

Philosophy, Science, and Virtual Communism

Abstract:

This paper considers how science, philosophy, and ‘the virtual’ inform the political potential of the communism that emerges within capitalism. It looks to the work of Gilles Deleuze and Félix Guattari, in particular *What is Philosophy?*, to set the terms of an anti-capitalist science and philosophy. Their understanding of the contrasting roles of the virtual in science and philosophy is then used to draw points of distinction between the theories of Manuel DeLanda, Jason Read, and Maurizio Lazzarato. DeLanda’s work demonstrates the uses of science, specifically the non-linear tracking of emergent phenomena. Read’s work demonstrates the uses of philosophy, specifically the historical tracing of the capitalist mode of production. And Lazzarato’s work demonstrates a combination of philosophy and science, specifically the theoretical identification of becomings not captured by capitalism. Throughout, the paper employs Deleuze and Guattari’s concept of the ‘the virtual’ to map the potentiality of communism within capitalism, as suggested by these three approaches.

Introduction

In *The Communist Manifesto*, Marx and Engels both praise and revile the advances of capitalism. They are astounded not only by the constant revolutions of capitalism’s productive forces but also by its unsettling of rigid social codes like patriarchy. Yet they were grimly aware that even as capitalism upsets social codes, many of them oppressive, it appropriates those codes for personal profit and private accumulation. Marx later expands on this process in *Capital Volume 1*, outlining how capitalism productively organizes cooperation between laborers working together in a chain of production.ⁱ In fact, he presents cooperation in *CVI* as one of most positive

articulations of capitalist production. Since then, numerous Marxists have made cooperation so central to their presentations of capitalism that it has served the basis for the shorthand description of capitalism as the socialization of production and the privatization of profits. For these Marxists, it is the dialectic between socialized production and privatized wealth that powers the historical development of capitalism's productive forces. Some Marxists are even confident enough in capital's ability to organize cooperation that they argue that such cooperation provides the best chance for overcoming capitalist exploitation – whether by out-producing capitalist fetters or creating the social conditions for class revolt. Nineteenth-century mutualists, for example, founded cooperatively-owned factory towns on the belief that they could benefit from the advances of the industrial revolution while circumventing the problems associated with capital ownership.ⁱⁱ Unfortunately, nearly all of these experiments have failed, yet their spirit lives on through worker-owned businesses and other cooperatively-managed enterprises.ⁱⁱⁱ Others have looked to the possibility of a socialism that emerges within capitalism that could eventually be wrested from the bosses. One aspect of the capitalist mode of production that puts this socialization at the fore is the Fordist model of production, which organizes production through a large factory that introduces workers into an assembly line run according to the principles of Taylor's scientific management. This model produced an “articulate, atomised, and deskilled labor force in a process of mechanization and socialization of labor” that contributed to the rise of mass society (“Introduction to the Postfordist Lexicon”). While it is true that Fordism socialized labor, it produced alienation and massification rather than socialism. Therefore, as scholars of Postfordism argue, a different image of social of revolt is now necessary, as mass society is no longer the hegemonic form of organization under contemporary capitalism.

In an attempt to keep up with the millions of tiny revolutions that capitalism sets into motion every day, Marxist theoreticians have updated the basic insight on the socialization of production from *Capital, Volume 1* to fit the specific characteristics of capitalist production today. In particular, Hardt and Negri have proposed shifting the focus of Marxian study from the social to the common. They argue that capitalist production has entered a biopolitical age whereby it harnesses the productive power of forms of life. One major transformation that brought about this change is the shift from modernist commodity production within the factory to the postmodernist informationalization of production. Hardt and Negri's claim is that the hegemonic organization of production is no longer mediated through the factory floor but a productive commons of communication, cooperation, and knowledge. Moreover, this productive commons inhabits the same political place that social cooperation did under industrial capitalism, which means that it is both the means by which capitalism is organized and lays out the path for overcoming capitalism. Therefore, if capitalism produces its own gravediggers, Hardt and Negri argue that it is in the form of a capitalist commons. Paolo Virno, among others, has called such a perspective 'the communism of capital.' To make his case, Virno notes in *The Grammar of the Multitude* that proponents of contemporary capitalism share many of the same aspirations as communists. For example, typical postfordist demands include the dissolution of the state and the abolition of work, though in the name of market liberalization and labor flexibility (111).

Yet it is not only a convergence in demands but also a shared means of organization that clouds the distinction between capitalist and communist political projects. And, if Hardt and Negri are right that capitalism not only produces but relies on shared knowledge and communication, is the

capitalist commons then a mere simulation of communism? Or, as Mario Tronti argues, is it an arsenal from which the weapons of class revolt must come?^{iv} In this light, the terms of the struggle need to be specified: Does ‘the communism of capital’ constitute a gamble made by contemporary capitalism to survive by relying on an elementary communism that it may not then be able to capture? Or, is the capitalist commons produced within a complete enclosure that prevents the common from exceeding the frontiers of capitalism, and therefore requires us look elsewhere for the path to full communism?

Science, Philosophy, and The Virtual

This paper analyzes the theoretical ground beneath a number of Marxian problematics. The analysis takes us ‘back to the source,’ tracking down the philosophical, scientific, and political terms that underwrite many of the Marxist theoretical claims about the communism of capital. While Marx's work serves as both a historical and theoretical foundation, it is a non-linear analysis of the development of the capitalist mode of production that provides one of the most ambitious critiques of political economy today.^v

The method for the comparative analysis undertaken in this paper comes from Gilles Deleuze and Felix Guattari’s *What Is Philosophy?*. While *WiP* has been overshadowed by Deleuze and Guattari’s two other major works, *Anti-Oedipus* and *A Thousand Plateaus*, it is my contention that this book remains an essential resource for combating capitalism. Deleuze and Guattari declare early on in *WiP* that philosophy, as it has entered the age of “universal capitalism,” must be saved from the “absolute disaster for thought” created when concepts are put to use by “commercial professional training” (12). *WiP* is the book Deleuze and Guattari wrote to think

that disaster and return the pedagogical function of concepts that analyzes singular conditions of creation, which prevents the concept's slide from subjective creation to capitalist tool. The antidote they suggest is a strong combination of science, philosophy, and art that brings together the "infinite speed" of chaos, thought, and sensation (36). Only such a synthesis, they say, would provide a mode of resistance effective enough to challenge the present state of affairs. With this in mind, I hope to avoid the pitfalls of previous Deleuze and Guattari scholarship.^{vi}

Deleuze and Guattari provide a detailed outline of philosophy, science, and art in *What is Philosophy?*. Philosophy, they state, is the creation of concepts on a plane of immanence. Science, as they define it, is the construction of propositions on a plane of reference. And art, they propose, is the composition of affects and percepts in a block of sensation. Moreover, philosophy and science exist in an interesting symmetry: both deal directly with an actual state of affairs, as in the earth and the living bodies that populate it, and their potential to differ, which Deleuze and Guattari call the virtual.^{vii} Importantly, this virtual "possess a full reality by itself" that is determinate rather than out-of-this-world sublime or absolutely open; as Deleuze says, echoing Proust, it is "real without being actual, ideal without being abstract" (*Difference and Repetition*: 211, 208). Deleuze and Guattari further clarify the virtual in *WiP* by providing a thought-image of the cosmos as chaos, a chaosmosis that is so packed full of determinations that it bears an infinite potentiality – though a restricted infinity and therefore far from the anything-goes of pop-science chaos theory. The point of science and philosophy is to intersect the chaosmosis with planes, much like a plane sections a cone, to isolate a workable section of chaos; but their aims in sectioning chaos this way differ. In fact, science and philosophy travel the same path but in opposite directions: science descends while philosophy ascends. Science

descends from the infinity of chaos by isolating variables in order to “trace states of affairs,” which is to say, to represent the world as it really is. For instance, science often lays out patterns of behavior in constituted systems by predicting their change and by identifying “the (diachronic) construction of functional structures in complex system that achieve a (synchronic) focus of systematic behavior as they constrain the behavior of individual components)” (*Political Affect* 181). Philosophy, on the other hand, ascends from a concrete present to the concepts residing in the virtual. Philosophy does not represent reality but provides a fresh orientation to the problems of this world that, in part, points toward a new world. In “the counter-effectuation of the event,” philosophy extracts a philosophical concept from an actual state of affairs to map that event’s potential, which consequently marks its thresholds of becoming-otherwise like an analyst looking for a breakthrough. In this way, contemporary philosophy connects “with what is real here and now in the struggle against capitalism” for the purpose of “relaunching new struggles whenever the earlier one is betrayed” (*WiP* 100). While philosophy is practical, however, it does not deal with any particular historical event. In fact, the philosophical concept “does not refer to the lived” but consists “in setting up an event that surveys the whole of the lived no less than every state of affairs” (33-4). Therefore, if philosophy can leave behind the certainty of science and let in chaos “without losing anything of the infinite,” then it succeeds at something science cannot do: renew the drive for creation (42). The ultimate aim of philosophy is therefore utopian, whereby creation breaks through the limits of this world and “turns it back against itself so as to summon forth a new earth, a new people” (99).

Despite their interest in renewing creation, Deleuze and Guattari do not intend to return philosophy to its status as the queen of the sciences. Rather, if done well, science and philosophy are complementary approaches:

It is true that this very opposition, between scientific and philosophical, discursive and intuitive, and extensional and intensive multiplicities, is also appropriate for judging the correspondence between science and philosophy, their possible collaboration, and the inspiration of one by the other (127).

Three theorists – Manuel DeLanda, Jason Read, and Maurizio Lazzarato – illustrate contrasting developments that incorporate mixes of philosophy and science while engaging the materialist questions of genesis, structure, and transformation. I extend Deleuze and Guattari’s claim with a comparison that begins with Manuel DeLanda’s scientific use of complexity theory, an approach that theorizes how relatively simple functional structures emerge from complex relations among the component parts of a system, and continue with Jason Read and Maurizio Lazzarato’s philosophical use of poststructuralism, which theorizes transversal connections among local, singular, differentiated terms without assuming a single origin or reducing them to a static unity. In addition to philosophy and science, this paper proposes the concept of ‘virtual communism’ as a heuristic key for comparing those three perspectives. In particular, I show how each theorist uses the virtual to construct a space of potential that might include communism.

Manuel DeLanda’s Virtual History

Manuel DeLanda’s work develops theoretical science in light of Deleuze and Guattari’s philosophy of science. The key point of intersection for all of DeLanda’s work is a combination of complexity science and Deleuzian metaphysics. DeLanda’s overall work draws on the canon of materialist historiography but he combines it with natural history and physical science. DeLanda’s earlier work in *War in the Age of Intelligent Machines* and *A Thousand Years of*

Nonlinear History, for instance, brings complexity theory to bear on specific historical matter to describe their unfolding. But rather than simply adding to the field of materialist historiography, his approach also offers critiques, revisions, and reconstructions. DeLanda's subsequent work has been a large philosophical synthesis of recent developments in science and Deleuze and Guattari's metaphysics, with the cornerstone being *Intensive Science and Virtual Philosophy*. In *ATY*, DeLanda is explicit about the aim of his project, as he states that he is offering a corrective to what he sees as postmodern or culturally relativist approaches to Deleuze's realist ontology.^{viii} A useful example of this project is *New Philosophy of Science: Assemblages Theory and Social Complexity*, where DeLanda offers a new paradigm for social science research that presents assemblages and emergence as non-reductive, non-essentialist descriptions of social phenomena.

DeLanda's social science method aspires to a scientificity that 'gets history right' through a method ostensibly rigorous enough to explain phenomena in both small detail and over the *longue durée*. In *New Philosophy of Society*, he targets three different approaches: micro-reductionism, macro-reductionism, and meso-reductionism. He describes micro-reductions as an atomistic approach that looks to break phenomena into its smallest parts in the hopes that it will reveal the essential nature of their existence. Macro-reduction, on the other hand, does the opposite – claiming that individuals are "mere products" of society, it looks to totalities as sufficient explanations for the inner-working of everything within them. Meso-reductionism is the 'intermediate level' between the two – an approach taken by Anthony Giddens in *The Constitution of Society*, for example – that offers a simple 'interaction' between individual and structure (*NPS* 5). DeLanda offers an alternative to all three with assemblages that are the historically contingent result of elements with no necessary relation, and express a cause not

internal to its elements but as an emergent effect of the interaction of those elements. DeLanda argues that such a model of non-linear causality should be able to describe nearly anything that exists within the physical world.

The two most innovative aspects of assemblages that DeLanda develops in *New Philosophy of Science* are an assemblage theory of non-linear causality and a topology of social assemblages, both of which are distilled versions of models he developed in previous books. DeLanda's non-linear causality uses the concept of threshold, probability, and expression to describe how assemblages produce events.^{ix} Using thresholds to describe the internal organization of an assemblage, he outlines how an external cause would affect an assemblage, most notably through catalysis. Non-linear probability therefore allows materialism to avoid the linear 'if a then always b' by positing statistical probability and repetition as key indicators for inference or tendency. In addition to providing a non-linear model of causality for matter, DeLanda additionally suggests a synthetic process by which that matter produces expression. He outlines a process by which each element of an assemblage uses simple forms of expression, for instance the radiation signatures of periodic elements that can refer back to and combine with other aspects of the assemblage that they constitute, like genetic code or language. Moreover, an additional synthesis of that expression, a 'second articulation,' can be produced through the consolidation of the effects of the first synthesis, which subsequently expands its degrees of freedom by enabling forms of expression not tied to the survival of its material carrier.

DeLanda's second innovative idea is to employ topology to describe the possibilities of social assemblages. And it is with topology that DeLanda defines the virtual, which for him is the

differential field of potential transformations of material systems. Topology provides DeLanda the resources for identifying “recurrent or typical behavior” common to material systems, and modeling their possible states (*ISVP* 14). In particular, topology can be used to identify patterns of predictable behavior in physical systems with diverging long-term tendencies whose final state is not determined, such as weather systems. Furthermore, DeLanda’s assemblage theory utilizes phase space to model those topological descriptions of systems. To make phase space, one constructs a multidimensional space whereby every degree of freedom or parameter is represented as an axis. A pendulum with one stiff bar that swings back-and-forth, to use a common example from physics, has one degree of freedom. A ship that moves around on the surface of the Earth has two degrees of freedom: longitude and latitude. The spatial representation of those degrees of freedom as axes therefore provides a map of the potential states of that system, not just any particular actualized state, and is therefore a map of the virtual. Constructing the phase space of social assemblages poses a problem, however, because the social has so many potentially relevant ways it can change. To model these assemblages, limited sets of axes are selected to provide a complex enough model to describe enough possible states to be useful.^x Despite these complications, DeLanda proposes topologically mapping the virtual potential of social assemblages according to their connectivity, attractors, and degrees of freedom. For DeLanda, connectivity describes the ability of an assemblage to interact with elements of other assemblages; attractors mark the invariants within that assemblage; and degrees of freedom represent an assemblage’s relevant ways of changing. And when these three elements are mapped into a diagram, DeLanda is able to provide a retroactive description for certain transformations, like the abstract body-plan of a species that can be pinched and morphed into another species during the process of evolution.^{xi}

A Thousand Years of Nonlinear History is an historical demonstration of the models from *NPS* in use. *ATY* describes the three different strata outlined by Deleuze and Guattari in *A Thousand Plateaus* – the inorganic strata (mineral), the organic strata (life), and the alloplastic strata (culture) – through the terms of complexity science. To do so, DeLanda first translates these strata out of the language of *A Thousand Plateaus* because, even though it is inflected by complexity theory, he finds the book’s poststructuralist language to be “the main obstacle to engaging with Deleuze” (“Deleuzian Interrogations” 19-20). Once he removes the post-structuralism, DeLanda’s strata come out transformed: mineral becomes the natural history of cities and economics; organic becomes the evolution of flesh and genes; and alloplastic becomes a history of languages.

The first section of *ATY* provides the most direct comparison with other approaches to historical materialism. In this section DeLanda uses the Braudelian natural history of Europe to describe the development of early capitalism. DeLanda begins with the city, as Braudel does, by explaining its material transformations. The model he uses here is quite descriptive – he compares the transition from the medieval castle built to withstand sieges (exoskeleton) to port-and trade-cities that maximize connectability in order to expand commercial profit (endoskeleton). From there, he charts additional innovations in urban planning, technology, and money as they contribute to the development of global markets and capitalist expansion. The terms he uses to describe these developments follow a clear and precise use of complexity theory: attractors, bifurcation points (thresholds), and feedback loops. As the material flows

follow the abstract diagram set out by the complexity terms, they constitute meshworks (decentralized networks) and hierarchies of matter that help or hinder development.

Assemblage theory provides a useful model for mapping changes in the virtual. Most notably, complexity science maps the virtual to reveal tipping points in a system as thresholds whereby certain elements acquire critical mass. This mapping shows how single actions that would have been called reformist according an old perspective are potentially revolutionary to the extent that they can contribute to a shift that would push a given system past a tipping point to produce definitive or categorical change. One dimension of the theory of the tipping point is the principle that effects are disproportionate to their causes. Using complexity theory to conceive of capitalism as an open and not a closed system, one can describe how even a single minor development might be able to produce a disproportionate amount of change (because effects are non-linear and exponential). This challenges the notion that there is a single cause that is *the* lever — the industrial proletariat as a class, agitation on the factory floor, or money as a virtual object — instead, levers are always found in the middle of two or more terms. Yet DeLanda seems either unaware or uninterested by the future, as in politics. None of his models gesture to or even hint at anything beyond ex post facto descriptions of past events. And when DeLanda does make one of his passing remarks on politics, as in at the end of *ATY* where he looks to the confrontation between meshworks and hierarchies, the implications are ambiguous. DeLanda sets out an analytic argument that the problem with hierarchies is not that they are a bad, in part or in toto, but that they currently play too strong of a role, and when systems are ‘balanced out’ with more meshworks, things are just fine. Such an argument cedes too much authority to what is

given, starting from the position of compromise with the actual even though that actual is continuously being upset by the virtual reorientations of philosophy.^{xii}

Jason Read's Communism of Capital

In his monograph *The Micro-Politics of Capital: Marx and the Prehistory of the Present*, Jason Read gives a philosophical account of the capitalist mode of production. Read philosophically traces the contradictions in the capitalist mode of production for the purpose of turning those contradictions into the constitutive materials for a new common.^{xiii} His three-part project first deals with Marx's "Pre-Capitalist Economic Formations" and the constitution of the subject of labor, continues with the politics and ontology of living labor, and concludes with the real subsumption of subjectivity by capital. There are two aspects of Read's argument that are important for my purposes, and both follow from the Althusserian displacement of the class struggle. The first aspect expands on later Althusser, who, having dropped the 'science' of Marxism, argues that capitalism is an ongoing process whereby capital continually draws in external elements – a process he calls the "becoming-necessary" of the capitalist mode of production. The first import of this description is that it both explains why capitalism requires market expansion and why capitalism did not take in places where the conditions were ripe, such as ancient China. In the contingent encounter between the various inputs in the combinatory process of capitalism, every input both predates capitalism and expands beyond it. The second aspect of Read's argument that is important for my purposes is Althusser's theory that the forces of production do not produce a dialectic of class but the division of labor and its articulation, which has several different forms.^{xiv} Read extends this theoretical innovation with the Negrian

insight that capitalist production has shifted from the formal subsumption of abstract labor to the real subsumption of forms of life.

Demonstrating the importance of the history of capitalism for his argument, Read looks in *MPC* to Marx's essay "Pre-Capitalist Economic Formations" for a description of the basic preconditions and presuppositions of capitalism. From there, he follows Marx's description of primitive accumulation from the end of *Capital Volume I*, defining it as the historical process of nascent capitalism coming into existence in Britain, Europe, America, and beyond. Read philosophically expands on this historical matter with the concept of 'becoming-necessary,' which follows from late Althusser's re-drawing of the epistemological break. Althusser restates his earlier work on the break by clarifying that his project distinguishes between "the two divergent materialisms at work in Marx's writing: a materialism of the event or the encounter versus a materialism of teleology and necessity" ("Primitive Accumulation" 30). In theorizing a capitalist mode of production that must continually renew capitalism's conditions for exploitation and domination, he proposes that we think of the mode of production in terms of 'the encounter.' Instead of imagining the constitutive elements necessarily emerging from the same cause, as Marx seems to indicate in primitive accumulation with the dispossession of feudal serfs that creates both capitalist control of the means of production and abstract labor, Read marshals Althusser's argument that the constituent elements enter into relations in spite of divergent ('non-contemporaneous') histories (29). In fact, the encounter is not only produced by contingent forces but is never free of contingency. For Althusser and then Read, the capitalist mode of production, vis-à-vis the contingent encounter, constantly risks losing the necessity of its own reproduction. The preordained *telos* ascribed by more deterministic models are no longer

tenable, regardless of whether they predict the success, failure, or transformation of capitalism. In their place, Read adopts becoming-necessary as an acknowledgement that the reproduction of the capitalist means of production is a process dependent on a complex interaction of social, technological, and political conditions that have independent histories and relations. It would then follow that the future of capitalism is always tentative, unclear, and open to disruption due to the contingency of the elements in its formation (30). Consequently, it is conceivable that a shift in trajectory of any element within the mode of production could be drastic enough to upset the system.

The specific payoff for Read is a foregrounding of the necessary contingency and limits of capitalist production that are produced from within, for example, in the formation of subjectivity. Rather than the subject being merely an effect of capitalism, Read argues that capitalism functions with *two* modes rather than one: the mode of production *and a mode of subjection*.^{xv} Moreover, these two modes co-produce causes that are immanent. There are three important points to consider from this major development: the first is that capitalism requires a threshold of consistency that is met by multiple forces in an aleatory encounter, each with its own history, and so it is always at risk of falling apart; the second is that capitalism produces lines of flight within itself and therefore does not require resistance to come from the outside; and the third is that subjectivity is at the heart of the system (not just on its margins or in a ‘superstructure’). Consequently, as Marx and Engels write in *The Communism Manifesto*, subjectivity is thus part of the “constant revolutionizing” of production that leads to “uninterrupted disturbance of all social conditions, everlasting uncertainty and agitation,” and can therefore undermine capitalism as much as its “apparently objective movements.”

Subjectivity serves as such a powerful example because it concretizes a communist potential, even if that potential currently exists only as a virtuality. By extracting capitalism from a specific state of affairs, Read outlines the structure of that virtuality by following Deleuze and Guattari's description of universal history. According to Deleuze and Guattari, capitalism has the unique quality of being capable of a form of self-criticism with specific attributes that allow it to be wielded as a weapon of revolution. While Read outlines each quality of universal history (retrospective, contingent, singular, ironic, and critical), it is perhaps universal history's immanent causality that speaks most to the power of the virtual, in particular, immanent causality's demand that the abstract does not explain but need to be explained. In particular, such an immanent causality interrogates transcendent terms such as god, the state, or capitalism in order to find the conditions for them to change into something new. And it is that drive for explanation that may finally push universal history to complete the subjective revolution against capitalism.

Demonstrating the use of this immanent critique, Read critiques a term, Althusser's 'society effect,' by converting it from the societal effects of capitalism into Deleuze and Guattari's 'socius,' which makes it both the cause and effect of capitalist production. This move mirrors Deleuze's critique of the possible/real distinction. According to Deleuze, the possible/real doublet operates according to resemblance and limitation, which makes only the possible side productive. The consequences of this formulation is that once something is made possible, any real that resembles the possible can be realized and the possibles that are not realized are excluded ('limited out').^{xvi} Alternatively, within the virtual/actual distinction, the virtual and the

actual are both productive. For the actual, “the rules of actualization are difference, or divergence, and creation, and no longer resemblance and limitation” (*Bergsonism* 51). And for the virtual, the virtual acts as a structure on the present by being a collection of pasts as a block of time. When the virtual and actual are combined, the actual selectively affirms a present from the virtual, adding new pasts to the virtual as it propels the present into the future.

According to this approach, there is no wastebin of history. History does not ‘run its course,’ expending the past like a limited resource (as in the possible/real position). Rather, the conditions in which certain ideas are realized are constantly changing, making the outcome always different (in accordance with the Deleuzian principle of the eternal return of difference). Therefore, capitalism is not one set combination of things but a calculative axiomatic that can add or subtract any material *as long as it maintains its necessary conditions for reproduction*. From this perspective, for example, actually existing socialism is not the failed experiment that many people accuse it of being, but a real past that weighs on the future. By combining the richness of the virtual multiplicity of the past with the open potential of the future, actually existing socialisms hold a wide range of determinate conditions that are actualized with substantially different results, as in the USSR, China, Cuba, Bolivia and Venezuela. Even more provocatively, though history may seem to converge on some predictable pattern, it is in fact always composed of many divergent paths. This approach differs from DeLanda’s non-linear historical materialism, which traces the path of ‘how we got here’ in such a way as to make the present look inevitable and casually determined. Rather, the more politically inflected non-linear historical materialism reveals the breaks and discontinuities in history to emphasize the tipping points or thresholds where things might turn out differently yet.

Unfortunately, the territory is larger than the map, so decisions must be made on what aspects of the virtual to focus on. Read's choice is to direct the power of virtual mapping to 'the communism of capitalism' in order to seek out the revolutionary potential in elements of the capitalist mode of production. On the one hand, this perspective acknowledges that revolution exists as a virtual potential within the everyday functions of capitalism. Yet on the other hand, it also chooses the productive forces for the best vantage point from which to identify revolution. The difficulty of taking differential elements of the capitalist modes of production and subjectivity into account, and qualifying them as contingent and independent, reveals that there are limits to mapping the virtual from the starting point of capitalist production. As Deleuze and Guattari say, planes of immanence section chaos like a plane sections cone, limiting out enough complexity to make a virtual map come into view (*WiP* 48). But:

We can and must presuppose a multiplicity of planes, since no one plane could encompass all of chaos without collapsing back into it; and each retains only movements which can be folded together.... it is because each plane has its own way of constructing immanence. Each plane carries out a selection of that which is due to thought by right, but this selection varies from one plane to another (50-1).

Choosing where and how to section that plane is important, as each plane will provide a different image. Approaching struggle from the communism of capital focuses on the productive forces of capitalism as the key points of struggle, as Read does. Read outlines the stakes of this approach in the section of *The Micro-Politics of Capital* entitled "The Common," where he argues that capital's production of subjectivity "is the simultaneous site of mystification and struggle" (191). Ultimately, the point of such an analysis is to identify key tensions in the capitalist mode of production, and theorize how they can be "rendered productive" (191).

Maurizio Lazzarato's Politics of the Virtual

Lazzarato's account differs from the previous perspectives because he offers a balanced presentation of both philosophy and science. Philosophically, Lazzarato uses a Deleuzian metaphysics. Scientifically, Lazzarato uses a combination of the micro-sociology of Gabriel Tarde and the genealogical history of power of Michel Foucault.

Lazzarato's balanced synthesis is distinct from traditional historical materialism due to a few key reversals. The first is that production is 'greater' than reproduction, a claim echoed by Deleuze and Guattari's argument in *A Thousand Plateaus* that capitalism produces more nondenumerable sets than it can capture via axiomatization.^{xvii} Lazzarato looks behind the veil of the capitalist mode of production, which treats society as a de facto totality, by employing a Tardean sociology that attempts to detach his analysis from capitalist production as much as possible:

invention, as the creation of the possible and its process of actualisation in the souls (of consumers as well as workers), is the real production, whilst what Marx and the economists call production is, in reality, a *reproduction* (or a manufacture of a product or a management of a service even if in this case the things are a bit more complicated) ("From Capital-Labour to Capital-Life" 192).

In place of the totality of the mode of production, Lazzarato posit an original dynamic multiplicity. And it is from that multiplicity that everything is constructed. Lazzarato then integrates a Foucaultian analysis within this metaphysics of the multiple.

Foucault provides Lazzarato with a genealogy of Euro-American power. Within this account, post-sovereign power is produced through the diffuse dispositifs of the social, which were first constructed during the centralization of power in institutional sites of discipline, which refer to relatively autonomous sites of power constituted as closed blocks of space-time (the prison, the

barracks, the hospital, etc.). Each one of these enclosures employs techniques of confinement to produce the kind of useful effects that are provided by a multiplicity when it is captured and disciplined within the limits of space and time.^{xviii} At first, the sites of enclosure worked as somewhat independent dispositifs of power, though they shared a similar logic: that of the prison. As power intensified, antagonisms began to emerge between dispositifs that shared similar elements – namely the tension between the centripetal logic of individual rights (‘my rights end where your rights begin’) and the centrifugal logic of economic exchange (the ‘natural propensity to *combine, expand, and profit*’). The result is liberalism, as it provides the response to this tension that “does not aim to take over, in a reconciled totality, the different conceptions of law, freedom, right that the process of the juridical and social dispositifs imply” (“Biopolitics/Bioeconomics”).

Two subsequent intensifications of power followed: biopower and societies of control. Beginning in the eighteenth century, biopower combined with disciplinary institutions to create a combined anatomo-politics of the body and a bio-politics of the population. Biopower marked the points where power was generated from managing multiplicities by controlling the emergent patterns of elements combined in open spaces and forced to interact. Second, as institutions began to derive power from multiplicities and not institutions themselves, society qualitatively shifted into what Deleuze calls ‘societies of control.’ Within these societies, power relations are “virtual, unstable, non-localisable, non-stratified potentialities” and are controlled through integration and differentiation (“Concepts of Life” 174).

It is imperative to delineate what Lazzarato means by integration and differentiation because they describe processes of power unique to the current moment. Through integration, control societies work “to connect singularities, to homogenise them and make them converge qua singularities towards a common goal... tracing a general line of force which passes through forces and fixes them into forms” piece by piece according to small differences, as in integral calculus (174). And through differentiation, dualisms are created and reproduced without a reference term in order to “capture, codify, and control virtualities” (174). This is not the bi-univocal dualism of male/female but a dispositif of the “thousand tiny sexes” and “tiny possible becomings” that make up a population. The effect of this control is not the prohibition of differences but their de-potentialization through a repetition of the same; in particular, the intended effect is to incorporate or reduce the risk of the outside. This is the primary strategy of neo-liberalism: predictable permissiveness to produce an intended result. Undesirable outcomes are mapped and neutralized in order to codify, and thereby drain the power of, repetition (176). Enclosed spaces of discipline are turned inside out and networked.

When the closed spaces of enclosure are split open, wholeness, completion, and coherence are transformed into a web of elements layered on top of disciplinary enclosures to de-code and de-territorialize them so they can be stitched together by virtue of their connectivity and transitivity. The effect of this process is “the movability of the event,” which displaces change and relationality from its initial conditions of production – a sort of ‘communication’ without content, reduced purely to its communicability (*Parables for the Virtual* 86-9). That connectivity is made through porosity, a leaking. It has been described as bio-political tissue, but it is more akin to a giant membrane that filters material that continually enters and traverses it. It twists the strange

formulation that ‘there is no outside,’ which sounds too much like the frightening howl of Thatcher’s ‘There Is No Alternative,’ into the much more useful ‘there is no inside.’^{xix} One no longer has to enter a disciplinary enclosure to be filled with a projective interiority, as control functions through open space and time. Consequently, the loss of a projective interiority affects the basic operation of organization and temporality of capitalism. In terms of organization, capitalism within societies of control no longer relies on cooperation but simply requires coordination. On the one hand, coordination empties the potential from political activity born in shoulder-by-shoulder cooperation on the assembly line, but on the other, it produces a new model for political activity “meant to be resolutely expressive, transformist, attentive to the unstable dynamics of post-identitarian identities, of which the reality of our world is woven” (“The Political Form of Coordination”). Even more profoundly, neoliberalism transforms time through an ideology that flow not from discrete disciplinary subjects but rather from a blanket attack on belief. At base, neoliberal temporality is a depotentialization of the future through the basic formula: “be afraid and have no trust in the world, the others, and yourself” (“From Knowledge to Belief”). This foreclosure of temporality fills out the picture of coordination within societies of control – neoliberal governance attempts to block out trust, collective action, and mutual passions by limiting connectivity and transitivity to the organization of capitalist production. Yet struggle is not eliminated; rather, this new model of coordination focuses today’s struggles on ‘believing in the world.’

Lazzarato charts out a path of struggle in his map of the virtual. But he displaces the focus from the communism of capital to the multiplicity, which therefore produces a completely different map of the virtual than DeLanda or Read’s. For Lazzarato, the social is a much more diverse

space than the image of that space generated by the apparatus of capture that is forever trying to close off avenues of difference. Lazzarato demonstrates the power of such an approach by beginning *Les Révolutions du Capitalism* with potentialities birthed outside of capitalist production. He presents those potentials by means of a slogan shouted in the streets of Seattle during the 1999 shutdown of the World Trade Organization: ‘another world is possible.’ Remarking on the slogan, Lazzarato insists on the *historical* and *ontological* dimensions of this slogan rather than on its imaginative one. “To exist is to differ,” he notes, emphasizing the *givenness* of slogan (“Lutté, Événement, Medias”). And since the slogan was both spoken and enacted, he argues that its mere presentation on the streets of Seattle affirmed the virtual *existence* of a different world. This insight follows from the notion that ‘another possible world’ is always virtually there – an observation that echoes Proust’s description of the virtual as real and ideal but not actual or abstract.^{xx} As established by DeLanda and Read, those virtualities have a real existence expressed in physical laws, social codes, and historical events but Lazzarato also incorporates the force of the mind. Lazzarato’s capacious mapping of the virtual draws on realms of creativity and thought like literature, art, and culture, giving them the same footing as more established forms. It is here that Lazzarato’s virtual politics overlaps with contemporary anarchism and in particular, the anarchist impatience with promises of far-off revolutions. If the other possible worlds of the virtual already have a real existence, those anarchist voices remind us, then they must not be altogether different from our own. To hear these voices, consider the opening lines from Bernadette Corporation’s *Get Rid of Yourself*, a film that shows anarchists fighting globalization in the streets of Genoa while simultaneously affirming their lived revolution:

They say, “another world is possible.” But I am another world. Am I possible? I am here, living, stealing, doing cocaine, subtracting myself from the bad movie of urban love stories, inventing weapons, elaborating the complex constellation of my relations, building the Party. They say “another world is possible.” But we do not want another world, another order, another justice: another logical nightmare. We do not want any global governance be it fair, be it ecological, be it certified by Porto Allegre. We want THIS world. We want this world as chaos. We want the chaos of our lives, the chaos of our perceptions, the chaos of our desires and repulsions. The chaos that happens when management collapses. Capitalism defeated traditional societies because it was more exciting than they were, but now there is something more exciting than Capitalism, itself: its destruction.

And even at its most destructive, this anarchism need not give up on communism because, as Deleuze and Guattari argue, utopia is a no-where *and* a now-here, *both at the same time* working to “posit revolution” in the streets “as plane of immanence, infinite movement and absolute survey” in the struggle against capitalism (*WiP* 99-100).^{xxi}

Toward a Virtual Communism

The potentiality of communism ultimately hinges on the virtual; because philosophy’s consummate task is a complete reorientation toward a state of affairs, which is brought about through virtual concepts, the virtual could be said to be the potential for revolution itself. And it is through the virtual that we can thus draw out the political consequences of each theorist’s mixture of philosophy and science.

As presented, each subsequent theorist unlocks more dimensions of the virtual. DeLanda provides the slimmest account of the virtual because he focuses mainly on the intensive processes of science, and sometimes their actualization over time. Yet his assemblage theory still provides a powerful scientific tracing of how the present state of affairs came to be. Read gives a wider account of history that includes its virtual dimensions, but his approach remains historical

and therefore does not address many of the becomings to come that reside solely in the future. His concentration on the communism of capital mobilizes philosophy to lead the search for cracks in the edifice of capitalism where communism may bloom. Lastly, Lazzarato offers the fullest account of the virtual because he analyzes real, existing potentials that have not been actualized. The potentials he identifies come from analyzing a state of affairs, not from Platonic prefigurative forms, and therefore make evident singularities of a reality that presently exists but has not been selected. This survey of the virtual expands the frame of analysis from capitalism itself to a philosophical and scientific survey of struggles over the constitution of the social.

As some theorists leverage more of the virtual than others, they come closer to a reorientation that would upend the capitalist present. And in that regard, the scope of an assemblage theory of the social is limited, even if it ostensibly describes how nearly any social phenomena came into being. Its primary limitation is that it begins and ends with science, and thus barely engages in philosophy. In *New Philosophy of Society*, for instance, DeLanda claims that he is wary of the “absolute deterritorialization,” as he says it exists only as a limit, so attention should rather be spent on what can be immediately reterritorialized (*NPS* 123-4). Yet Deleuze and Guattari suggest that the inability to perceive absolute deterritorialization is a limitation inherent to a purely scientific approach, noting that

even when science is concerned with the same ‘objects’ (as philosophy) it is not from the viewpoint of the concept; it is not by creating concepts...science needs only propositions or functions, whereas philosophy, for its part, does not need to invoke a lived that would give only a ghostly and extrinsic life to secondary, bloodless concepts (*WiP* 33).

This conceptual anemia is a result of the scientific task being so specific: to create propositional functions that can be pieced together on a plane of reference. And the power of the plane of

reference is its ability to describe the world rather than change it. That is because the scientific task is not to take us into other worlds on a path of becoming, as philosophy would have us do, but to slow down our world to the speed of science. The virtual dimension of DeLanda's work is therefore thin. His project is informed by the scientific drive for fewer, more elegant solutions, rather than the fecund richness of philosophy or literature. Moreover, with respect to the question of the communism of capital, DeLanda's assemblage theory of the social does not offer a clear means for determining if the virtual potentials of capitalism open toward a communist future. So, while DeLanda succeeds in providing some powerful tools for describing the world, he fails to keep the door open or indeed, fails to open the door to radically different ones.

In contrast to DeLanda's science, the success of Read's approach draws from the power of philosophy to consider the potential for communism in the present. Read outlines the basis by which the force of capitalism is overtaken by the force of a commons produced within it. Here the image of a communist future is found in mapping the virtual potential of capitalist production because communism and capitalism are immanently intertwined. For its method, such a mapping utilizes a philosophy that "is not mixed up with the state of affairs in which it is effectuated... even though it is incarnated or effectuated in bodies" (*WiP* 21). But in his commitment to a philosophical flight from an already effectuated present, Read limits virtual communism to the products of capitalism. And from this perspective, capitalism not only acts as a limiting force on potential communism, but capitalism is also the source and cause of communism.

There are possible drawbacks to this strategy. On one hand, the focus on the labor and subjectivity produced by capitalism may blur or even miss other forms of life that are producing

non-capitalist alternatives. While virtual communism perhaps requires mapping the unactualized potentials of capitalism to see how they could be redirected away from capitalist reproduction, the essential map is of communism itself, as there are many more paths out of capitalism than toward communism, and the specter of fascism and the failures of actually-existing socialism weigh heavily on the minds of the living. While on the other hand, if the virtual map tries to do too much, it would become too chaotic to be useful. But contrary to some understandings of chaos, that chaos is “characterized less by the absence of determinations than by the infinite speed with which they take shape and vanish,” and too much chaos would therefore promise too many possible avenues without suggesting a single decisive one (42). As a result, Read’s program of ‘rendering productive’ the products of capitalism may never culminate in a revolutionary reorientation, regardless of successes in the radical reformism of the ballot box, social activism, and ethical consumption, or the revolutionary politics of radical parties, direct action, and post-capitalist production.

Lazzarato’s virtual politics thus offers the most ambitious anti-capitalism of the three theorists. Most notably, he provides an image of struggle that is real but utopian by tracking aspects of the virtual not captured by capitalism through the processes of resemblance or repetition. This combination of philosophy and science draws on the force of the mind, both in its ability to consider historical discontinuities and its creative impulse to construct new worlds, while also finding its actualization in bodies living in and struggling against capitalism. For him, struggle exists outside capitalism, as capitalism is productive but lacks creativity. Therefore, it is not by utilizing the fruits of capitalism but by building on what has escaped that the multiplicities that constitute communism will flourish.

Following Lazzarato, the concept of communism must change. In fact, he argues that “communism, the revolution, the proletariat as we have known them since the end of the 19th century represent dead hypotheses or options today,” and that “communism, as it is practiced today by Trotskyists, Maoists, [and] Communists” no longer appeals “to our capacity to act” (“From Knowledge to Belief”). Yet, as Marx and Engels note in *The German Ideology*, if communism is “not a *state of affairs* which is to be established” or “an *ideal* to which reality [will] have to adjust itself,” then communism may still be on the horizon – not as the communism of capitalism, but as a revolution that “abolishes the present state of things” (*The German Ideology*). Furthermore, this virtual communism is a fresh set of problems posed by life itself and not an ideal state or a pure politics, which distinguishes it from the tradition of communism that poses itself as an axiom or regulative ideal, such as that of Badiou or Rancière.^{xxii}

Virtual thus communism proceeds by opening “a space for political construction and experimentation” that creates a rupture, not by reactivating a potential that has been limited by capital, but “by retraversing and reconfiguring the economic, the social, the political, and so on” (*The Making of the Indebted Man* 54). By offering new basis for experimentation, this communism brings together philosophy and science to guide the actualization of the real, existing communism that resides in the virtual potential of this world. While virtual communism does not hold the certainty of historical passage held by those theorizing the commons emerging within capitalism, it does maps out a terrain of struggle for forms of life that already believe in this world. And although communisms birthed by capitalist production will be included, it is creative potentials not previously actualized by capital that will complete the map of our full communist future.

Bibliography:

Althusser, Louis. *Philosophy of the Encounter: Later Writings (1978-1987)*. Ed. F.

Matheron. Trans. and intro. G. M. Goshgarian. London: Verso, 2006. Print.

Althusser, L. and É. Balibar. *Reading Capital*. Trans. B. Brewster. London: New Left Books, 1970. Print.

Balibar, É. "The Infinite Contradiction." *Yale French Studies* 88 (1995): 142-164. Print.

Get Rid Of Yourself. Dir. Bernadette Corporation. Perf. Chloe Sevigny, Werner von Delmont. 2003. Film.

Chesters, G. and I. Welsh. *Complexity and Social Movements: Multitudes at the Edge of Chaos*. New York: Routledge, 2006. Print.

DeLanda, M. *War in the Age of Intelligent Machines*. New York: Zone, 1991. Print.

DeLanda, M. *A Thousand Years of Nonlinear Philosophy*. New York: Zone, 2000. Print.

DeLanda, M. *Intensive Science and Virtual Philosophy*. London: Continuum, 2002. Print.

DeLanda, M. *New Philosophy of Society: Assemblages Theory and Social Complexity*. London: Continuum, 2006. Print.

DeLanda, M, J. Protevi, and T. Thanem. "Deleuzian Interrogations: A Conversation with Manuel

DeLanda, John Protevi & Torkild Thanem." *Tamara* 4.4 (2005): 1-36. Web. 25 Apr. 2013.

<<http://www.dif-ferance.org/Delanda-Protevi.pdf>>.

Deleuze, G. *Bergsonism*. Trans. H. Tomlinson. New York: Zone, 1990. Print.

Deleuze, G. *Difference and Repetition*. Trans. P. Patton. New York: Columbia University Press, 1995. Print.

Deleuze, G. and F. Guattari. *Anti-Oedipus*. Trans. M. Seem. Minneapolis: University of Minnesota Press, 1977. Print.

Deleuze, G. and F. Guattari. *A Thousand Plateaus*. Trans. B. Massumi. Minneapolis: University of Minnesota Press, 1987. Print.

Deleuze, G. and F. Guattari. *What is Philosophy?* Trans. H. Tomlinson and G. Burchell. New York: Columbia University Press, 1996. Print.

Giddens, A. *The Constitution of Society*. Berkeley and Los Angeles: University of California Press, 1984. Print.

Hardt M. and A. Negri. *Empire*. Cambridge: Harvard University Press, 2000. Print.

Holland, E. "Nonlinear Historical Materialism and Postmodern Marxism." *Culture, Theory, & Critique* 47.2 (2006): 181-196. Print.

Jacobs, D. "Local Solidarity: Historical and Contemporary Experiments in Socially Responsive Business Development." *Ephemera* 7.3 (2007): 395-402. Web. 25 Apr. 2013.

<<http://www.ephemerajournal.org/contribution/local-solidarity-historical-and-contemporary-experiments-socially-responsive-business>>.

Lazzarato, M. "Lutté, Événement, Medias." republicart, 2003. Web. 25 Apr. 2013.

<http://www.republicart.net/disc/representations/lazzarato01_fr.htm>.

Lazzarato, M. *Les Révolutions du Capitalisme*. Paris: Empêcheurs de Penser en Rond, 2004. Print.

Lazzarato, M. "From Capital-Labour to Capital-Life." *Ephemera*, 4.3 (2004): 187-208. Web. 25 Apr. 2013. Web. 25 Apr. 2013. <[http://www.ephemerajournal.org/sites/default/files/4-](http://www.ephemerajournal.org/sites/default/files/4-3lazzarato.pdf)

[3lazzarato.pdf](http://www.ephemerajournal.org/sites/default/files/4-3lazzarato.pdf)>.

Lazzarato, M. "The Political Form of Coordination." Trans. M. O'Neill. European Institute for Progressive Cultural Policies, 2004. Web. 25 Apr. 2013.

<<http://eipcp.net/transversal/0707/lazzarato/en>>.

Lazzarato, M. "The Concepts of Life and the Living in the Societies of Control." *Deleuze and the Social*. Ed. M. Fuglsang and B.M. Sorensen. Edinburgh: Edinburgh University Press, 2006. 171-190. Print.

Lazzarato, M. "Biopolitics/Bioeconomics: a politics of multiplicity." Trans. E. Empson and A. Bove. Generation Online, 2006. Web. 25 Apr. 2013. < <http://www.generation-online.org/p/fplazzarato2.htm>>.

Lazzarato, M. "Majority/Minorities." *SubStance* 36.1 (2007): 98-105. Print.

Lazzarato, M. "From Knowledge to Belief, from Critique to the Production Subjectivity." Trans. C. Nielsen. European Institute for Progressive Cultural Policies, 2008. Web. 25 Apr. 2013.

<<http://eipcp.net/transversal/0808/lazzarato/en>>.

Lazzarato, M. *The Making of the Indebted Man: An Essay on the Neoliberal Condition*. Trans. J. D. Jordan. New York: Semiotext(e), 2012. Print.

Massumi, B. *Parables for the Virtual: Movement, Affect, Sensation*. Durham: Duke University Press, 2002. Print.

Marx K. *Capital: A Critique of Political Economy, Volume 1*. Trans. S. Moore and E. Aveling. Moscow: Progressive Publishers, 1887. Web. 25 Apr. 2013.

<<http://www.marxists.org/archive/marx/works/1867-c1/>>.

Marx K. and F. Engels *The German Ideology*. 1932. Web. 25 Apr. 2013.

<<http://www.marxists.org/archive/marx/works/1845/german-ideology/>>.

Marx K. and F. Engels *The Communist Manifesto*. Trans. S. Moore. Web. 25 Apr. 2013.

<<http://www.marxists.org/archive/marx/works/1848/communist-manifesto/>>.

Protevi, J. *Political Affect: Connecting the Social and the Somatic*. Minneapolis: University of Minnesota Press, 2009. Print.

Read, J. "Primitive Accumulation: The Aleatory Foundation of Capital", *Rethinking Marxism* 14.2 (2002): 24-49. Print.

Read, J. *The Micro-Politics of Capital: Marx and the Prehistory of the Present*. Albany: State University of New York Press, 2003. Print.

Read, J. "A Universal History of Contingency: Deleuze and Guattari on the History of Capitalism." *borderlands* 2.3 (2003). Web. 25 Apr. 2013.

<http://www.borderlands.net.au/vol2no3_2003/read_contingency.htm>.

Summer, K. and H. Halpin. "The End of the World as We Know It" *Shut Them Down! The Global G8, Gleneagles 2005 and the Movement of Movements*. Eds. D. Harvie, K. Milburn, B. Trott, and D. Watts. New York: Autonomedia, 2006. 351-359.

Summer, K. and H. Halpin. "Crazy Before the New." *turbulence: ideas for movement*, 1.1 (2007): 30-31. Print.

Surin, K. *Freedom Not Yet: Liberation and the Next World Order*. Durham: Duke University Press, 2009. Print.

Swartz, C.L. *What is Mutualism?* New York: Vanguard Press, 1927. Print.

Tronti, M. *Operai e Capitale*. Turin: Einaudi, 1971. Print.

Virno, P. *A Grammar of the Multitude. For an Analysis of Contemporary Forms of Life*. New York: Semiotext(e), 2004. Print.

Zanini, L. and U. Fadini. "Introduction to The Postfordist Lexicon." Trans. A. Bove. Generation Online, 2001. Web. 25 Apr. 2013. <<http://www.generation-online.org/t/postfordistintro.htm>>.

ⁱ See Chapter 13, "Co-operation," of Marx, *Capital: A Critique of Political Economy, Volume 1*.

ⁱⁱ See Swartz, *What is Mutualism?*

ⁱⁱⁱ See Jacobs, "Local Solidarity: Historical and Contemporary Experiments in Socially Responsive Business Development."

^{iv} Tronti, *Operai e Capitale*, 18.

^v For further elaboration on the benefits of non-linear analysis for studying the developments of capitalism, see Holland, "Nonlinear Historical Materialism and Postmodern Marxism."

^{vi} Past pitfalls include the large body of work that argues that Deleuze and Guattari offer 'postmodern metaphors' for the cultural transformations of late capitalism that fail to take into consideration the rigorous (scientific) propositions present in their work, or the philosophers that have relied on Deleuze and Guattari for developing 'ontology first' metaphysics but subsequently ignore the imperatives against philosophical foundationalism given in *WiP*.

^{vii} Unfortunately art does not follow this symmetry, and therefore does not fit the complementarity of philosophy and science built by each of the theorists discussed.

^{viii} DeLanda, *A Thousand Years of Nonlinear History*, 114.

^{ix} DeLanda, *A New Philosophy of Society*, 20-3.

^x Deleuze and Guattari note that science always implies a limitation, "because reference, implying a renunciation of the infinite, can only connect up chains of functions that necessarily break at some point" (*WiP* 124). Moreover, philosophy also utilizes topological models because "every concept has a phase space," but "not in the same way as science" as philosophy remains open to the infinite modes of thought (25).

^{xi} DeLanda, *A New Philosophy of Society*, 29.

^{xii} Other theorists, however, have used like approaches to varying success. Kay Summer and Harry Halpin have written a number of complexity science articles that draw tentative models of political transformation based on probable outcomes of environmental degradation, see Summer and Halpin, "The End of the World as We Know It", and Summer and Halpin, "The Crazy Before the New." The politics they suggest are broad but still challenge their audience to consider a range of strategic interventions and their potential to produce alternative worlds. The complexity theory account of social movements given by Graeme Chesters and Ian Welsh, in contrast, offers a more forward-looking and therefore less retrospective account than DeLanda, but comes off nearly as wooden.

^{xiii} Read, *The Micro-Political of Capital*, 151.

^{xiv} See Althusser and Balibar, *Reading Capital*.

^{xv} Read employs Etienne Balibar's argument from "Infinite Contradiction" to make this argument. For an extended treatment of Balibar's mode of subjection, see the first chapter of Kenneth Surin's work *Freedom Not Yet: Liberation and the Next World Order*.

^{xvi} "The whole of existence is here related to a pre-formed element, from which everything is supposed to emerge by a simple 'realisation'" (*Bergonism* 20).

^{xvii} Deleuze and Guattari, *A Thousand Plateaus*, 469-70.

^{xviii} Lazzarato, "The Concepts of Life and the Living in the Societies of Control," 173.

^{xix} Ideology functions as a projective inside, typified in disciplinary institutions. The 'interiority' of the disciplinary enclosure produces a corresponding interiority of the subject, to which the subject is then able to speak. This was the part of Michel Foucault's project on confession, particularly Christian confession and anxiety, which was never fully developed.

^{xx} Lazzarato, "From Capital-Labour to Capital-Life," 191.

^{xxi} It is also worth noting that in spite of Deleuze's much touted affirmative metaphysics, the first task of schizoanalysis that outline in *Anti-Oedipus* is destructive. They say that schizoanalysis begins by carefully pushing not only psychoanalysis but also the whole of society to the point of autocritique. See Deleuze and Guattari, *Anti-Oedipus*, 273- 382, and pages 318-319 in particular.

^{xxii} Lazzarato, *The Making of the Indebted Man*, 53-4.