medical discursive frame as a horrendous conflict between human and nonhuman agencies.

Contagion and infection are more than mechanisms of antigen recognition and antibody response; they are, as our textbooks tell us, entire ‘wars’ and ‘invasions’ continuously fought on the battle lines of the human body. [9]

These are, it would appear, fears and anxieties induced by a sense of invasiveness of what spreads beyond the battle lines into non-biological contexts. Reminiscent perhaps of Michel Foucault’s earlier observations on how the space of plagues and epidemics (like leprosy) opened up new disciplinary territories that would further exclude the nonhuman from the human world, [10] this current exercise of biopower seems to carry forward discursive epidemiological power into new and as yet uncharted corners of social cartography. To be sure, the emotional responses to these unwelcome incursions by the microbe are increasingly exploited by the defenders of network sovereignty — particularly in the rhetorical terms used to describe the threat posed by the cultural and biological viruses of the terrorist cell.

There is, as Thacker argues elsewhere, an Agambenian “zone of indistinction”, or biopolitical continuum, at play in the rhetoric of the *War on Terror*, which exceptionally merges the language used to describe the terrorist with that used to describe the microbial virus. [11] But there is perhaps nothing new in such myth making. It is certainly a central plank of a much older ideological critique that recognizes how culture is often strategically turned into nature. [12] Nonetheless, are these transmissions of fear and anxiety adequately explained by a semiotic model of communication, based as it is on the spreading of false beliefs conjured up by images, words and ideas? How does this old approach, which in effect divides up culture and nature, account for an inherent social vulnerability to suggestion beyond resorting to a fuzzy state of false consciousness? It would seem that the emotional openness to repetitive and ever converging transmissions of statements of this kind exceed mere ideological productions of myth. Indeed, would not belief (and how it can spread) need to be reconsidered, *ahead of ideas*, as the bringing on of mostly insensible and unconscious responses intended to trigger deep seated fears, anxieties, panic, and insecurity? Is this not a neurological contamination that exposes the mind to an entire valence (fearsome and joyful) of affective encounters that herald the idea?

So as to further deliberate on the affective and contagious qualities of what spreads I want to briefly introduce three think-

ers who help to frame an alternative to ideological models of transmission. The first, George Lakoff, (a cognitive scientist) focuses attention on a neurological understanding of how the political mind can be tapped into and activated. The second, Teresa Brennan, presents a theory of affective transmission that rethinks the relation between culture and nature by removing the pretence of the divide that separates them, and focuses instead on an *intersection point* wherein what is socially encountered, and biologically responded to, meet. Finally, I turn to Tarde's late nineteenth-century social contagion theory which similarly locates the human condition somewhere in between deliberate volition, biologically motivated mechanical habits and the self-spreading of desires and social invention. Importantly, all three are advocates of a concept of social subjectivity that is not closed or self-contained, but is instead open to contagious suggestibility of others.

A Neurological Unconscious

To begin with, I want to acknowledge George Lakoff's neurological understanding of a mostly unconscious political mind. Lakoff describes a mind made vulnerable to outside political manipulation through appeals to emotional markers, which can trigger feelings (including those related to infection) already

contained in neurological bindings, or what he calls the *metaphorical frames* of the mind. [13] Following the prominent work of neuroscientist Antonio Damasio in the mid 1990s, as well as "accepting" the fairly recent mirror (or empathy) neuron hypothesis, [14] Lakoff points to the absorbency of *somatic markers*, which can be persistently activated so as to provoke the "right" feelings and emotions, almost to order. [15] So, for example, following 9/11, the much repeated video images of *The Twin Towers* falling played alongside rhythmic utterances of "Islam" and "extremism" evokes fear in the neural circuits of a mind that *empathizes* (shares in the feeling) with what it encounters via its sensory system. [16]

To fully grasp how the neurological unconscious might work, we need to firstly register Damasio's contra-Kantian (and Cartesian) argument that our reasoning and decision-making processes are not as purely cognitive as we may think they are. In fact, Damasio's somatic marker hypothesis persuasively argues that "emotions and feelings may not be intruders in the bastion of reason at all; they may be enmeshed in its networks." [17] Secondly, according to neuroscience, our understanding of how feelings get passed on need no longer to be informed by an unknowable empathic transmission. The location of so-called mirror neurons supposedly points to the brain processes behind the sharing of feelings and mood. Mirror neurons are said to be the equivalent of human-to-human "wireless communication," and

have been linked to innate imitative human relations occurring between infants and adults. [18]

It is the porous volatility of the political mind to the feelings and suggestions of others (up close and mediated over distance) that leads to an important question for contagion theory: *is it not what “we feel” about what spreads that becomes the most effectual contagion of all?* If this is indeed the case, then the contagious encounter is not exclusively explained by the unique merging of linguistic terms strategically relating human to invasive non-human worlds, but instead reveals a multisensory intersection point *in-between* what have traditionally been regarded by much of academia as separate social and biological domains. Arguably, unlike the horrors of the microbial metaphor, this force of contagious encounter is not at all biologically determined. The spreading of fear is instead an intermingling of affective social phenomena and hardwired biological responses that activate and adapt each other.

At very least this appeal to cognitive neuroscience may help to provide a more graspable process by which *infectable* humans encounter the “living” horrors of the microbial world. Communication theory should, in any case, pay close attention to a similar neurological concentration apparent in political psychology, marketing, and product design where the affective priming of experience is fast becoming endemic to the study of social influ-

ence and methods of persuasion. [19] Accordingly, what spreads is understood to pass unconsciously through the skin into the viscerality of human experience, guiding automatic behavior, before it moves *upstream* to the conscious reflective mind and sense of volition. The strategic convergence of the epidemic and suicide bomber can still be grasped as Thacker puts it, in the “innovative ways” human beings have developed by which to “live through microbes”. [20] Here, however, we have a process no less that begins for the most part by a contaminating encounter with an event. It is the manifestation of affects in this encounter which move upstream, activating mostly unconscious feelings of horror, before they intersect with the *downstream* flows of a neural circuitry loaded with manipulable and biographical emotional content.

It is this seemingly ready-made, yet highly absorbent and adaptable circuitry that is, Lakoff claims, tapped into by political strategists, so that, for example, the repetition of the images and the utterances of the *War on Terror* reinforce and activate negative conservative neurological bindings rather than acting to challenge and change the way people think. [21] Significantly, for Lakoff, the idea that the political mind is openly vulnerable to suggestion in this way (and potentially prone to passing on such suggestions via neuronal transfers) confronts the unyielding artifice erected and maintained by the same Enlightenment aficionados Damasio identifies: that is, an abrupt separation be-

tween somatic experiences and the evolutionary hardwiring of a self-contained and rational mind. But as the subtitle of Lakoff's political mind thesis argues, "you can't understand 21st-Century American politics with an 18th-Century brain." It would seem that the Enlightenment artifice between contaminating emotion and pure reason disintegrates at the point where what is socially suggested, and biologically responded to, intersects: *an encounter between upstream flows of affect and downstream biological responses*.

The Transmission of Affective Contagion

In her analysis of the decline of nineteenth century crowd theory, Teresa Brennan notes the ominous implications of what replaced it. The cognitive turn in the twentieth century not only re-concentrated enquiry on the rational minds of a self-contained individual, but also bisected biological and sociological explanations of collective social interaction. [22] The theory of the self-contained individual stresses, as such, that it is an evolutionary hardwired and conscious cognition that determines human agency rather than natural phenomena, like emotions, feelings and affect. For Brennan however, what spreads (affect) turns such a crude dichotomy on its head by significantly placing social encounter ahead of biological adaptation. Despite the prevalent "prejudice concerning the biological and the so-

cial" and the "belief in [a subject's] self-containment" that obsessed early social scientists' interest in how collectives respond to each other, Brennan argues that the biological and the social are irrevocably blended together. [23] Contagion is, like this, "a simple affective transfer" discerned by permeable individuals in rooms and other affective atmospheres of encounter. [24] She compares it to entrainment whereby a person's affects can contaminate another, pulling or pushing them along in rhythmic synchronization. Importantly, affective transmission does not originate in the biologically hardwired drives of the individual. To be sure, the porous self is nothing like the inward looking ego (only thinking of itself). [25] On the contrary, the affective transfer is always, from the outset, *social*. But this encounter is not social in the sense of the term accepted in mainstream sociological categorizations. The encounter comes from out there in the affective atmosphere, and can as such, spread from person-to-person, entering into the skin and *hacking* into the evolutionary drives.

Viral Love

Importantly then, the biopolitical intensity of what spreads through affective atmospheres should not be limited to negative transmissions of fear. There is a need to consider a far wider valence of virality contaminating the social mood. [26] Love, or viral love as I call it, might even be regarded as more contagious

than fear. As Brennan contends, love as an affect is very different to negative affects which require an independent medium of transmission. Love, in contrast, is both affect and the medium through which the affect travels. [27] Viral love is in this sense both virus and viral environment enfolded into one communicable space.

Whether or not viral love is in fact a more powerful contaminator than fear is not really the focus here, but as a concept it usefully brings together the notions of neurological unconsciousness and affective contagion with the seminal contagion theory set out by Tarde in the late 1800s. As Tarde claimed, the most ingenious and potent of political strategies appeals not to fear alone, but also the desire to love and be loved in return, and the potential to contagiously pass on those loving feelings to others to imitate. According to Tarde, it is the “power of belief and desire...” of the “love and faith” of the social somnambulist (a neurologically unconscious social subject by any other name) that produces “obedience and imitation.” [28] In other words, the somnambulist succumbs to emotional appeals to his sense of fascination, attraction, allure and absorption, and a tendency to become distracted by the animations of his environment. Viral love may well be compared, as such, to a contagious social neurosis, or mass attention deficit disorder, but it is not feared like a microbial disease. Despite being mostly unconscious of its affects, the somnambulist is not controlled or panicked into

submission by epidemics of fear, but willingly engages with the faith and hope inspired by his joyful and mesmeric encounter with love. [29] Social obedience is partially guided then by “unheard-of expenditures of love and of unsatisfied love at that.” [30] Significantly, these investments in love made by religious and political institutions of power, Tarde claims, satisfy a “persistent need of loving and admiring,” requiring the raising up of “new idols... from time to time.” [31]

So who are the new idols of viral love on the contemporary political scene? Well, in contrast to the microbial contagions of the GW Bush administration and its appeal to the political unconscious through the cold emotionless channels of advisors like Cheney and the fear mongering of Rumsfeld, Lakoff notes how Obama’s campaign of hope and change managed to empathically tap into the infectable emotions of many US voters. This was certainly a contagion befitting the age of networks. From the outset, Obama’s election campaign team made the best possible use of the intimate features of Web 2.0 applications to spread activism through joyful encounters experienced predominantly *at-a-distance*. On *Facebook* you can become Obama’s friend (one of nearly 9.5 million to date). You can find out that he enjoys “basketball, writing, spending time w/ kids” and what his favorite music, books and TV shows are. Yet, it is the Obama team’s pre-election use of *Flickr* that best illustrates the empathic virality of political love. [32] For it signalled the new presi-

dent's intention to sidestep the formality and distance of Cheney and Rumsfeld, and instead intercept, through these networks, the affective flows of those voters disillusioned by GW Bush. Of course, Obama is a powerful orator, using rhetorical skills as old as Aristotle, and that should never be underestimated, but the emotionally charged and intimate pictures of his family on the eve of his election spread through global media networks like a firestorm, painting a mood and stirring up a worldwide love contagion. What is important to stress here is not necessarily a dualistic relation between fear and love, but a political element of communication that exceeds the semiotic realm of effect. These are haptic images that quite literally *touch* the eye. As one *Flickr* user's comments perfectly capture the empathic transmission flowing from these images: "I love this shot. You can feel the butterflies in their stomachs as they are watching the returns." [33]

The events leading to the election of the first black US President were certainly marked by a global outpouring of love. In this sense, Obama's love contagion seemed to attune itself to a positive flow of the love of difference. As Tony Negri suggested shortly after Obama's election, behind this great victory may well be traces of the great struggle of the multitude, certainly in terms of its positive role in the globalization of the issue of race. [34] Yet, viral love can be capricious too. Whether or not Obama can truly live up to the expectations of the multitude project, and deliver the spontaneous democracy it desires, is of course highly questionable. Perhaps the short lived virality of this example of a *love*

of difference has already been subsumed into what Michael Hardt has identified as the dictatorial counter forces of a *love of the same*. [35] Certainly, as I write, Obama's contagion is already oscillating uncontrollably between unrequited love and a love gone bad.

To conclude this section, what spreads might be considered using a term Nigel Thrift adapts from both Brennan's theory of affect and Tarde's original thesis. *Affective contagion* re-stresses the 'involuntary precognitive nature' of what is passed-on. [36] What spreads enters into the porous neural network of outlier relations that connect the self to the other (and other things) via the communicable media of the skin, as well as the intimacy of social networks. Again, this is not an exclusively biological or social contagion, as traditionally understood. What spreads, as both Brennan and Thrift point out, is what passes through an intersection point or artifice. [37] Significantly, what spreads is passed on, not just through fear and anxiety, but via passions, obsessions, and other empathic transfers that are equally catching. What spreads certainly has the capacity to capriciously affect (and become affected) across the valence of positive and negative feelings. What spreads can be, in other words, a fearful or joyful mesmeric encounter between indistinct social and biological worlds. It is an encounter that triggers empathic contagions that spread through adaptive atmospheres of affect and imitative entrainment. As Brennan elegantly puts it, "[m]y affect, if it comes across to you, alters your anatomical makeup for good or ill." [38]

2. THE MECHANISM INDEPENDENCE OF CONTAGIOUS SOCIAL ENCOUNTER

The idea that social encounter is interwoven with biological adaptation is of course controversial. Before venturing further into Tarde's contagion theory it is therefore necessary to grasp the importance of the intersection point he sets up between social and biological contexts and clearly distinguish it from deterministic thinking.

Using Tarde to Avoid Biological and Social Determinism

While it is noteworthy that Thacker has cautiously approached how the abstraction of contagion is transformed into non-biological contexts, such as the meme, viral marketing and computer viruses, [39] microbial contagion is still at risk of falling into a similar deterministic trap. Indeed, it is perhaps too often the case that social and cultural contagion theorists look to biological and medical discourses for their sole inspiration. The problem being that the analogies and metaphors made between the virality of genetic code inheritance, cultural imitation and digital replication inform a markedly biologically determined mechanism of infection. Like this, memetics is exemplary. It plays fast and loose with a universal biological referent and attempts by its advocates to claim Tarde as a forefather of the meme are deeply misleading. [40] To be sure, a Tardean "epidemiological" diagram can be clearly differentiated from the deterministic logic

of the neo-Darwinian meme/gene analogy, and its claim to be the definitive biological force shaping social and cultural fields. [41]

Since being fleetingly introduced in the closing chapter of Richard Dawkins' bestseller *The Selfish Gene* in 1976, the genocentric evolutionism of the meme/gene analogy has gone on to be a highly influential, albeit controversial explanation of how culture spreads through a population. Accordingly, the meme virus is a unit of imitation which determines the evolutionary invariance and survival of the ideas that spread through a population of minds. It follows that a population of minds will passively absorb the evolutionary mutations directed by the meme in order to both survive and provide a better medium of propagation for the future survival of evolved memes. It is, at its extreme, part of a claim that everything from the mind to communication technologies like the internet are the outcome of memetic units constructing a more efficient communicable environment in which to self-spread. [42]

This is not to say that memetics does not begin with an interesting premise. Like Tarde, to some extent, it points to the often unconscious transmission of what spreads through infectable populations. Nonetheless, what is considered to spread becomes a wholly mechanistic and self-contained evolutionary unit of imitation. [43] As Brennan convincingly argues below, the neo-Dar-

winist adopts an essentialist position that neglects to engage at all with the capacity of affects to occur outside of the genetically formed individual.

[According to neo-Darwinism] [t]he individual organism is born with the urges and affects that will determine its fate. Its predisposition to certain behaviors is part of its individual genetic package, and, of course, these behaviors are intrinsically affective. Such behaviors and affects may be modified by the environment, or they may not survive because they are not adaptive. But the point is that no other source or origin for the affects is acknowledged outside of the individual one. The dominant model for transmission in neo-Darwinism is genetic transmission. [44]

To be sure, in both biological and non-biological contexts, the neo-Darwinian paradigm negates the creative potential of chance encounters by grossly inflating the status of a deterministic code mechanism. By analogy it attributes the same high level of agency to the fidelity, fecundity and longevity of the genetic package as it does to the passive passing on of a competing idea. Memetics crudely consigns, as such, the by and large capricious, unconscious and imitative transmission of desire and social invention through a population to an insentient surrender to a self-serving code. [45] As Brennan continues, “the critical thing about it here is that its proponents ignore the claims of social and historical context when it comes to accounting for causation.” [46]

While Tarde’s epidemiological diagram and the biological determinism of memetics are demonstrably incompatible, it is equally important to distance him from social determinism. What composes the historical forces of the social is all too often accepted as a given. So, before thinking through the social context of contagion theory, it is useful to stress the discernible differences between Tarde and the intrinsic determinism of the Durkheimian social paradigm apparent in notions of social epidemiology. [47] What concretely distinguishes Tarde from Durkheim is the latter’s attempt to render all things psychological, biological, and neurological categorically distinct from the social, while the former marks their inseparability. For example, in their “momentous debate” at the Ecole des Hautes Etudes Sociales in 1903, Durkheim reportedly made a particular issue of how the social sciences needed to make its subject matter separate from these other phenomena. As he puts it elsewhere:

[T]here is between psychology and sociology the same break in continuity as there is between biology and the physical and chemical sciences. Consequently, every time a social phenomenon is directly explained by a psychological phenomenon, we may rest assured that the explanation is false. [48]

So how did Durkheim consider social emergence? To begin with, his notion of “dynamic density” aligns him to particular theories of social complexity and collective emergence very much

at odds with a contemporary reading of Tardean microsociology. In short, dynamic density is a process of social emergence that increases by way of the growing number and frequency of individual connectivities. By way of his influence on Talcott Parsons' functionalism, Durkheim has subsequently been claimed by a number of other authors as an early pioneer of systems theory and cybernetic approaches to the social, including notions of swarm, collective, and distributed intelligence. [49] So while Durkheim's social theory points to the downward causation awarded to social facts and collective representations, both of these concepts are considered "*sui generis*." That is, they emerge from out of a relation with their own social kind. Social emergence is thus independent of psychological and biological factors and derived instead from a social consciousness emerging from the dynamic densities (connectivities) made between individuals. [50]

Dynamic density is, incidentally, an account of social agency that can be linked to current network theory where there is also a heavy emphasis placed on the agency of collective behavior emerging from a network of individuals. [51] The synergy here is not precise, but worthy of note nonetheless. For Durkheim society is "not at all the illogical or a-logical, incoherent and fantastic being" others consider it to be. On the contrary "the collective consciousness... is the consciousness of the consciousnesses." [52] The organic glue that brings social collectives together (makes it conscious, as such) is founded in the collective

consensus of individuals. Similarly, in network theory, individuals become "individuals of a different sort." It is, as such, the localized level of "consensus-building" that links the individual "to the swarm as a whole." [53]

In lieu of Durkheim's concentration on a conscious social category arising from out of associative individual densities, devoid of biological or psychological content, Tarde's diagram comprises of mostly unconscious flows of desire, passion, and imitative radiations of muscular, as well as cerebral activities. In sharp contrast then, Tarde's society of imitation does not fall back on collective or individual representations. It is not at all about pure association as it concerns the disassociated connectivity (unconscious association) of a social somnambulist. Like this, Tarde's social becomes an assemblage of relationality composed of self-spreading and mesmeric imitative waves or flows. [54] What comes together does not occur by way of a collective consciousness pushing down on the individual, but is instead the "coherent" outcome of "desires that have been excited or sharpened by certain [social] inventions," which imitatively radiate outward, point-to-point, assembling what appear to be the logical arrangements of social form, like markets, nations and cities. [55] What radiates outwards are neither social facts nor collective representations, but the microrelations of shared passions, thoughts, conversations, beliefs, feelings and affects which pass through porous self/other relations in all manner of contagious

environments, including corporate, economic and political arenas. [56] What comes together “socially” in these Tardean spaces is neither genetically subject-bound nor obligated to the wisdom of collective consensus, but is rather the outcome of an infra-individual relation that spreads below consciousness. The social, according to Tarde, is a vital force that self-spreads, radiates and vibrates out from capricious mechanism-independent social encounters with events and accidents.

3. WHAT DIAGRAM?

Networks?

So beyond deterministic thinking, what kind of diagram can be used to study the force of these encounters in contemporary contagious environments? Is it, as Galloway and Thacker propose, the nodes and the edges of the technical network? [57] Well, in part yes. Network fever is indeed all-pervasive. Nevertheless, in ontological terms, the network diagram has certain explanatory limitations that need to be considered. Galloway and Thacker’s own dissatisfaction with the graph theories of network science, for example, point to a tendency to attribute unfettered and apolitical naturalness to what are in effect asymmetrical topological spaces. [58] Yet, these limitations seem to be further

heightened by the spatial homogeneity of temporal considerations. Although Galloway goes on to interestingly locate the event in the “emergence of the networked form of mediation” in itself, [59] we should perhaps not altogether ignore the opinions expressed in network science which openly acknowledge that these topological spaces, standardized by nodes and edges, tend to freeze out the temporality of what just occurred (the event). [60]

This solidifying effect is not only a problem in the nodes and edges of network science, but in other theories of the network too. Despite drawing on Tarde as a “thinker of networks” [61] to support the agency to objects, a distributed personhood, and emphasize invention over cognitive reflection, actor network theory (ANT) is weakened, Thrift contends, by a tendency to sustain “effectivity.” [62] The problem with ANT is that it neutralizes the intensity of events, giving precedence to “steely accumulation” over “lightening strikes,” and “sustained strategies” over “sharp movements.” [63] In fact, being able to map *what just occurred* — the shock events and accidents of present-day contagious spaces, like those recently experienced in the economy or fame obsessed cultural milieus introduced below — is of central concern to contagion theory. One important challenge then is to find an appropriate abstract diagram that better assimilates these temporal considerations. [64] Indeed, what Tarde provides (and here the influence on Deleuze is made clear)

is an epidemiological diagram that exceeds a mere network of relations (technical or otherwise) and points instead toward a far more complex array of events and contagious assemblages of desire and social invention.

The Events of Financial Contagion

There are, it seems, legitimate reasons to suggest that the spreading of the recent financial crisis is linked to the growth of automated networks and so-called algo trading. [65] However, beyond the technological diagram there is another way to approach financial contagion. That is to utilize what Massumi calls the *networkability of events*. Like this, the temporal movement of the event is not simply limited to network connectivity and distribution, [66] but is instead inextricably coupled to the manifold components of assemblages such as those that compose the current turmoil in the economic system. The passing-on of financial contagion through these economic assemblages, for example, is of course greatly influenced by the digitalization and networking of financial information. Post-big bang electronic circuits have played a major role in speeding up and automating economic events and contagious spillovers. However, as Massumi proposes, the “medium of communication” of events and their subsequent contagions, is not the technology. [67] It is rather the events’ *movability*: its displacement, communicability and relationality.

It is useful at this point to refer to Tarde’s much earlier account of times of boom and bust so as to more concretely stress the significant role of the event in emergent economic relations. Tarde presents an economy assembled around the repetition of periodic events, but always prone to the occasional monstrous aperiodic shock event or accident. So as to explicate how these events affect the economy, he makes a clear distinction between two kinds of contagious desire. [68] The first are “periodically linked desires.” Organic life, Tarde noted, “need[s] to drink or eat,” clothe itself to ward off the cold, and so on. [69] These necessary desires related to survival become interwoven into the repetitious and mechanical habits of day-to-day events. However, when such desires become economically appropriated by social invention, they become “special” desire-events, and can as such, take on an imitative and spontaneous “life” of their own. According to Tarde, these are “capricious, non-periodic, desires” [70] for things like fashion and fame that organic life seems to passionately aspire toward, and imitate, mostly unaware of the mesmeric and magnetic attraction they generate. On occasions, the intensity of these passions build anomalous financial bubbles, which continue to contagiously grow until they inevitably burst, spilling over into the wider economy. [71]

Along these lines, Thrift, and more recently Latour and Lépinay, have pointed to a revival of a Tardean political economy founded on the eventful passing-on of contagious desires,

passions, glories, and intoxications. [72] Like this, the current financial crisis demonstrates how the “reach and complexity [of imitative radiations] has expanded inordinately since Tarde’s time, allowing them undreamt of generative powers.” [73] The expansion of these flows of desire and imitative social invention is accordingly linked to the growth of an economy driven by “new socio-technical platforms,” including vast electronic networks and automated modes of trading, which not only increase the fluidity and rapidity of financial information, but also “power up” the communication of desire via “conversations” and “hormonal splashes” spreading through the imitative meshwork of financial media. [74] Nonetheless, the networkability (and unpredictability) of the present-day economy, and its intimate coupling to fluctuations in the market mood, is a distinctly social phenomenon of a Tardean order. Although the economy can appear to be a “logical arrangement” of events organized around predictable network distributions, the backdrop by which desire becomes appropriated by social invention is merely “capricious and accidental.” [75]

The Accidents of Contagious Fame

Another way by which to effectively trace the accidents of contagion in Tarde’s diagram is to consider how it accounts for the spreading of fame for those individuals “fortunate” enough to encounter ingenious ideas. Tarde’s study of the nineteenth-cen-

tury equivalent of celebrity worship argues that fame is seemingly generated by small deferential social groups, before it becomes more widely dispersed into a public that “does not know its hero personally,” but nevertheless feels the same “fanatical, impassioned and devoted admiration.” [76] Yet, this jump from the respect of the few to the emotionally charged adulation of the many (again, mostly *at-a-distance*) is explicitly linked by Tarde to the spontaneity of encounter with complex “currents of imitation.” One person’s fame is, it would appear, an accidental unfolding of the events of their eventual glory. A point Tarde reinforces in *Economic Psychology* when he argues:

One can see... what is accidental about glory. Given equal natural genius, a man will or will not encounter ingenious ideas, depending on whether the elements of these ideas are or are not brought to him by the intersecting currents of imitation. And, given an equal ingeniousness of discovered ideas, they will make him illustrious or obscure depending on whether they do or do not encounter a public which desires them and is disposed to welcome. [77]

Although this account ingeniously points to an infectable desiring population as a necessary precondition for an epidemic of influence, it also draws attention to a particular criticism of how Tarde contends with the accidentality of what spreads. As Thrift points out, Tarde may well have overestimated the acci-

dentalness of contagion, and negated, as such, the capacity for increasingly mediated encounters of imitation-suggestibility to be “consciously and carefully steered.” [78] While Tarde successfully grasps “the power of imitative processes in the mediated environments” of his time, [79] he tended to...

See these mediated processes as spreading like wildfire, like mobs all but out of control, or as currents pushing up against each other in a fluid dynamics in which ascendancy could be all but accidental. [80]

What Tarde seems not to have anticipated is the capacity of current corporate and political agencies, working with PR strategists, media experts, technologists, network scientists and so-called neuromarketers, to produce the necessary mood environments ripe for capturing the accidents of desire in social inventiveness, and making populations readily infectious. In present-day spaces of consumption there is, Thrift argues, “an ever-growing multiplicity and difference of celebrities and notorieties buoyed up by persistent media attention.” [81] Celebrity is endemic to a media engineered desiring machine marketers and politicians compete with each other to plug into. This is a Tardean machinic diagram defined by “a potent combination of technology and genre, imitation and hormone,” [82] and the reproduction of infra-individuals readily primed to desire and pass on the inventions of celebrity hype to others.

To conclude this section there seem to be at least two diagrammatic alternatives to choose from. The first regards the diagram as Tarde seemed to, as all but accidental. The social somnambulist is merely an unconscious conduit through which the capricious currents of imitation flow. What spreads either catches on or simply dies, depending on the chance encounter with the logical contests and oppositions of imitative radiation. The second option is not however as straightforwardly non-accidental as it is perhaps inferred above. On the contrary, it stresses how spontaneous events can be captured, measured, primed and organized, even made to look like an accident or chance encounter, so as to dip below conscious awareness and become more readily absorbed into the neurological unconsciousness. This last option has weighty implications for the future of human agency.

4. VIRAL AGENCY: IN BETWEEN SPONTANEITY AND DICTATORSHIP

The Tardean Social

The problem of human agency appropriately comes to the fore in Thacker’s microbial contagion theory. Again though, careful attention needs to be paid to such questions concern-

ing viral “life” and its seemingly counter relation to human life. These two vital forces are, it must be said, too often located on either side of the aforementioned artifice that divides social and biological domains. This artificial separation certainly reinforces the idea that there are “unknown” biological mechanisms functioning outside of, and independent of, the social field. Yes “we humans” do encounter a whole host of nonhuman and human biological agencies mostly unawares (viruses, pheromones, hormones, feelings, affects etc.). But that does not make such agency-free infectious encounters discrete from the social. As Tarde prophetically argues, the social is, for the most part, an involuntary association with all manner of affecting agencies that drift in and out of a somnambulistic disposition. Indeed, *everything is a society*. The agency of others, and the agency of other things, intertwines, as such, with an impression of our own volition countered by an insensibility to the way our desires are excited and appropriated into social inventions, and how we become part of a repetitious and imitative rhythm of life. Importantly, human freewill and biological inclinations are regarded by Tarde as inseparable. As he puts it:

Nothing... is less scientific than the establishment of this absolute separation, of this abrupt break, between the voluntary and the involuntary, between the conscious and unconscious. Do we not pass by insensible degrees from deliberate volition to almost mechanical habit? [83]

Neuromarketing

Over a hundred years later and Tarde’s notion of the inseparability of voluntary and involuntary behavior is becoming central to biopolitical endeavors to organize consumptive labor. Just as Thrift argues that the contemporary exercise of biopower evident in network science closely follows a Tardean trajectory, [84] the so-called neuromarketing expert claims to be able to measure the inseparable and anesthetized degrees between conscious and unconscious consumption. Drawing on recent inventions in neuroscience to inform such business enterprises, the neuromarketing expert claims to be able to gauge the spontaneous flows of consumer passion for services, brands and products. With ready access to advanced emotional recognition software and affective dataflows collected from the “user testing” of consumption experiences increasingly delivered online and through mobile devices, these highly qualified experts endeavor to prime environments for future purchase intent. Blending eye tracking software with electroencephalography (EEG) and galvanic skin response (GSR), companies like Berkeley based *NeuroFocus* not only measure a consumer’s cognitive attention and memory retention, but claim to directly tap into what a consumer “feels about a product.” [85] The combination of eye movement with the measurement of electrical activity in the brain, heart rate, and skin temperature to effectively record a user’s emotional arousal during consumption, supplants the subjective

inaccuracies of older marketing techniques of self-reporting, like questionnaires, surveys and focus groups.

Another innovation from the Danish company, *iMotions*, flags a distinct Tardean turn in market research technology. Distinct from slightly older methods that tended to measure either *voluntary attention* (bodily gestures, orientation, voice intonation, eye contact and evasion, and nervous responses) or *involuntary inattention* (increases in heart, pulse and breathing rates, and body temperature and sweating) the *Emotion Tool* claims to tap into the relation between the two. It targets, as such, the space in between the *implicit*, unconscious part of the brain (the limbic system), which is widely recognized as being hardwired to the nervous system and physical reactions, and the *explicit*, conscious system (the frontal cortex) associated with cognitive attention. It is the somatic memory, physical responses and emotions of the implicit system that are supposed to prime or guide the explicit system. [86] As the developer of the *Emotion Tool* claims:

It is now generally accepted that emotions dominate cognition, the mental process of the ability to think, reason and remember. Therefore, there is a rapidly increasing interest in methods that can tap into these mostly subconscious emotional processes, in order to gain knowledge and understanding of consumer behavior. [87]

The *Emotion Tool* tracks facial expressions, particularly those that occur around the eyes, the amount of blinking, the duration of the gaze, along with pupil dilation to measure emotional engagement. It further incorporates an algorithmic assessment of two dimensions of the emotional responses captured by the technology: *emotional strength* and *affective valence*. The first gauges the level of excitement an external stimulus provokes in the consumer, the second, measures the feelings that follow the stimulus — the degree of attraction or aversion that an individual feels toward a specific object or event. Scores are calculated from a range of pleasant, unpleasant, or neither pleasant nor unpleasant. High scores are defined as “affective,” low scores “unaffactive.”

Neuromarketing ushers in new methods of persuasion designed to sidestep the cognitive realm of visual representation and tap into the implicit, unconscious affective systems of consumption. Over and above focusing on what a consumer cognitively consumes in terms of visual attention (assumed to be atop of the Kantian hierarchy of the senses), neuromarketers measure the streams of affect the user somatically absorbs in the atmosphere. As the enthusiastic CEO of *NeuroFocus* puts it, a combination of techniques helps the marketer to go beyond conscious consumer engagement with a product and actively seek out what unconsciously attracts them.

Absorption is the ideal because it signifies that the consumer's brain has not only registered your marketing message or your creative content, but that the other centers of the brain that are involved with emotions and memory have been activated as well. The latest advances in neuroscience have revealed that all three of these key elements — attention, emotion and memory retention — are essential to the formation of what we call “persuasion”- which in turn means purchase intent. [88]

This inherently Tardean appeal to the indivisible neurological space between volition and mechanical habit suggests that “subliminal advertising,” as Thrift notes, “does work.” [89]

Resistance to Imitation?

Indeed, the biopolitical and biophilosophical implications of these many attempts to contaminate mood by appealing to the intersection point at which social encounter and biological hardwiring meet are far reaching. With a similar focus on contagious empathic transfers, particularity those established in echoic relations with objects of art, Barbara Maria Stafford makes, as such, a radical intervention into the old dichotomy between rational freewill and ideological false consciousness. [90] By noting how the imitative relation with the other begins entirely with the involuntary encounter, she combines the mirror neuron hypothesis with an implicit Tardean perspective. This is perhaps how hu-

mans co-exist with nonhuman agents. Not so much by way of the battle lines of microbial warfare, but through the contamination of mood. Markets, marketers and politicians are, it seems, beginning to fathom out how to more effectively recognize and reproduce affective atmospheres able to ripen the social mood and make it ready for capricious contagious overflows. Horrendous as these neurological contagions may seem to be, the potential to discern spontaneous epidemic flows of affect, to educate the senses, and become decontaminated from empathic and mesmeric transfers, at least provides a possible path of resistance to the horrors of such a dictatorship. There are indeed a number of authors who have approached the subject of counter-contagion and by way of concluding this essay I will briefly refer to the various ideas put forward.

The question of how to resist imitation-suggestibility is of course complicated by Tarde's insistence that what spreads contaminates the entire affective valence of the emotional landscape. So while Teresa Brennan and Michael Hardt have forwarded love as a way of learning to feel the sensations of others and discern the negative affect of a love gone bad, [91] the virality of a Tardean love seems to evade the affirmative power of loving attention. Viral love can, like a hypnotist, steer unconscious desires and fascinations, guiding attention and influencing beliefs and decision-making processes by way of visceral contamination.

Nonetheless, Thrift points to a potential resistance movement actualized from within the biopolitics of imitation: a social invention organized around the very “speed and imitative capacities” of the networks that function otherwise to denigrate democracy. [92] What this infers is a counter politics of imitation that spreads not by way of love, but similarly through sympathy. [93] We might consider here attempts to trigger counter-contagions in the shape of vigils, gathering protests, online petitions, and campaigns and fund raising. Yet, once again, Tarde’s skepticism concerning counter-imitation needs to be noted.

In counter-imitating one another, that is to say, in doing or saying the exact opposite of what they observe being done or said, they are becoming more and more assimilated, just as much assimilated as if they did or said precisely what was being done or said around them... there is nothing more imitative than fighting against one’s natural inclination to follow the current of these things, or than pretending to go against it. [94]

In short then, in becoming an adversary, one simply becomes more associated in the assemblage of imitation. This is how, Tarde contends, in the process of nonverbal communication, opposing facial expressions do not simply oppose people, but unconsciously associate them in an assemblage of imitation and counter-imitation.

One way in which we might become disconnected from this associative chain is through the suppression of empathy and refusal to engage in the transmission of affects, emotions and feelings of others. But of course Tarde does not accept the Kantian proposition of apathy. Such a break in communication with the outside world is regarded as impossible. On the contrary, in order to break from these associative chains he makes a crucial distinction between counter-imitation and non-imitation. [95] In sharp contrast to sympathy, empathy, and indeed apathy, Tarde’s non-imitation is achieved through pure antipathy. This is not therefore a disconnection or non-social relation, but is a non-imitation of, and thus anti-social relation with a “neighbor who is in touch.” [96]

What Tarde proposes as an alternative seems to counterintuitively reject Hardt’s love of difference as a way to achieve spontaneous democracy insofar as he offers a distinctly cognizant “refusal . . . to copy the dress, customs, language, industry, and arts which make up the civilization of [this or that] neighborhood.” [97] Non-imitation requires a constant assertion of antagonism, “obstinacy,” “pride,” and “indelible feelings of superiority,” that empowers and produces a “rupture of the umbilical cord between the old and the new society.” [98] It involves a declaration that all other societies are “absolutely and forever alien,” and an undertaking to never reproduce the rights, usages, and ideas of any other society. It is indeed non-imitation that Tarde contends

purges the social of the contagions of the other. It is only after this purge that old customs can be replaced by truly new fashions. For Tarde then, it is the long term maintenance of non-imitation which ensures that those who wish to resist the contagions of the present political climate will in a moment of spontaneous revolution “no longer find any hindrance in the way of [their own] conquering activity.” [99]

Notes

- [1] Robert Baer, “This Deadly Virus: in a searing analysis of the wave of suicide bombings, former CIA agent Robert Baer warns Britain of the grave dangers ahead,” *The Observer*, August 7th, 2005.
- [2] Jussi Parikka, *Digital Contagions. A Media Archaeology of Computer Viruses*, (New York, Peter Lang, 2007), 93-96. [3] Clive Thompson, “Is the Tipping Point Toast?” *Fast Company Magazine*, February 1st, 2008 <http://www.fastcompany.com/magazine/122/is-the-tipping-point-toast.html> (accessed 13th July, 2010).
- [4] Eugene Thacker, “Cryptobiologies,” *ArtNodes: E-Journal on Art, Science and Technology*, 6 Nov, 2006 <http://www.uoc.edu/artnodes/6/dt/eng/thacker.html> (accessed on 29th June, 2010).
- [5] This article is based on an earlier response to Eugene Thacker’s position paper forwarded to the *Exploring New Configurations of Network Politics* conference held in Cambridge in March 2010. See Eugene Thacker, “On the Horror of Living Networks,” posted to the *conference* website, <http://www.networkpolitics.org/request-for-comments/dr-thackers-position-paper> (accessed on 29th June, 2010).
- [6] Gustave Le Bon, *The Crowd: A Study of the Popular Mind* (New York, Dover, 2002); Gabriel Tarde, *Social Laws: An Outline of Sociology*, trans. H.C. Warren (New York, London, Macmillan, 1899), Gabriel Tarde, *The Laws of Imitation*, trans. E.C. Parsons (New York, Henry Holt and Company, 1903); and Gabriel Tarde, *Psychologie Économique*, (Paris, Bibliothèque de Philosophie Contemporaine, 1903). Part of *Psychologie Économique* is translated by Alberto Toscano in *Economy and Society*, issue 36 no. 4, November, 2007.
- [7] Eugene Thacker, *Exploring New Configurations of Network Politics*.
- [8] Ibid.
- [9] Ibid.
- [10] Michel Foucault, *Madness and Civilization: A History of Sanity in the Age of Reason* (London, Routledge, 1989), 3.
- [11] As Thacker argues, “[i]n this regard nothing is more exceptional than the inability to distinguish between epidemic and war, between emerging infectious disease and bioterrorism.” Eugene Thacker, “Living Dead Networks,” *Fibreculture: Internet Theory, Criticism, Research* 4 (2005). http://journal.fibreculture.org/issue4/issue4_thacker.html (accessed on 29th June, 2010).

- [12] Roland Barthes, *S/Z* (London, Cape, 1974).
- [13] George Lakoff, *The Political Mind: Why You Can’t Understand 21st-Century American Politics with an 18th-Century Brain* (New York, Viking, 2008).
- [14] Ibid., 39-40.
- [15] Ibid., 28.
- [16] Ibid., 41.
- [17] Antonio Damasio, *Descartes’ Error: Emotion, Reason, and the Human Brain*, (London, Vintage, 2006), xxii.
- [18] Mirror neurons are located in the area of the brain called f5 which fires in response to the affects of others. Mirror neurons fire more effectively in face-to-face encounters, when there is a need to comprehend, or “mind read” the “intentions of others,” but they amount to more than simply recognizing a face. On the one hand, they lead to the automated copying of emotions, like joy, sadness or distress. On the other hand, they fire following the avoidance of face-to-face contact, as people tend to do when lying, or following the interruption of stable emotional signals through surprise, shock and a failure to predict. See Barbara Maria Stafford, *Echo Objects: The Cognitive Work of Images* (Chicago, University of Chicago Press), 75-81.
- [19] David Patrick Houghton, *Political Psychology: Situations, Individuals, and Cases* (London, Routledge), 143-154. Dr. A. K. Pradeep, “Persuasion: The Science and Methods of Neuromarketing,” industry whitepaper published on *NeuroFocus* website (September, 2007) http://www.neurofocus.com/pdfs/NeuroFocusWhitePaper_Persuasion.pdf (accessed 29th June, 2010).
- [20] Eugene Thacker, “On the Horror of Living Networks.”
- [21] Lakoff, 56.
- [22] Teresa Brennan, *The Transmission of Affect* (Ithaca, London, Cornell University Press, 2004), 62-63.
- [23] Ibid., 49.
- [24] Ibid.
- [25] As Deleuze infers, it is best not to confuse affect with such phantasy. Gilles Deleuze, *Two Regimes of Madness: Texts and Interviews 1975-1995*, (New York, Semiotext(e)), 102.
- [26] See Tony D Sampson, *Virality: Contagion Theory in the Age of Networks* (Minneapolis, University of Minnesota Press, due 2012).
- [27] Teresa Brennan, 32.
- [28] Gabriel Tarde, *The Laws of Imitation*, trans. E.C. Parsons (New York, Henry Holt and Company, 1903), 80.
- [29] As Tarde puts it: “[i]t is a great mistake to say that populations are controlled by fear alone... [I]n spite of frequent epidemics of panic, hope is certainly more catching than terror.” Ibid., 196.
- [30] Ibid., 202.
- [31] Ibid.
- [32] Obama images archived at: <http://flickr.com/photos/barackobamadotcom/sets/72157608716313371/> (accessed on 29th June, 2010).
- [33] Specific Obama image and flickr user comment archived at: <http://www.flickr.com/photos/barackobamadotcom/3008254887/> (accessed on 29th June, 2010).

- [34] Global Project, “Behind this victory, the great multitudinarian struggle,” an interview with Antonio Negri, *Global Project* website, <http://archive.globalproject.info/art-17685.html>, translation archived at: <http://anomalia.blogsome.com/2008/11/06/negri-obamas-victory-the-multitude/> (accessed on 29th June, 2010).
- [35] Michael Hardt, “Love as a Political Concept,” a lecture for the *European Graduate School*, 2007 <http://www.youtube.com/watch?v=ioopkoppabl> (accessed 2nd September 2008).
- [36] Nigel Thrift, *Nonrepresentational Theory: Space/Politics/Affect* (London, New York: Routledge, 2008), 139.
- [37] Nigel Thrift, “Pass it On: Towards a Political Economy of Propensity,” paper presented at the *Social Science and Innovation Conference* at the *Royal Society of the Arts* (RSA), London, UK, February 11th, 2009), 8. http://www.aimresearch.org/uploads/File/Presentations/_2009/FEB/NIGEL%20THRIFT%20PAPER.pdf (accessed on August 3rd, 2009).
- [38] Teresa Brennan, 74.
- [39] Eugene Thacker, “Living Dead Networks”.
- [40] Paul Marsden, “Forefathers of Memetics: Gabriel Tarde and the Laws of Imitation,” *Journal of Memetics: Evolutionary Models of Information Transmission*, 4 (2000) http://jomemmit.cfpm.org/2000/vol4/marsden_p.html (accessed on December 10th, 2007).
- [41] Richard Dawkins, *The Selfish Gene* (Oxford, Oxford University Press, 1976).
- [42] Susan Blackmore, *The Meme Machine* (Oxford, Oxford University Press, 1999).
- [43] Ibid.
- [44] Teresa Brennan, 74.
- [45] This all contrasts starkly with Tarde’s critique of the Darwinist emphasis on a biological form of struggle and opposition at the expense of cross-breeding and hybridization. See Bruno Latour and Vincent Antonin Lépinay, *The Science of Passionate Interests: An Introduction to Gabriel Tarde’s Economic Anthropology* (Chicago, Prickly Paradigm Press, 2009), 36. Moreover, even critics from within memetics point to a failure to locate an equivalent code mechanism at work in cultural environments. As Dawkins argues, unlike the gene, the meme has yet to find its Crick and Watson. See Richard Dawkins cited in Susan Blackmore, xii.
- [46] Teresa Brennan, 74.
- [47] See a similar discussion in Tony D Sampson, “Error-Contagion: Network Hypnosis and Collective Culpability,” in Mark Nunes (ed.), *Error: Glitch, Noise, and Jam in New Media Cultures* (New York, London, Continuum, 2010), 239-240.
- [48] Émile Durkheim, *The Rules of the Sociological Method* (New York, The Free Press, 1982 [1884, 1895]), trans. W. D. Halls, 129.
- [49] Robert Keith Sawyer, *Social Emergence: Societies as Complex Systems* (Cambridge, New York, Cambridge University Press, 2005), 1-9, 63-124; Elias L. Khalil and Kenneth Ewart Boulding (eds.), *Evolution, Order and Complexity* (London, Routledge Taylor & Francis Ltd, 1996); Jennifer M. Lehmann, *Deconstructing Durkheim: A Post-Post-structuralist Critique* (London, New York, Routledge, 1993), 129; N. J. Enfield and Stephen C. Levinson (eds.), *Roots of Human Sociality: Culture, Cognition and Interaction* (Oxford, New York, Berg, 2006), 377.
- [50] Robert Keith Sawyer, *Social Emergence: Societies as Complex Systems*, 105.
- [51] Eugene Thacker, “Networks, Swarms, Multitudes: Part Two,” *CTheory* (2004) <http://www.ctheory.net/articles.aspx?id=423> (accessed on 29th June, 2010).
- [52] Émile Durkheim, *The Elementary Forms of the Religious Life*, trans. Joseph Ward Swain (London, George Allen & Unwin Ltd, 1915), 444.
- [53] Eugene Thacker, “Networks, Swarms, Multitudes: Part Two.”
- [54] As Deleuze and Guattari contend, Tarde’s associations had nothing to do with either collective or individual representations, but pertain instead to a flow or a wave. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* (London, New York, Continuum, 1987), 218-219.
- [55] Gabriel Tarde, *The Laws of Imitation*, 109.
- [56] Nigel Thrift, *Nonrepresentational Theory: Space/Politics/Affect*, 220-254.
- [57] See further discussion in Tony D Sampson and Jussi Parikka, “Learning from Network Dysfunctionality: Accidents, Enterprise and Small Worlds of Infection,” *Conference Proceedings, ISEA 2010 RUHR: 16th International Symposium on Electronic Art*.
- [58] Alexander R. Galloway and Eugene Thacker, *The Exploit: A Theory of Networks* (Minneapolis, London, University of Minnesota Press, 2007), 27.
- [59] Alex Galloway’s position paper for the *Exploring New Configurations of Network Politics* conference <http://www.networkpolitics.org/request-for-comments/alexander-r-galloways-position-paper> (accessed 8th July 2010).
- [50] Duncan Watts, *Six Degrees: The Science of a Connected Age* (London, Vintage, 2003), 50.
- [61] Bruno Latour, “Gabriel Tarde and the End of the Social,” *The Social in Question: New Bearings in History and the Social Sciences*, Patrick Joyce (ed.), (London, Routledge, 2002), 117-132. Version at: <http://www.bruno-latour.fr/articles/article/082.html> (accessed July 09).
- [62] Nigel Thrift, *Nonrepresentational Theory: Space/Politics/Affect*, 110.
- [63] Ibid., 110-111.
- [64] It is Deleuze who notes the importance of finding the appropriate abstract diagram. A diagram that can both exercise a force (or many forces of relation) on the social field and display these relations between forces that determine features and functions apparent in the field. Gilles Deleuze, *Foucault* (London, Athlone Press, 1988), 36, 34-44.
- [65] Sean Dodson, “Was software responsible for the financial crisis?” *The Guardian*, Thursday 16th October, 2008 <http://www.guardian.co.uk/technology/2008/oct/16/computing-software-financial-crisis> (accessed 12th July, 2010).
- [66] Brian Massumi, *Parables of the Virtual: Movement, Affect, Sensation*, (Durham and London, Duke University Press, 2002), 86.
- [67] Ibid.
- [68] Gabriel Tarde, “Economic Psychology,” translated by Alberto Toscano, *Economy and Society*, 36(4), November 2007, 633.
- [69] Ibid.
- [70] Ibid.
- [71] Capitalism has a long history of such bubble building events. See for example Sadie Plant’s account of Tulipomania in the 1630s in her Foreword to *The Spam Book: On Viruses, Porn and Other Anomalies From the Dark Side of Digital Culture*, Jussi Parikka and Tony D Sampson (eds.), vii-x.
- [72] Bruno Latour and Vincent Antonin Lépinay, *The Science of Passionate Interests: An Introduction to Gabriel Tarde’s Economic Anthropology*.

[73] Nigel Thrift, "Pass it On: Towards a Political Economy of Propensity," 3.

[74] Ibid.

[75] As Tarde puts it: We see specific desires that have been excited or sharpened by certain inventions or practical initiatives, each of which appears at a certain point from which, like a luminous body, it shoots out incessant radiations which harmoniously intersect with thousands of analogous vibrations in whose multiplicity there is an entire lack of confusion... The order in which these inventions or discoveries appear and are developed is, in a large measure, merely capricious and accidental; but, at length, through an evitable elimination of those which are contrary to one; another (i. e., of those which more or less contradict one another through some of their implicit propositions), the simultaneous group which they form becomes harmonious and coherent. Viewed thus as an expansion of waves issuing from distinct centers and as a logical arrangement of these centers and of their circles of vibration, a nation, a city, the most humble episode in the so-called poem of history, becomes a living and individual whole. Gabriel Tarde, *The Laws of Imitation*, 109.

[76] Nigel Thrift, "Pass it On: Towards a Political Economy of Propensity," 19.

[77] Gabriel Tarde, "Economic Psychology," 620.

[78] Nigel Thrift, "Pass it On: Towards a Political Economy of Propensity," 18.

[79] Ibid.

[80] Ibid.

[81] Ibid., 18-19.

[82] Ibid., 18.

[83] Gabriel Tarde, *The Laws of Imitation*, xi.

[84] Nigel Thrift, "Pass it On: Towards a Political Economy of Propensity," 24.

[85] Dr. A. K. Pradeep, "Persuasion: The Science and Methods of Neuromarketing."

[86] Jakob de Lemos, "Measuring Emotionally 'Fuelled' Marketing." *Admap Magazine*, Issue 482, April 2007, 40-42.

[87] Ibid.

[88] Dr. A. K. Pradeep, "Persuasion: The Science and Methods of Neuromarketing."

[89] Nigel Thrift, "Pass it On: Towards a Political Economy of Propensity," 22.

[90] Barbara Maria Stafford, *Echo Objects: The Cognitive Work of Images*, 76-77.

[91] Teresa Brennan, *The Transmission of Affect*, 23; and Michael Hardt, "Love as a Political Concept."

[92] Nigel Thrift, *Nonrepresentational Theory: Space/Politics/Affect*, 253.

[93] Ibid.

[94] Gabriel Tarde, *The Laws of Imitation*, preface to Second Edition, xvii

[95] Ibid., xix.

[96] Ibid.

[97] Ibid.

[98] Ibid.

[99] Ibid.

'Tarde as Media Theorist'

an interview with Tony D. Sampson

by *Jussi Parikka*

@Theory, Culture & Society Journal (2013)

This discussion focuses on Sampson's recently published monograph *Virality: Contagion Theory in the Age of Networks*, characterised by Brian Rotman as "offering a new theory of the viral as a sociological event." In this conversation, Parikka and Sampson talk about Gabriel Tarde and assemblage theory, and why Tarde should be approached as a media theorist who is more interested in the somnambulistic notions of the social. Sampson's interest in the non-cognitive – and non-cognitive capitalism – resonates with recent discussions of affect, but with a special focus on developments in HCI-design and research.

Jussi Parikka: I would like to start by asking why you are approaching your topic – contemporary network culture – via Gabriel Tarde, a 19th century social theorist? What is it that affords Tarde to be seen as a suitable theoretical source for an analysis of digital network culture, where agency does not lie only in human contagion, but also non-human actors?

Tony Sampson: It was Tiziana Terranova who first suggested Tarde, quite some time ago now. I was trying to think through these ideas I had about the contagions of network culture. I had, up until that point, been trying to develop an assemblage theory approach to networks referring to material from network and computer science. I wanted to keep well away from metaphorical renderings of digital contagion, which seemed to me to be the worst possible starting place. This approach worked OK, to a point, but Tarde's imitation thesis opened up a lot of new possibilities. Interestingly I was able to take another look at Deleuze through Tarde's work. It was like coming at him from a fresh direction. Although Deleuze didn't write a book on Tarde – and I wish he had – he was, I think, influenced by him as much as he was by Spinoza, Bergson or Nietzsche. This is the point François Dosse makes in *Intersecting Lives*. Mainly, Tarde allowed me to reread assemblage theory as a social theory or more precisely a theory of social subjectivation. I would say that Tarde is possibly the first assemblage theorist insofar that he is only really concerned with desire and social relationality.

Another important thing about Tarde's role in *Virality* is that he does not distinguish between nature and society or similarly between biology and culture. He helped me as such to break through the artifice of metaphorical contagion which makes it seem like the biological is always invading the social, at least where biological language and rhetoric seem to impose them-

selves on social phenomena. Once that artifice is removed we nevertheless see that it is the other way round. The biological is always social, and it's the social that is contagious. So what I in *Virality* call a *resuscitation* of Tarde positions him as a media theorist within a nature-society zone of indistinction. This wasn't hard to do. After all, when he writes about imitative radiation or imitation-suggestibility, Tarde is really pointing to a monadological mediation that does not distinguish between humans and non-humans, just as it does not seek to separate nonconscious from conscious states or mechanical habit from a sense of volition. As he puts it, all phenomena are social phenomena, all things a society. So like Whitehead to some extent, he put atoms, cells, and people on an equal footing: a society of things. This is why I also think it important to stress that there are networks in crowds and crowds in networks.

JP: Virality pitches an intriguing idea about somnambulist media theory – can you talk a bit more about that concept and its relation to non-volition?

TS: Again the somnambulist comes from Tarde, of course, and what I try to do in the book is grasp how this concept resonates with network culture. It seems to me that the tendency toward contagion in networks seems to be related to the implicit

brain functions that Tarde describes as unconscious associations – through which he contends that the social assembles itself. This relation between virality and nonconscious association could be grasped as the spreading of a capricious state of false conscious, if you like, wherein, on one hand, the social is infected at the infra level of brain function by imitation-suggestibility, and on the other hand, we find that everyone is just kept too busy, and too distracted, to really grasp that their shared feelings are being steered toward this goal or that goal. The idea of sleepwalking media, or media hypnosis, is similar in many ways to Jonathan Crary's work on attentive technologies. Crary in fact provides a wonderful repositioning of the attention economy thesis. Unlike the account given by business school gurus who see attention as a precious resource to be fought over, he grasps the controlling and disciplinary nature of attention. Fuller and Goffey have similarly referred to this as the inattention economy, which like Crary does not distinguish between attention and inattention. They are not polar opposites.

JP: Related to those ideas, you insist on talking about non-cognitive capitalism and its techniques. Why this emphasis that takes you in a slightly different direction than the previous years of discourse in cultural and political theory about cognitive capitalism? What is it that makes this approach different?

TS: So yes non-cognitive capitalism does not stray too far from the familiar Taylorist and post-Taylorist flow of labour. In terms of human-computer work we might think of this as a shift from ergonomic relations; the best possible physical fit established between human and machine during the labour process, if you like, toward a cognitive model focused on mental labour. We see this shift between paradigms everywhere in Human Computer Interaction (HCI) literature and practices, but now something else seems to be happening. The emphasis is increasingly on the labour of emotions, affect and experience. These are measured using biometric and neurotechnologies alongside more traditional cognitive tools that probe memory and attention. This is just one aspect of the neuroculture we find ourselves in today where it is not the person, but the neuron, or perhaps the neurotransmission itself, that is being put to work in all kinds of ways to produce a new kind of molecular subjectivity.

It was not until the latter stages of writing the book that I started to read the social psychologist Robert Zajonc's work on preferences needing no inferences; that is to say his idea that feelings might have thoughts of their own. Indeed, if marketers, political strategists and designers can make us feel a certain way then they can also influence the way we think. This mirrors a trend in commercial design at the moment to grasp the importance of the relation between emotions and cognition. Zajonc goes even further though by saying that affective systems

are both independent of, and possibly stronger than, cognitive systems. Potentially then marketers, politicians and designers needn't bother appealing to thought at all. This is the trajectory I think non-cognitive capitalism follows. In addition to the labour of neurotransmission there is also this well publicized shift in media technology to so-called ubicomp. I think this is important too. Here we see nontask interactions also occurring below attentiveness. Pervasive computing works by producing interactions that work on the user simply by way of the user coming into contact with a "hot" zone or becoming part of a device-to-device network, triggering an event that they need never know about.

*JP: Your ideas seem to relate closely to *Evil Media*, a recent book by Matthew Fuller and Andrew Goffey. Is there a wider interest in the non-communicative, and non-representational sort of aspects of media culture?*

TS: Absolutely, this is why I was so pleased to do my first *Virality* talk with Matt and Andy at Goldsmiths. I think there's a nice synchrony between my book and what they call the unobtrusive greyness of certain media practices. This is not solely the strategic use of media for specific goals, or the uncovering of some embedded or hidden ideology, but instead points to the unintended, the re-appropriated or the steering of accidents that just

crop up. I wrote about the immunologic stratagem as a kind of deceptive fearmongering originating from the accidents of computer science in the 1970s and 80s. This is how I see viral culture. It's not as viral marketing would like it to be – a step-by-step procedure that leads to effective zero cost marketing. Instead we find that the digital entrepreneur needs to nurse virality into being by priming brands so that they become stickier than their rivals and their potential to spread all the more likely. In network marketing nothing is for certain. All you can really do is bide your time while waiting to navigate the next accident.

Another connection I've recently made to *Evil Media* is with the artist group YoHa. They asked for contributions to their *Evil Media, Curiosity Cabinet* project which is being exhibited in Berlin in the New Year. I've opted for Modafinil. This neuropharmaceutical is mainly used to treat sleeping disorders, some of which are related directly to malfunctioning labour processes, like shift work disorders. That's hideous enough, but the greyness of Modafinil becomes apparent in its off-label uses by students and soldiers who need to keep attentive in the university exam and on the battlefield.

*JP: Although the difference from *Evil Media* seems to be that you talk of love in your book too – can you elaborate on that point, relating to affects?*

TS: So there is this really intriguing Machiavellian thing going on in *Evil Media*, right? It is fear that is preferable to love. My work simply turns that idea on its head. Tarde writes on love in several places, in his novel *Underground Man* and the extralogical part of *The Laws of Imitation*. He thinks that love is, albeit often transitory, far more catching than fear. He also regards it an asymmetrical power relation in which it is mostly those in love who copy their beloved. I took inspiration from that and a couple of others. Teresa Brennan, for example, writes that love, unlike fear, does not need a medium to cling to. Love for Brennan is both affect and medium at the same time, which sort of boosts its affective contagion. Michael Hardt's love as a political concept is also interesting to me. His notion that the love of family, race, god and nation tends to unify populations in ways that are "bad" becomes significant, I think, to understanding love as a far more effective and sinister Trojan than fear. Indeed, just because an experience makes you feel good doesn't mean it will be good for you. I look at Obama love like this – as a kind of grey viral media practice of love. Aside from the obvious uses of love in his campaign, like the I Love Obama websites, T-shirts and badges, there are also those haptic images of Obama, with his family on the eve of his first election victory. We hear how this very cool guy wants to make a new partnership with the Middle East and close Guantanamo, but all we get are surges in troop numbers, his initial support for the Mubarak regime, and the relentless rise of the drones. His supporters say that he wants to

see Guantanamo closed down, so he's either deceitful or totally ineffective. That's the greyness of Obama love.

JP: *One of the most intriguing bits in the book is when you look into concrete technologies that are emerging, like such interface design techniques that tap into the involuntary. Is this another sort of a level of affect modulation, for instance in emotion/affect based interface design, and how does it relate to the recent wider debate concerning "affect" in cultural theory?*

TS: I see somnambulist media theory as a useful way to understand the so-called third paradigm of HCI. This is the move to exploit emotions and affect, social context, and experience processing already mentioned. Indeed, as a part of this shift, experience design consultancies and neuromarketers are fast becoming the next big thing in the persuasion business. Their biggest customers are apparently the banks and other financial institutions. Not surprisingly these enterprises have an image problem at the moment. So they are keen to tap into the potential to connect the end user to their brand via the visceral level of experience processing, appealing straight to the gut. This is what emotional design promises to do.

This stuff is slowly taking hold. I've attended a number of design related industry events lately where biometric techniques are being put into practice by the designers of apps, advergames

and eCommerce, for example. They are enthusiastically hooking up user generated affect to GSR [galvanic skin response] and EEG [electroencephalography] devices which can work alongside facial and posture recognition software and eye tracking technology to explore how states of arousal across the affective valence might correspond to such things as brand identification and purchase intent. There is a desire here to understand what is happening to the user at the nonconscious level of experience processing so that brands can be primed and users steered toward certain windows of opportunity.

Again these concrete practices are steeped in greyness. These technologies and methods were initially intended for neurological treatment of conditions like ADD and dementia. There are no hidden agendas in their repurposing though. There is no effort to cover up the intrusiveness of these marketing techniques. The practice of persuasion, which became something of a taboo in old media arenas, has returned, it would seem, with a vengeance.

Crowd, Power and Post-democracy in the 21st Century

by *Obsolete Capitalism*

@Obsolete Capitalism blog (2013)

‘Rural fascism and city or neighborhood fascism, youth fascism and war veteran’s fascism... fascism of the couple, family, school, and office. Only the micro-fascism can answer the global question: “why does desire long for its repression? how can it desires its very own repression?”’

— Gilles Deleuze, Fèlix Guattari, *A Thousand Plateaus*

On the micro-fascism

Obsolete Capitalism *Let us start from the analysis Wu Ming set out in their brief essay Grillismo: Yet another right-wing cult coming from Italy and which interprets Grillo’s Five Star Movement as a new authoritarian right-wing faction. Why did the desire for change of much of the electorate long once again for its very repression? We seem to witness the re-affirmation of Wilhelm Reich’s thought: at a given moment in history*

the masses wanted fascism. The masses have not been deceived: they have understood very well the danger of authoritarianism; but they have voted it anyway. Even more worrying is that the authoritarian Berlusconi's Freedom People (PDL) and Grillo's Five Star Movement (M5S) conquer more than half of the Italian electorate together. A very similar situation arose in the UK in May 2013, with the UKIP's exploit in the latest local elections. Why and in what measure are the toxins of authoritarianism and micro-fascism present in contemporary European society?

Tony D. Sampson I'd like to think this through using Tarde's somnambulist as the situation seems to lend itself to a theory of sleepwalking subjects, but this approach should also have a UK political context. So yes, once again, we are faced with a surge in rightwing populism, particularly here in my home county of Essex: a much maligned county east of London along the Thames Estuary. Across the UK the rise of the right should not really be a surprise. The working poor and unemployed have been hit hard by the Tory cuts. They need someone to blame and political forces like UKIP, BNP and EDL (English Defence League) have just the (one) policy to do that: they blame the "Others". Moreover though, many of these people have completely turned their backs on the left. This is partly due to the Thatcher-Murdoch demonizations in the 1980s, but it's also due to the failure of the kind of bourgeois democracy they experienced under New Labour. Blair's "third way" decimated left thinking in the middle ground. He moved the centre left further to the right

than the Tories with his public-private initiatives and laissez-faire approach to banking and communications. Now we have the coalition and their insulting mantra of "we're all in this together." Unemployment is on the increase, along with mini-jobs and their derisory contracts. The Liberals used to soak up the popular protest vote. No one believed they could ever really get into power. But they did! The illusion of bourgeois democracy is now exposed, which is a good thing, but this could also mean that many people in Essex turn even further to the right.

This broad macropolitical failure does not however explain it all. At the microsocial level of the "people" we are, it seems, seeing the continuance of a fascistic political unconscious. In Essex the people have voted Tory for years. Indeed, the question the left have been asking for a long time now is why people in this neglected London overspill support a political class of expensively educated, career politicians whose policies contradict their own interests? Is this a people who seek their own repression? So yes Reich's question is pertinent once again. We need to try to rethink what seemed to him to be the perverse impulses of the fascist unconscious; a desire for repression that seeps through the layers into conscious rational choices. Why do so many people desire this kind of popular fascism? They are aware. They are not deceived. The fascist brain is caught up in a mixture of rebellious emotions and reactionary ideas against the putrid centre ground. But it is not democracy they desire. They are in need of

a religion to protect them from the chaos. They crave authority, as Reich argued. They desire belief.

While Reich's binary thinking may have famously helped him to mistake the desire to be repressed for an irrational perversion of an otherwise rational state, he did point out that Marxist sociology offers an equally binary perspective of the desiring machine. They had it wrong about mass psychology. Contrary to how we perceive the masses through the lenses of Marxist thinking, they do not perceive themselves as a hard done by proletariat pitched against the bourgeoisie elite. Desire does not have a class distinction hidden inside. As Reich points out, the Marxist ideal of abolishing private property seems to clash with the people's desire for all kinds of commodities. He mentioned shirts, pants, typewriters, toilet paper, books etc, but today we can add iphones and flat screen TVs. They also seem not the least concerned if it is the state or the private sector that appropriates their surplus labour. No surprise then that the promises of a return to the student protests of 1968 all but fizzled out in the winter of 2011. Indeed, it was the English summer riots that emerged as a much greater force. But this was no Arab Spring. Nobody took over Trafalgar Square. They went straight to the shopping mall. Perhaps the rioter's desire to loot needs to be grasped as a kind of perversion of the desire to shop.

1919, 1933, 2013. On the crisis

OC *In 2008 Slavoj Zizek said that when the normal run of things is traumatically interrupted, the field is open for a 'discursive' ideological competition. In Germany in the early 1930s Hitler won the competition to determine which narrative would explain the reasons for the crisis of the Weimar Republic — the Jewish conspiracy and the corruption of political parties. Zizek ends his reflection by stating that the expectations of the radical left to get scope for action and gain consent may be deceptive as populist or racist formations will prevail: the Greek Golden Dawn, the Hungarian Fidesz, the French Front National, the UK Independence Party are examples. Italy has had farcical groups such as the Lega Nord or the recent Five Star Movement, a bizarre rassemblement that seems to combine Reverend Jones People's Temple with Syriza, or 'revolutionary boyscoutism' with the disciplinarianism of the societies of control. How can one escape the crisis? What discursive, possibly-winning narratives should be developed? Are the typically Anglo-Saxon neo-Keynesian politics an answer or, on the contrary, is it the new authoritarian populism that will prevail?*

TS Perhaps I need to begin by realizing the limits of a my philosophical approach in this context. I cannot provide a discursive formation. It's about relational concepts rather than a series of logical propositions. *This* will not lead to *that*. We need to approach discursive formations by exposing the nondiscursive relations of encounter with events. For example, we can ask how the

microsocial encounters macrolevel politics. What are the new layers of experience that succeed Reich? What is it that viscerally appeals to the “people” of Essex? Perhaps it is fear! There is the Eastern European conspiracy/contagion here (they are coming for our jobs and benefits). They blame it on the Muslims too (they want to kill us all). What escape do we have from these formations? What kind of intervention could clear away the fog of populism that obscures affirmative felt relations: the empathy all repressed people should have in common with each other.

On the missing people

OC *Mario Tronti states that ‘there is populism because there is no people.’ That of the people is an enduring theme which Tronti disclaims in a very Italian way: ‘the great political forces use to stand firmly on the popular components of the social history: the Catholic populism, the socialist tradition, the diversity in communism. Since there was the people, there was no populism.’ Paul Klee often complained that even in historical artistic avant-gardes ‘it was people who were lacking.’ However the radical critique to populism has led to important results: the birth of a mature democracy in America; the rise of the theory and the practice of revolution in the Tsarist Empire, a country plagued by the contradictions of a capitalist development in an underdeveloped territory (Lenin and bolshevism). Tronti carries on in his tranchant analysis of the Italian*

and European backgrounds: ‘In today’s populism, there is no people and there is no prince. It is necessary to beat populism because it obscures the relations of power.’ Through its economic-mediatic-judicial apparatuses, neopopulism constantly shapes “trust-worthy people” similar to the “customers portfolio” of the branded world of neoliberal economy: Berlusconi’s “people” have been following the deeds of Arcore’s Sultan for twenty years; Grillo’s followers are adopting similar all-encompassing identifying processes, giving birth to the more confused impulses of the Italian social strata. With institutional fragility, fluctuating sovereignties and the oblivion of left-wing dogmas (class, status, conflict, solidarity, equality) how can we form people today? Is it possible to reinvent an anti-authoritarian people? Is it only the people or also politics itself that is lacking?

TS One source of the fog of populism is the seemingly reciprocal relation between the people and the media. While some coverage of the protests in Turkey are appearing at the backend of BBC news reports, top of the most watched/listened to list on the news website have been items relating to the price of the new PS4, interest in Apple’s new look for iOS 7; and live video coverage from Westminster Abbey of a special service to mark the 60th anniversary of the coronation of Queen Elizabeth II. The media has also perpetuated the rise of the loveable rightwing buffoon: UKIP’s Nigel Farage and the Tories’ Boris Johnson. These rightwing conceptual personae help to obscure power relations in the UK, which are rapidly sinking back to a people dominated by those “born to rule” Bullingdon bullies.(1)

So yes, I agree with Tronti's point that you raise, about the people being missing from populism, or at least, to put it another way, they are difficult to make out in all this fog. *A new people need to be found.*

On Control

OC In Postscript on the Societies of Control, published in 1990, Gilles Deleuze states that, thanks to the illuminating analyses of Michel Foucault, a new diagnosis of contemporary Western society has emerged. Deleuze's analysis is as follows: control societies have replaced disciplinary societies at the beginning of the twentieth century. He writes that 'marketing is now the instrument of social control and it forms the impudent breed of our masters.' Let us evaluate who stands beyond two very successful electoral adventures such as Forza Italia (Berlusconi's first party) and M5S: respectively Publitalia 80 owned by Marcello Dell'Utri, and Casaleggio Associati owned by Gianroberto Casaleggio. The incontrovertible fact that two marketing companies stand behind these political projects reinforces Deleuze's analysis. Mechanisms of control, media events such as exit polls and infinite surveys, im/penetrable databases, data as commodities, continuous spin doctoring, influencers that lead consensus on the net, opaque bots, digital squads, dominant echo-chambering. Evil media. These are the determinations of post-ideological (post-democratic?) neoliberalism. The misery of the new control techniques competes

only with that of the glass house of transparency (web-control, of course). Jacques Ranciere says we live in the epoch of post-politics: how can we get out of the neo-liberal cage and free ourselves from the ideological consensus of its electoral products? What will the reconfiguration of left-wing politics be after the exhaustion of Marxist hegemony?

TS We not only need to find the people, but also better grasp what their desires might be. With this in mind, it is perhaps interesting to look at the rhetoric of contagion deployed by the Tories. They do not want to defend their privilege, they say; they want to spread it! (2)

This is the sort of hollow discourse that is easy to see through, but a little harder to resist. Not simply because the relations of power are dominated by the privileged, but because the "people" desire the inventions of privilege. The somnambulist subject is lead by example so much so that the examples he desires become incarnated in him. He desires to become the example that is copied. In Essex the sleepwalkers are caught up in their passionate interest in becoming rich businessmen, footballers, celebrities, soldiers, gangsters. Of course most people never get anywhere near to what they aspire to be, but are forever striving for it. So if you cannot become what you aspire to be, the next best option is to continue to follow the example. Where else is there to go? Desire needs somewhere to go.

Not that every example is unobtainable. It is fairly easy to become a soldier in Essex or at least pretend to be one by lining up in support of “our” boys through thick and thin, through legal and illegal wars. This is the threat posed by the EDL. Tarde would have described these people as somnambulists; not merely unconscious beings, but unconscious by association.

The Tory think tanks grasp this thing about examples well, I think. They employed an aspirational Essex man to become their voice in the popular press. Andy Coulson (now charged with phone hacking) worked his way up from a local Essex newspaper to become the editor of Murdoch’s poisonous tabloids. He was introduced to counter the Eton accents with the voice of working class aspiration. They needn’t have bothered because the working class in Essex have long been in love with the posh. The recent rise of rightwing buffoonery has arrived via a long held passion for inventions like Saatchi’s Thatcher and the much older Royal brand that seems to continue to soak up the desire to be repressed.

As Reich said, the working classes do not see themselves as a struggling proletariat. They see themselves in mixture with the middle classes. That’s not a bad thing. Any modicum of change would require the involvement of all. However, unlike Turkey at this moment where it is the young middle classes who are willing to be on the streets in the protests, the left leaning middle

classes here in Essex are hiding in their cosy enclaves. They have too much to lose. Even the growing instability of their jobs in the City is not enough (yet) to get them out on the streets or anywhere near their poorer neighbours. So what would it take to shake them out of their neoliberal cages?

On the Googlization of politics; the financial side of digi-populism

OC The first decade of the 21st century has been characterized by the rise of neo-capitalism, referred to as cognitive; in this context a company like Google has established itself as the perfect synthesis of web-business as it does not compensate, if not in a small part, the content-carriers it lists. In Italy, following the electoral success of the Five Star Movement we witnessed a mutation of the typical prosumer of social networks: the new figure of the “prosumer-voter” was in fact born on Grillo’s blog - being essentially the one and only channel of information of the movement. The blog is a commercial activity and the high number of contacts and daily access has steadily increased in the last year. This digital militancy produces incomes both in the form of advertising and online sales of products such as DVDs, books and other material associated with the movement. All of this leads to the risk of googlization of politics whereby the modes of financing political activity radically change because of the “network surplus-value” - an expression coined by the researcher Matteo Pasquinelli to define that portion of incomes extracted from the practices of the web prosumers. Having said this, are we about to witness a shift of the financial

paradigm applied to politics? Will the fundings from powerful lobbies or the general public be replaced by micro-donations via web (in the style of Obama's) and by the exploitation of the prosumer-voters? And if so, will the dominant 'googlization of politics' involve any particular risks?

TS In many ways this is a second front. The fear contagions perpetuated by the mainstream media only go so far. They need to be accompanied by the intimacy of something like Obama's campaign. This is just the tip of a much bigger effort to tap into, to nudge, and to steer feelings via networks. This is a different kind of propaganda model though. The networking of Obama love has at its heart a user experience designer. The risk is that the contagion will be so well designed that we'll be distracted enough and miss it. The best user experiences are invisible.

On digital populism, on affective capitalism

OC *James Ballard once said that after the religions of the Book we should expect those of the Web. Some claim that, in fact, a first techno-religion already exists in the form of Affective Capitalism whose technological and communicative characteristics mirror those of network cultures. This notion of a secularized cult can be traced back to Walter Benjamin's thought but is enriched by a very contemporary mix of affective manipulation techniques, politics of neo-liberalism and political practices 2.0.*

The rise of the Five Stars Movement is the first successful example of Italian digital populism; Obama's campaign in the U.S.A. has witnessed an evolution of micro-targeting techniques - customized political offers via the web. The new frontier of both medical and economic research is producing a disturbing convergence of evolving 'fields of knowledges': control theories, neuro-economics and neuro-marketing. In 1976, in the optic of the 'war-repression' schema, Foucault entitled his course at the Collège de France 'Society must be defended'. Now, faced with the general friability of all of us, how can we defend ourselves from the impact of affective capitalism and its digital practices? Can we put forward a differential, local knowledge which, as Foucault said, 'owes its force only to the harshness with which it is opposed by everything surrounding it'?

TS The politics of Tarde's somnambulist can be found in two places. The first is in the capricious force of imitative encounter; in the affective contagions that spread through the fog. Right-wing ideas and emotions can sometimes spread like wild fire. In the wake of the Woolwich murder we expect to see much more of this. The second requires an intervention into the vital forces that link example to example. What is perhaps needed is interference; not a counterimitation, but a nonimitation that breaks down the flow of certain fascist inventions: a deterritorialization. In effect, the somnambulist needs to *wake up!*

Many have seen both kinds of politics manifested in network cultures. Social media encourages both intervention and sleepwalking. To this extent, I am concerned that the to and fro of e-petitions on Facebook and Twitter can also have an entropic effect on protest. Again, it seems to soak up desire rather than deterritorializing it. I wonder therefore if Tarde's vitalist imitation can replace Reich's Orgone as an anti-entropic force. Unlike Reich, Tarde was not a binary thinker. He positioned the irrationality of biological desires and seemingly rational in an inseparable in-between space. Microsociology becomes a mixture of visceral experiences, mechanical habits, and an illusion of self that is not locked away, but vividly etched with the suggestibility of the Other. It is in this multilayered culture that desires become appropriated by social invention. Quite often, it seems, these inventions take on a fascistic dimension: rural, city, youth, family, as Deleuze saw microfascism *everywhere!* So we still need to focus on resisting all forms of fascism, but trying out nonimitative interferences rather than taking counter positions.

A small, but perhaps significant interference that we have seen recently is the Railway pub in Southend in Essex. It was once known as the BNP (British National Party) pub. They used to meet there I'm told.(3) The pub has certainly become Other. We recently saw a bouncer threaten to eject someone for a racist comment. Now it is a haunt for local artists, musicians and one would hope a shadow of a different kind of Essex people.

It plays host to leftwing film nights and union meetings. What is more interesting is that the pub is not a middle class comfort zone by any means, but the middle classes are beginning to visit. Whether or not this or any other cultural hub can really grow into something that can intervene in the kind of popularist somnambulism we see in Essex is of course circumspect, but as a site of nonimitation the removal of the BNP it seems like an interesting place to explore. What kinds of deterritorialization occur in these places? What new people might emerge?

Notes

1. The Bullingdon Club is a secret society dining club exclusive to students at Oxford University. The club has no permanent rooms and is notorious for its members' wealth and destructive binges. Membership is by invitation only, and prohibitively expensive for most, given the need to pay for the uniform, dinners and damages. PM Cameron, London Mayor Johnson and Chancellor George Osborne were all members, as well as the financier Nathaniel Philip Rothschild.
2. In a speech to the Tory party conference on Wednesday Oct 10th 2012, British PM David Cameron promised to 'spread privilege' of the kind he enjoyed growing up as he vowed to make the country one of aspiration.
3. There is currently an EDL pub in the town.

Crowds vs publics, Ukraine vs Russia, the Gaza crisis, the contagion theory and netica

a dialogue with Tony D. Sampson

by *Rares Iordache*

@ #hibridmedia magazine (2014)

Rare Iordache: *After EuroMaidan to the conflict between Ukraine and Russia. This event increased his covering and it transformed into a genuine war. When I think at EuroMaidan I make a comparison with Indignados, the protests in Spain. There are several distinctions, but the contagions and their spreading caught my attention. Tell me, what do you think were the contagious objects in this case? Another interesting thing is epidemiography, a term used by John Postill. This one is also in connection with viral phenomena and the contagious objects.*

Tony D. Sampson: What is the difference between Spain and Ukraine? What tips the contagiousness of one protest into revolution and civil war while the other fizzles out? Although there have been analogous patterns emerging in recent years – beautifully portrayed in **John Beiler**'s big data application (despite its

obvious weaknesses) – I’m not sure there’s one concrete object or set of viral objects determining what goes viral. In **Virality** I asked what we might learn from **Gabriel Tarde**. In terms of revolution we need to look beneath the spreading of mere belief systems (ideologies) to how desires are given release or inhibited by invention. The object of desire is always belief; meaning that the biological and social mingle at the point where desires are appropriated by social inventions. We perhaps need to think through the interwoven relations established here between the desire for change and inventions of old hierarchies, revolutionary crowds, mobs, mass protests alongside mediated publics and electronic networks. **Tarde’s** proto-media theory also provides us with a familiar distinction between publics and crowds. Crowds have been progressively usurped by mediated publics. On one hand, crowds have something of the animal about them. They are not easily led. If you want to win a revolution you probably need an animal on your side. On the other hand, the new publics appear¹ to be better informed by the new media, but are in fact more easily controlled; mainly as a result of the distances the increasingly mediated flows of information open up between connected subjects. There is, I suppose, less need to join a crowd as a source of information. This marks the beginning of press baron power and manufactured mass audiences. Old crowd theories suggested that the violent irrationality of crowd power was just about enough to prevail over old aristocratic hierarchies.

1. See John Beielser’s map: <https://vimeo.com/115366102>

Prevailing revolutionary movements have historically relied on some level of violence – the muscle of the mob; usually spilling out of the poorer neighbourhoods and storming the palaces. So what difference can a network make? Take Beielser’s protest map again. A tipping point may well correspond with the wide-scale uptake of the Internet. Indeed, there are echoes of crowd theory evident in some of the popular ideas about network contagions today. The BBC broadcast a documentary a couple of year’s back fundamentally claiming that Facebook caused the Arab Spring. Governments take these claims seriously too. They see social media as a threat.

But is a network like a crowd? Things are complex. There are networks in crowds and crowds in networks, but a network only seems to have revolutionary potential if it can tap into the violence of an actual crowd; a crowd prepared to put its life on the line for the cause. Indeed, I am growing a little sceptical about the threat posed by social media. The problem for protesters in most western European countries is that they are still countered by a docile public led by corporate media and bourgeois politicians. When the students got out of hand during the fees protests in the UK most of the public seemed to turn against them, welcoming their suppression. Others remained blissfully distracted by their diet of celebrity gossip, football transfers, and TV talent shows. Social media provides an alternative; it acts as a vent for protest, of course. It has an influence on discursive

formations and interacts with the actions of crowds. But it's a distraction too. The extreme police violence played a role in the demise of the student movement, but they didn't close down their accounts. The stuff that generally trends on these networks does not appropriate the desire for political change, but rather indulges a craving for joyful encounters – entertainment, sex, love, scandal, and fun, or as Olga Goriunova argues, utter idiocy. Perhaps there's revolutionary potential in this stuff, but how that works I'm not sure. For every FB posting encouraging action on the streets there seems to be thousands of stupid cat pictures. It's also important to note that contagions are not inherently radical. Contagions can be very conservative. As Barbara Ehrenreich points out, the only English 'revolution' was founded on the spreading of a Calvinist belief system that opposed the kind of festivities and carnivals that we might usually associate with the animality of radical protests. As Beieler's map problematically illustrates the contagion could be an Occupy or Tea Party protest... Perhaps networks are a hybrid crowd-public or ersatz crowds that lack the animality of actual crowds. We cannot storm the Bastille with tweets alone! The crowd needs to become the brutal muscle that intertwines with network sloganing. So yes, any attempt to produce epidemiographs of protest movements studying the interaction between network and crowd is very welcome.

R.I.: *I try to establish a triad between media – archaeology, cyber-in-*

*telligence and philosophy of information. We can start this discussion from the particular case of network archaeology. At this moment, beside the impact of flow information and of his transgression, I can talk about a kind of ethics of information. In fact, how we use the information in cyberspace. This issue will give his quality. We are able to set up a balance between the quantity and the quality of information via **Luciano Floridi**. I define this ethics as (n)ethics because all is about functionality. In reality, **Netica** is a software program developed by **Norsys Software Corporation**. Its purpose is to make a network more intelligible to us. Everything relies on a set of algorithms. So, what are your first thoughts about this triad and his rethinking based on (n)ethics?*

T.D.S.: Media archaeology is very appealing; not least because it helps us to think up ways by which we can rummage through the archives of media invention without placing the constraints of a discipline on the researcher. As **Erkki Huhtamo** and **Jussi Parikka** put it, media archaeology needs to go against the grain of almost everything. It's a nomad. So I think any attempt to triangulate it needs to keep this in mind. If it's to work well then the archaeology needs to perhaps loosen up the ethics. This is what Parikka's mapping of noise and Genosko's fairly recent book on communication theory do. Most technical histories of Shannon and Weaver regard them as having brought noise under control, but there is of course an archive of accidents captured in, for example, collections of computer viruses and glitch music. So perhaps one ethical stance would be, in this case, a

treatment of noise not simply grasped as the enemy of information, but something that has communicative potential beyond fixed ethical positions. Netica looks like a fascinating example for media archaeology. Thanks for pointing it out. It would be really interesting to know how Bayesian networks integrate noise in logical circuits of a belief diagrams. For my part I'd also be interested in the extent to which these predominantly cognitive decision-making diagrams cope with the emotions, feelings and affects involved in reasoning? Is there a line of flight between Netica type programs and the concerted effort to integrate emotions into machine learning? I assume there is.

R.I.: *The conflicts between Israel and Gaza. Any discussion about this event is a viral phenomenon, it is clear, and it is a form of manipulation. An informational one. Where are the affections, where are the contagious or viral objects?*

T.D.S.: What kind of viral phenomenon is this? There is a swelling of the protest movement resulting from emotional engagement with this horror. There is a crowd forming. The death of innocent people, many of who are children, will act as a powerful emotional contagion. We can barely dare to watch this cruelty unfold. But what influence are these protests having on governments? There were a million stop the war protesters before the invasion of Iraq. I can only think that the hitherto failure of the government here to halt arms sales or more strongly

condemn Israel's asymmetric slaughter of innocents exhibits a kind of political autism at the heart of the establishment here. To prioritize arms sales and support the blockade of Gaza in favour of this slaughter is obscene. The most effective contagion will most likely be the spreading of revenge in the Middle East for the death of so many innocents. The actions of the IDF and their arms suppliers in the west are producing an epidemic of avengers. This will be a crowd that will be willing to put its life on the line. It will be networked too.

R.I.: *You wrote **Virality: Contagion Theory in the Age of Networks**, a book which transposes the virality in the social field. You rethink Tarde's ideas mixing this spectrum with deleuzo-guattarian structures. It's more than a Tardean recovering. Besides these influences, what is your theoretical support for your research?*

T.D.S.: The project began with an interest in the potential of computer viruses – how these anomalous codes might provide an open alternative to the type of closed information spaces we find within proprietary software systems. In many ways that remained part of the focus, but it expanded outwards to look at virality in relation to social theory and the history of crowd theory in particular – moving through Tarde, Le Bon, Freud, Milgram, Deleuze and Guattari and ending up with network science, affective contagions and marketing. The open system of the viral electronic network was in some ways transposed to the openness

of the contagious self-other relation of a more generalized social network. Instead of finding a new age of contagion, I found that contagion had always been there.

If I am to look back at it now and summarize I would say that the project's main philosophical point was to collapse technological, social and biological distinctions. It tries desperately not to side with deterministic thinking. It focuses on the insensible degrees between conscious and nonconscious states, affective and representational states, volition and mechanical habit... I'm not sure how successful that effort was though?

R.I.: *You are in connexion with Romanian project Bureau of Melodramatic Research? What do you think about Romanians researchers and projects?*

T.D.S.: My visit to Bucharest was a fantastic experience – one of the best invites since publishing **Virality**. The discussions I had there with various people provided me with lots of new ideas about my next project on neuroculture. I still follow BMR's work and was luckily enough to meet up with Alina and Florin in London last year. Indeed, one of the most valued books in my collection is their little pamphlet called End Pit. It's a great read. Knowing that the project coincided with the protests in Turkey at the time makes it all the more fascinating. Protest art as interference or accident; a mixture of performance, affective art and politics.

R.I.: *The cyberspace is filled with anomalies, contagious objects, viruses and viral phenomena/ objects. So, in this context, are media ecologies the most important things for our cyberspace? At the same time, what do you think about an ecology based on semantic web?*

T.D.S.: Well, yes, it's these objects, processes and inventions, as **Matt Fuller** argues, that make up the world, synthesize it, block it, and make new worlds available. To discount the anomaly from this world is senseless, as we argued in *The Spam Book*. There might be many attempts to introduce intruder detections and immunological nets, to weed out the weeds, but the potential of the anomaly to spill out and infect is always there. I'm not sure about the semantic model of the web. I wonder how much of the anomalous will figure in automated machines reading of data? What threat does it pose to anonymity too? I suppose going back to what I have said already, it is the anomaly that might help actualize the network into a crowd; its becoming animal. The tendency is, it seems, to always drift toward a conservative stability founded on the fear of the other (human and nonhuman). What we need is nomadic novelty to take hold and deterritorialize these territories of prejudice.

R.I.: *Tell me a few words about your current and future interests, research or writings.*

T.D.S.: I'm on sabbatical at the moment working on a few projects. I'm writing a book on neuroculture. This will explore the rise of the neurosciences and the impact it has on nomadic thought through various essays on the brain in relation to control, work and art. I'm also collaborating with various people. Along with the performance artist, Dean Todd, I'm developing on what I'm calling dystopian media theory. I'm also working with Jairo Lugo from University of Sheffield on a project that revisits Tardean media theory. We are interested in the extent to which the contagions of social media affect editorial decisions and content.

Biography

Tony D. Sampson is currently reader in digital media cultures and communication at the University of East London. His publications include *The Spam Book*, co-edited with Jussi Parikka (Hampton Press, 2009), *Virality: Contagion Theory in the Age of Networks* (University of Minnesota Press, 2012), *The Assemblage Brain: Sense Making in Neuroculture* (University of Minnesota Press, Dec 2016) and *Affect and Social Media*, co-edited with Darren Ellis and Stephen Maddison (Rowman and Littlefield, 2018). Tony is the organizer of the Affect and Social Media conferences, a co-founder of the public engagement initiative Club Critical Theory in Southend, Essex and Director of the Emotion UX Lab at UEL. Current research explores a wide range of digital media culture related interests, specializing in social media, virality (socio-digital contagion), marketing power, network models, passion-power, the convergence between experience (UX) design and marketing, assemblage and affect theory, critical human computer interaction (c-HCI), digital activism and neuroculture (e.g. neuromarketing, neuroeconomics and neuroaesthetics).