

**The Affective Turn: Theorizing the Social**  
**An Introduction**  
Patricia Ticineto Clough

“Each self-reproducing system in this generalized production of order out of chaos combines modulations of what could be called, broadly, the ‘political’ dimension...the ‘economic’ dimension ..., and contributes in a way that could be called ‘cultural’ .... For lack of a better word, the chaotic cofunctioning of the political, economic and cultural dimensions could be dubbed the ‘social’—although all of these designations are fairly arbitrary at this point.” *Brain Massumi*<sup>1</sup>

The increasing significance of affect as a focus of analysis across a number of disciplinary and interdisciplinary discourses is occurring at a time when critical theory is facing the analytic challenges of ongoing war, trauma, torture, massacre and counter/terrorism. If these world events can be said to be symptomatic of ongoing political, economic and cultural transformations, the turn to affect may be registering a change in the cofunctioning of the political, economic and cultural, or what Massumi dubs the social. The essays collected in *The Affective Turn: Theorizing the Social* explore these political, economic and cultural tendencies and investigate how these tendencies are being rendered as a shift in thought—captured in critical theory’s turn to affect.

The essays collected in *The Affective Turn*—written when their authors were completing doctoral work in Sociology, Women’s Studies and Cultural Studies—explore the recent turn in critical theory to affect, especially the conceptualization of affect that draws on the line of thought from Gilles Deleuze and Felix Guattari back through Baruch Spinoza and Henri Bergson.<sup>2</sup> The essays engage the insights of scholars who presently are working in this line of thought, and who treat affectivity as a substrate of potential

bodily responses, often autonomic responses, which are in-excess of consciousness. For these scholars, affect refers generally to bodily capacities to affect and be affected or the augmentation or diminution of a body's capacity to act, to engage, to connect, such that autoaffection is linked to the self-feeling of being alive—that is, “aliveness” or vitality.<sup>3</sup> Yet, affect is not “presocial,” as Massumi argues. There is a reflux back from conscious experience to affect, which is registered, however, as affect, such that “past action and contexts are conserved and repeated, autonomically reactivated but not accomplished; begun but not completed.”<sup>4</sup> Affect is a non-linear complexity out of which the narration of conscious states such as emotion, are subtracted, but always with “a never-to-be-conscious autonomic remainder.”<sup>5</sup>

In this conceptualization, affect is not only theorized in terms of the human body. Affect is also theorized in relation to the technologies that are allowing us both to ‘see’ affect and to produce affective bodily capacities beyond the body's organic-physiological constraints. The technoscientific experimentation with affect not only traverses the opposition of the organic and the nonorganic; it also inserts the technical into felt vitality, the felt aliveness given in the pre-individual bodily capacities to act, to engage, to connect—to affect and be affected. The affective turn, therefore, expresses a new configuration of bodies, technology and matter that is instigating a shift in thought in critical theory. It is this shift in thought that the following essays engage. Taken together, the essays explore the movement in critical theory from a psychoanalytically informed criticism of subject identity, representation and trauma to an engagement with information and affect; from privileging the organic body to exploring nonorganic life; from the presumption of equilibrium-seeking closed systems to engaging the complexity

of open-systems under far-from-equilibrium conditions of metastability; from focusing on an economy of production and consumption to focusing on the economic circulation of pre-individual bodily capacities or affects in the domain of biopolitical control. Taken together the essays suggest that attending to the affective turn is necessary to theorizing the social.

This not only means thinking about affect in terms of the historical changes in Western capitalist industrial societies but recognizing that politics, economy and culture always have been and are presently being reconfigured differently across various regions of the world. This recognition comes not so much from a comparative analysis but rather a geopolitical analysis of the ongoing transformation of relations of power across international organizations, regions, nations, states, economies, private and public spheres. *The Affective Turn* especially marks the way these historical changes are indicative of the changing global processes of accumulating capital and employing labor power through the deployment of technoscience to reach beyond the limitations of the human in experimentation with the structure and organization of the human body, or what is called 'life itself.'<sup>6</sup> The affective turn throws thought back to the disavowals constitutive of Western industrial capitalist societies, bringing forth ghosted bodies, and the traumatized remains of erased histories. It also sends thought to the future to the bodily matter and biotechnologies of technoscientific experimentation.

The affective turn invites a transdisciplinary approach to theory and method which necessarily invites experimentation in capturing the changing cofunctioning of the political, the economic and the cultural, rendering it affectively as change in the deployment of affective capacity. The authors of the essays collected in *The Affective*

*Turn* have made use of theory and method both to grasp the changes that constitute the social and to explore them as changes in ourselves, circulating through our bodies, our subjectivities, yet irreducible to the individual, the personal or the psychological.

Irreducible because the shift in thought that *The Affective Turn* elaborates might itself be described as marking an intensification of self-reflexivity (processes turning back on themselves to act upon themselves) in information/communication systems, including the human body; in archiving machines, including all forms of media technologies and human memory; in capital flows including the circulation of value through human labor and technology; and in biopolitical networks of disciplining, surveillance and control.

As self-reflexivity becomes internal to these systems, an ongoing and readily available feature of their functioning, self-reflexivity increasingly is realized in feed-back loops, which shoot off with varying speeds, in multiple directions, and in multiple temporalities, emerging by chance and out-of-control—the chaos which, as Massumi proposes, is at this time the condition of possibility of the social. System self-reflexivity shifts from seeking homeostasis and equilibrium to seeking control and freedom in complexity in systems under far-from-equilibrium conditions.<sup>7</sup> In introducing the essays, then, I want to give some sense of the chaotic processes that presently constitute the social. I also want to revisit the various intellectual discourses that the authors and I explored together in order to refind the capacities of critical theory to address the reconfiguration of technology, matter and bodies—captured in the affective turn.

### **From traumatized subjects to machinic assemblage**

In 1999, I taught a course entitled *Psychoanalysis and Social Theory*. I organized the course around a list of readings meant to move us through psychoanalytic discourses on

trauma, melancholy and loss and allow us to then turn to Gilles Deleuze's work on time, bodies, images and memory. I wanted students to examine the ways bodies are thought in relationship both to trauma and to technoscientific productions of bodily capacities beyond the human body's organic-physiological constraints.

A number of the essays that follow might be described as experimental and autoethnographic as each essay reflects the subjectivity of the writer. But what is more important is the way the essays render changes in processes of embodiment, that is, employ new writing/methods for grasping the materialities and temporalities of bodies. On one hand, the essays touch on a psychoanalytically oriented account of trauma in order to welcome bodies that are haunted by memories of times-lost and places-left. On the other hand, the essays engage technoscientific experimentation in exploring the disjointed temporalities of experiences which cannot be known for certain, cannot be placed once and for all, but which repeatedly pressure the subject with bodily effects.

Grace M. Cho's essay, "Voices from the Teum: Synesthetic Trauma and the Ghosts of Korean Diaspora" is a performed movement from a psychoanalytic understanding of trauma to Deleuze's notion of 'machinic assemblage.' Cho's essay focuses on the traumatic history of Korean women from Japanese colonization to the U.S. diaspora. She treats the diasporic body as an effect of a transgenerational haunting and as a composed machinic assemblage. Diasporic bodies, she proposes, carry a vision, a machinic vision, of what they did not see and what an earlier generation saw but could not say they saw. Cho shows the diasporic body as it acts out being haunted, repetitively and melancholically, in a constant movement toward the traumatic experience of an earlier generation, her mother's. Hosu Kim's essay, "The Parched Tongue," focuses on the production of trauma in terms of a body without organs, a body that does not privilege

the organism, and thereby lets loose body parts for a machinic assemblage. One body part in particular is the focus of Kim's "Parched Tongue:" the mouth—its ability to or its failure to shape words. In the aftermath of the move from Korea to the U.S., the mouth of the diasporic body holds a cracked tongue, having become parched with envy, in an economy of English. It is made to gather all sensations, the effects of the history of the American Dream gone nightmarish, the textualization of which invents: a broken English gone poetic.

It is not surprising that students and I first began to engage the shift in thought in critical theory and the attendant intensification of self-reflexivity through a discussion of psychoanalysis—the self-reflective methodology of choice of critical theory just before the turn of the century. Nor is it so surprising that this engagement would lead us to move through trauma studies, and the queering of melancholy and loss, in order eventually to think about technoscience and rethink the technology of time and the ontology of bodily matter. After all, in the last years of the twentieth-century, critical theory came to focus on trauma, loss and melancholy, borrowing from psychoanalytic discourse. That it did so at the turn of the century might well be expected but what is nonetheless important to notice is how psychoanalytic discourse about trauma could so ably serve as a summary rendition of the epistemological crisis in Western thought, which critical theory instigated, at the same time that psychoanalysis could offer an opening to the future of thought in the ontology it proposes for bodies, temporality, memory and materiality.

Even before the turn of the century, critical theory had been engaged with psychoanalysis, especially with a Lacanian understanding of the subject, which emphasized the human being's entrance into subjectivity and language through a

subjugation to the symbolic law of the father—the oedipal law that demands that the infant-child submit to symbolic castration, to a loss of wholeness, a loss of what Lacan had referred to as the imaginary wholeness of the mirror stage. While the subject does submit to the law, as Lacan argued, there also is a refusal of the law, so that the subject is shaped around a lack in being, a castration that is both avowed and disavowed in the unconscious, which sends unconscious desire along a chain of signifiers in a blind search to recapture what is lacking. The subject is shaped around a void, a real that is always already lost and only leaves traces of its loss as traumatic effects.

It is in the Lacanian understanding of the subject that trauma is linked to the “Real,” which is equated with the “unassimilable,” presenting itself in analysis, as Lacan put it, “in the form of the trauma, determining all that follows, and imposing on it an apparently accidental origin.”<sup>8</sup> For Lacan, the Real is unassimilable because it is non-symbolizable. It is that which is in-excess of the symbolic, an exclusion or void interior to the symbolic but not reducible to the symbolic or the imaginary. Rather, this interior exclusion or void in the symbolic is the very condition of possibility of the symbolic, what will surface seemingly accidentally as an origin of subjectivity, identity, meaning and materiality.

Critical theory not only was influenced by Lacan’s understanding of the subject and unconscious desire. The Lacanian understanding of the interrelationship of the real, the imaginary and the symbolic also took hold in critical theory, as it explored a more general treatment of the unassimilable. Critical theory turned psychoanalysis into a provocative and productive way of thinking politically about subjectivity, identity, meaning, bodies and reality. For one, it retraced the unassimilable presenting itself in

thought, finding the traces of the unthought of authorized knowledge. It did so often on behalf of those excluded from authorship or the authority of knowledge.

In taking up trauma, critical theory was able to transition from the deconstruction of the Subject of Western modernity to the production of multiple subjectivities and multiple modernities expressed in new forms of history, often presented at first in autobiographical experimental writings by diasporic subjects. These experimental forms of writing render the traumatic effect of the long exclusion from writing, which haunts the writing as a motive force. These writings are traumatizing as they call into question the truth of representation, the certainty of memory, if not the very possibility of knowledge of the past.

Just as experimentation in autoethnographic writing was being elaborated in critical theory and cultural criticism, trauma was being discussed in terms of its effects on memory, its producing in the subject the incapacity to retrieve the past, or to speak truth about it. In her take on various debates over the effects of trauma, Ruth Leys proposed that trauma is a forgetting without memory so that traumatic effects are a symptomology substituting for what was never experienced as such. It cannot be said that there is repression of what is experienced. There is no repression and therefore no possibility of projection or displacement onto the other. Instead, trauma is drawn back into the ego. The ego is overrun by the object or event, fixating the ego.

The ego is put into something like a trance state, what Leys has referred to as the ego's "mesmerized immersion in the object," a "fascinated identification" with the object or the event. There is a coalescence of the ego with the object or event of fascination, such that it might be said that there is no ego, surely not one distinguishable from the



object.<sup>9</sup> Trauma is the engulfment of the ego in memory. But memory might better be understood not as unconscious memory so much as memory without consciousness and therefore, “incorporated memory,” “body memory,” or “cellular memory.” As a surfacing of a difficulty in remembering or in being certain about the truth of memory, the body becomes a memorial, a ghosted bodily matter.

Although there are efforts to work out trauma, more commonly trauma is acted out or compulsively repeated, a seemingly wasteful but actually productive repetition. The effort to overcome the repetition fails and fails to put an end to forgetting. Not surprisingly, the experimental forms of writing that mean to capture trauma often present the subject in blanks or hesitations—a topographic formulation of forgetting, loss, uncertainty, disavowal and defensiveness. Moreover, the loss and the forgetting might not be those of the writing subject per se. As Nicolas Abraham and Maria Torok suggest, in an elaboration of what they refer to as “transgenerational haunting,” the forgetting of trauma is passed down from one generation to another, mesmerizing multiple egos, putting all in a transgenerational bodily trance.<sup>10</sup> Not only does one generation act out the trauma of the generation before it. There also can be a haunting across different groups of one generation, in different places, “creating a monstrous family of reluctant belonging,” as Jacqueline Rose puts it, in her treatment of the transgenerational haunting joining Palestinians and Israeli Jews.<sup>11</sup> One lives in the unconscious fantasy of the other, not unfamiliar to each other but all too familiar. There is, what Petar Ramadanovic calls “an entanglement,” “where, instead of the we-that-will-have-been, there is an entanglement beyond all possibility of disengagement.”<sup>12</sup>

But what kind of body is the body of entanglement? What is the ontological status of a ghosted body, of a haunted materiality? Of course, critical theory of the late twentieth century had drawn on a psychoanalytic account of trauma to rethink bodily matter. Judith Butler had introduced queer theory with her notion of “melancholic heterosexuality;” she had argued that with the imposition of the cultural norm, or regulatory ideal of heterosexuality, what she referred to as “heteronormativity,” the love for the same sexed parent is not merely repressed but foreclosed. As such, the loss is never actually experienced and, therefore, cannot be mourned. The loss is, however, melancholically incorporated and lived in the body as compulsively repeated traumatic effects, giving form to the matter of the body, giving the body the sexed morphology of a melancholic heterosexuality.<sup>13</sup> As such, the body is materialized as ghosted or haunted by a loss which is endlessly repeated, performed albeit with a possibility of difference (*différance*) in the interval between repetitions. Butler’s queer theory makes bodily matter dynamic with an incorporated haunted/haunting imaginary, the materialization of a foreclosed unconscious desire. In recognizing the material effects of the imaginary or haunted body, Butler begins to move theorization of the body beyond Lacanian semiotics and opens up the possibility of rethinking bodies, matter and technology.

However, while for Butler the matter of the body is dynamic, its dynamism is the effect of the productivity of a cultural form imposed on the body. The nature of bodily matter is culturally or unnaturally formed, so that while neither form nor matter preexist each other, only form is productive, what in his critique of Butler, Pheng Cheah has described as the “hypertrophic productivity” of a historicized or politicized notion of form.<sup>14</sup> Cheah concludes that for Butler, “matter is invested with dynamism and said to

be open to contestation only because the matter concerned is the product of sociohistorical forms of power, that is, of the human realm.”<sup>15</sup> Matter remains undifferentiated. The social too remains undifferentiated, serving only as a site for the deployment of power in the imposition of a cultural form. In this, matter and form are opposed in an a-historical way, in a way that is unreflective of the changing relation of matter and form elaborated in technologies that give a body and a sociality to such relations. Butler’s treatment of the body therefore does not open up to rethinking bodily matter or matter generally beyond the human body. She inevitably reproduces the distinction, if not opposition, between matter and form, nature and culture.

Refusing to think the dynamism of the body as only the product of cultural form or the effect of the performativity of language, Cheah raises the possibility that form inheres in matter as potential capacity for self-organization, out of which bodies, and not only human bodies, arise. Cheah questions “if *tekhne* is *physis* deferred, then must there not be another nonanthropologic level of dynamism subtending these different orders (of culture and nature), irreducible to mechanical laws of causality and naturalist teleology, of which the performativity of language would only be a case?”<sup>16</sup> Such questioning not only opens to the thought of matter as dynamic or alive, necessarily reconfiguring the relationship of bodies, matter and technology. It also opens to rethinking the form of the human body; the relationship of the human body to its environment. To engage in such rethinking requires contending with the idea of compulsive repetition that is central to psychoanalytic discourse on trauma linked to the Freudian death drive.

### **From body-as-organism to nonorganic life**

In his use of the term nonorganic life, Manuel De Landa points to chemical clocks, wave solitons and cloud patterns as examples. These examples, he argues, show matter's capacity for self-organization and emergence. However, what "has allowed us to 'see' matter as self-organizing," De Landa argues, "is the advance in technology that materially supports (non-linear) mathematics, and with it mathematical technology."<sup>17</sup> I suggested to students that the thought of a dynamism inherent to matter troubles the body-as-organism, the body presumed in theories of trauma. And thus, with the thought of nonorganic life, the autoethnographic writing about trauma is called to go beyond itself, beyond speaking of the incapacity to speak, beyond a compulsive repetition of memory that fails to master traumatic effects. I proposed that we rethink repetition central to psychoanalytic discourse on trauma in the context of technoscientific experimentation and the reconfiguration of bodies, technology and matter.

For me, the shock of Keith Ansell Pearson's *Germinal Life: The Difference and Repetition of Deleuze* was the critique it offered of Humberto Maturana and Francisco Varela's concept of "autopoiesis," a critique which Pearson drew from Deleuze's biophilosophical criticism of Freud's death drive.<sup>18</sup> Maturana had been my teacher years earlier and had interested me in neurophysiology, information theory and the field of cybernetics to which Maturana and Varela's thinking about autopoiesis is deeply indebted. Exploring the relation of Deleuzian biophilosophy to autopoiesis in the context of a reconfiguration of bodies, matter and technology was challenging but discomfiting as well. In 2000, I taught a course entitled, *Feminism and Science Studies*, with the intention of exploring more deeply the ongoing transformations in science or what would be better referred to as technoscience. Just before the course began, it was announced that the mapping of the human genome was completed.

A number of the essays which follow are engaged in rethinking the subject of trauma as something more like an assemblage of body memories and pre-individual affective capacities. Trauma is made to open up to a new ontology of bodily matter, beyond the autopoiesis of the human organism, making it possible to rethink heredity, repetition and time in terms of the virtual and the crack in time. Jean Halley's "The Wire" is a moiré patterning of times and places, where the distinction between past and present, here and there, as well as human and animal, life and death cannot be made. For Halley, the autoethnographic form cannot be used for telling a story of self-development, as is often now the case with autoethnographic writing. The autoethnographic form cannot be given over to producing the truth of a self-(re)discovered because of the difficulty of being able to know, especially to know oneself. In this recognition, strangely, hopefully, Halley's scripting of the desire for suicide as a release unto life sits along side the becoming of a new life form in the thought of a machinic assemblage. Jonathan Wynn's essay, "Haunting Orpheus: Problems of Space and Time in the Desert," maps the space of arriving and leaving, of separation deferred and displaced onto a juxtaposition of 'real' places, Las Vegas and Rhyolite, the former in constant reconstruction, the latter long a ghost town. Producing a wild oscillation around the architectural tension between construction and destruction, Wynn manipulates the tempo of creation and decay, even life and death. Deborah Gamb's "Myocellular Transduction: When My Cells Trained My Body-Mind," explores social bodies below the level of the human organism through movement and transformation at the cellular/muscular level. "Myocellular Transduction" reacts to the crossing of bodymind/mindbody in the process of physical training. It explores the affects and sensations of movement in a way that complicates the relations of bodies, power and cultures as they become for a human-body-becoming-runner.

In *Beyond the Pleasure Principle*, Sigmund Freud takes up repetition and memory in discussing the war neuroses of men who suffer from repeated reminiscences of what had threatened them with death.<sup>19</sup> Freud connects this unpleasurable repetition this threat to the subject's unity or integrity, to the death drive, which he also calls the 'drive for mastery.' The repetition of the death drive functions at the limit of the subject's identity, where there is a contest within subjectivity between mastery and disintegration: repeating near-disintegration over and over again seemingly in order to regain integration and restore equilibrium. Freud's theorization of the death drive is folded into his discussion of trauma as the excess of in-flowing energy and of traumatic repetition as a curative rebinding of energy that tends toward the preservation of the equilibrium or homeostasis of the bodily ego. As such, Freud's theorization of the death drive moves psychoanalysis from its focus on sexual libido and the repression of sexual desire to anxiety and the disavowal or management of the threat to the ego's definition or boundaries, a threat, which, for Freud, comes from the environment.

Not only does Freud concern himself with threats to the boundary of the bodily ego in terms of energy flows; he also treats these threats in relationship to the evolution of the species. Arguing that ontogeny recapitulates phylogeny, Freud suggests that in seeking homeostasis and equilibrium, the repetitions of the death drive function in order to return the ego to nonorganic matter, the primitive, the infantile, and the instinctual. In a defense against disequilibrium or death, there is a repetition of the development of the human organism, which is a repetition of the development of the species. Thus the bounded-ness of the ego, the human body and the species are reproduced. What never evolves is the organism's desire to regress or return to homeostasis and equilibrium. For

Freud, as for Butler and for theorists of trauma generally, the body is the body-as-organism, a closed system, seeking homeostasis and equilibrium. To think the body differently is to rethink matter and the dynamism inherent to it. It is rethink evolution of species as well.

In rethinking evolution, Keith Ansell Pearson takes up Deleuze's critique of Freud's death drive in relation to Humberto Maturana and Francisco Varela's treatment of autopoieses. Deleuze refuses to think, as Freud did, that the only force of evolutionary change comes from the environment outside the human organism. Instead, a co-evolution of organism and environment is posited. Maturana and Varela agree but for them coevolution occurs in terms of the organism's "autopoiesis," or its being informationally closed to the environment."<sup>20</sup> This means that in its relationship to the environment, the organism's functional organization of its components, their interaction, are maintained. Closed to information, the organism can not merely be determined from without by the environment; instead the organism engages the environment, autopoietically. The organism selects the environment in ways that allows it to self-make itself as a self-reproducing organism. In other words, while relating to its environment, the organism seeks homeostasis and equilibrium for itself; it is in terms of or on behalf of its homeostasis and equilibrium that the organism selects its environment. Therefore, the environment's effect on the organism is, in part, selected by the organism. For Maturana and Varela, this is what constitutes the co-evolution between the autopoietic organism and the environment.

Pearson suggests that a Deleuzian biophilosophy offers a criticism of autopoiesis and therefore a different view of the organism. Autopoiesis, as Pearson sees it, does not

offer enough in way of elaborating the potential for co-evolution of organism and environment because autopoiesis takes disturbances to the organism's equilibrium and homeostasis as destructive. The closure of the organism to information is questioned by Pearson. Autopoiesis, he argues, places "the stress on operational closure, which can only conserve the boundaries of the organism," and therefore, presents the organism with "a stark choice between either entropy or maximum performance." What Maturana and Varela do not see is "that living systems and their boundaries are caught up in machinic assemblages that involve modes of transversal becoming," that is communication across species and genus, across the evolution of phyletic lineages.

Deleuzian biophilosophy suggests that the organism must be rethought as open to information, where information is understood in terms of the event or chance occurrence arising out of the complexity of open-systems under far-from-equilibrium conditions of metastability, that is, where microstates that make up the metastability are neither in a linear nor deterministic relationship to it. As such the organism is opened to the possibility of change in its organization and structure and is better understood as a machinic assemblage, which, at this time, is approaching a "techno-ontological threshold," such that "the human is implicated in a postbiological evolution as part of its very definition."<sup>21</sup>

Pearson defines a machinic assemblage in relationship to such a threshold: "A machinic assemblage connects and convolutes the disparate in terms of potential fields and virtual elements and crosses techno-ontological thresholds without fidelity to relationships of genus or species."<sup>22</sup> Neither organic nor mechanical, the machinic assemblage arises out of the machinic heterogeneity of dynamic matter and as such



introduces into autopoiesis the far-from-equilibrium conditions “required for a truly creative model of evolution, in which evolution does not simply involve self-reproduction through the dissipation of outside forces and nullification of dimensions of alterity.”<sup>23</sup>

For Pearson, the thought of a machinic assemblage is linked to the thought of an “artificial selection” of a “machinic evolution,” which not only is resonant with the potential of postbiological evolution; it is also resonant with a way of thinking about evolution that differs with Darwin’s. Here Pearson draws on the contentious rethinking of evolution in the work of Lynn Margulis and Dorion Sagan who point to the parasitic and symbiotic relations that precede the appearance of reproduction through nucleic DNA, a process called endosymbiosis that challenges the model of evolution based on linear or filiative evolution. Whereas the Darwinian treatment of evolution proposes that natural selection ensures common descent through a regulated transmission of variations, Margulis and Sagan point to mitochondrial transmission, which like bacteria, transmit information just through contact, reengineering the genetic material of each lineage it moves through without fidelity to genus or species.<sup>24</sup>

For Pearson, endosymbiosis points to a virtual multiplicity out of which novelty emerges. This move away from privileging homeostasis to thinking evolution in terms of information, complexity and open-systems under far-from equilibrium conditions of metastability undoes the opposition between the organism and the environment, as well as the opposition between the organic and the nonorganic. Rather than presuming matter or the nonorganic to be inert, such that form is imposed on it, matter is understood to be in-formational, that is, form arises out of matter’s capacity for self-organization out of complexity.

In his reading of Deleuze's biophilosophy, Pearson points to Deleuze's thinking about heredity and time as the measure of an increase of disorder and disequilibrium, and the possibility of chance. Here, time is no longer the narrative time of human subjectivity: that is, human development linked to historical development, or to Darwinian thought of the evolution of species. Instead, time is thought of in terms of "the virtual," which Deleuze, following Bergson, contrasts with "the actual."<sup>25</sup> The virtual is not the possible that is to be realized; instead, the virtual calls forth actualizations that have no resemblance to the virtual. Actualization is not a specification of a prior generality. Actualization out of virtuality is creation out of heterogeneity. Actualization is an experiment in virtuality, an affecting or materializing of a virtual series.

For Deleuze, the virtual is linked to what he refers to as the "time-image." The time-image gives a direct image of time and therefore differs from what Deleuze refers to as "the movement-image," the most important variant of which is "the action-image." The action-image is fixed to the movement of a human "sensory-motor schema," which fixes time to the unfolding movement of a linear narrative, typical of classical cinematic representation. Unlike the movement-image, the time-image is no longer deployed to make something seen or to make a viewer see something. It is not a matter of representation but rather a matter of images moving in conjunction with each other at different angles and speeds. The time-image makes time visible in its own movement and without appearing as a movement aberrant to narrative.<sup>26</sup> As such, the time-image points to the productivity of time, the movement of time outside the subject and suggests a different sort of memory, or storage, which is readily linked to electronic imaging or digital technologies.

In this context, Deleuze's notion of "the crack" offers an invitation to think memory, image and time differently and therefore to think differently about trauma and writing about trauma.<sup>27</sup> In psychoanalytic terms, trauma makes the past and future meet without there being a present. The future is collapsed into the past, as the past overwhelms the present—all this usually taken as pathological in the psychological sense. For Deleuze, however, the crack of heredity is not about what is being passed down, something being passed from the past to the present, as for example, in the passing on an addiction to alcohol. The crack is rather the potential for a swerving in terms of inheritance, the potential for swerving to the future. So, the past does not overcome the present because the past in general is ontologically present. The crack arises in the present out of the past as a virtuality, as a chance of repetition veering off from what is, off from what is a passing to the past from the present.

The crack of time, in which the actualization of the virtual is made possible, is like the imaginary of psychoanalysis, where it is unclear whether one is in the past or the present, resulting in a haunting in time, of time, a folding of time. But, the imaginary of psychoanalysis haunts the individual's time through the displacement of loss or lack in being, in the being of the subject, as well as through the incorporation of others' displaced losses or lack, especially those of the parents. Memory is often the memory of childhood to which one regresses. For Deleuze, the imaginary should not be reduced to the individual subject's unconscious. The imaginary does not just belong to the subject or even to the subject's body. The imaginary is part of a machinic assemblage, which may include the subject but does not necessarily. As Pearson argues, Deleuze treats memory not as regressive but as creative, a shift "from its function as a psychological faculty of

recollection.”<sup>28</sup> Rather, memory is conceived “as the membrane that allows for correspondence between ‘sheets of past and layers of reality,’ making insides and outsides communicate...,” with the potential to swerve to the future.<sup>29</sup> Memory intervenes and intensifies, opening up new paths.

Memories become a block, a “block of becoming” that allows lines of flight, of inventiveness, through transversal communication, that is, communication without fidelity to genus or species, or a hierarchy of forms. There is a creation which involves deterritorialization which, however, is not regression; it does not presume loss or a lack in the being in the subject, as the psychoanalytic treatment of trauma does. Even the thought of childhood memories must be rethought. As Deleuze (and Guattari) put it: “We write not with childhood memories but through blocs of childhood that are the becoming–child of the present.”<sup>30</sup> This writing block of childhood calls forth experimental writing that is not merely an experiment with a given form, such as experimenting with the ethnographic form. It is rather an invention that strives to capture a shift in thought that is happening to the writer and which the writer is inviting. Each writer is thrown backward and forward to find the self that is turned into parts, turned around parts of a new assemblage: an autobiographical-techno-ontological writing block.

### **From Discipline and Representation to Control and Information**

Following Deleuzian biophilosophy, we were moving away from thinking of bodies only in terms of the human organism and rethinking the relationship of life, information and technology. We retraced the crossing of information theory from physics to biology.<sup>31</sup> This allowed us to think of both matter and the human body (linked to genetics and recombinant DNA) as informational, where information, as Eugene Thacker writes, “is

seen as constitutive of the very development of our understanding of life at the molecular level—not the external appropriation of a metaphor, but the epistemological internalization and the technical autonomization of information as constitutive of DNA.”<sup>32</sup>

We read Martin Heidegger’s “The Question Concerning Technology” and John Johnston’s “Machinic Vision,”<sup>33</sup> and wondered about scientific self-reflexivity in the production of knowledge, when science has become a primary agency of power? We concluded that it would matter what we thought about technoscience or technological development in the late twentieth century. It would matter if we thought, as Heidegger did, that there is a fall from nature into technology that, in relationship to a history of capitalist development of technology, means the increasing displacement of the human laborer by the machine, taken to be a detriment to humanity. Or, if instead, the natural and the technological are indistinguishable, as Johnson proposes, what question should we raise about the relationship of information, labor and bodily matter? What should be the nature of criticism? Donna Haraway suggests that the object of study is inextricable from the apparatus or the technology of both its production and further elaboration. Each object/event, or what Haraway refers to as “a material semiotic entity,” is dynamic and generative. Each object/event is like a temporary knot in a field of moving forces and requires a form of criticism that is different from a scientist’s self-reflection or the critic’s reflexivity.<sup>34</sup> It requires, at least, understanding the field of moving forces

A number of the essays are engaged with technology’s reach to affective bodily capacities and in rethinking representation in terms of these technologies. The essays also treat the shift in governance from discipline to control in which these technologies play a part. In “Slowness: Notes Toward an Economy of Differential Rates of Being,” Karen

Gilbert ironically speeds through studies in physics and biology, writing fast, trying to capture the very speed of thought coming from the future. In doing so, Gilbert argues that there are two complementary systems within living entities: one a rule-following unidirectional mode of being subject to entropy understood in 19<sup>th</sup> century terms of thermodynamics, the other a mode of being, arising in a field of flows and phase shifting, which Gilbert takes up in terms of quantum theory. Jamie Skye Bianco's "Techno-Cinema: Image Matters in the Affective Unfoldings of Analog Cinema and New Media" treats technoscientific experimentation as a 'literary genre,' in order to draw out an ethical approach to film criticism. In taking up *Requiem for a Dream's* 'television world explosion,' 'Lola Reint's body-clocked repetitions' in *Run Lola Run*, and *Memento's* 'sheets of reversing time,' Bianco registers a shift from a politicized aesthetics of desire and subject identity to an ethics of capture (and flight) in response to biopolitical control. She explores time and writing about time, writing in time "in a prompt language ...equal to the moment,"<sup>35</sup> as Walter Benjamin might put it, or when "the game is at its end from the start," as Bianco puts it. In their essay, "Losses and Returns: The Soldier in Trauma," Greg Goldberg and Craig Willse focus on the soldier-body both in terms of the technoscientific preparation of a body, made ready for war and in terms of media accounts of the damaged bodies of soldiers returning from the war in Iraq. Goldberg and Willse argue that the soldier-body, both as the production of highly technologized war training and as the object of medical-scientific practices, reveals an organization of bodily matter and its capacities that exceeds the treatment of the body in trauma studies because the latter fails to grasp the way in which trauma (studies) presumes the body-as-organism.

What the body is thought to be, Luciana Parisi and Tizina Terranova argue, is a matter of an historically specific organization of forces brought into being by capital and discursive investments. For example Parisi and Terranova point to the late nineteenth century and the becoming of the body-as-organism which was not so much produced but “reinforced and given strength by the disciplinary society (of industrial capitalism) so that it could become the ultimate definition of what a body is.”<sup>36</sup> Following Michel Foucault, Parisi and Terranova point to the enclosures of civil society—the family, the school, the labor union—as sites of ideological interpellation as well as the enforcement of social and cultural practices that constitute a regime of representation.

Making an organism into a human subject, this regime of representation centers on the perception of the body mirrored, from a distance, as a whole. The investment in the body-as-organism makes the body a closed system drawing energy from the outside thus, drawing the body back into homeostasis and equilibrium, which leads inevitably to entropic heat death. As Parisi and Terranova put it: “The great confinement was essential to this process of reorganization of power in the interests of an emerging industrial capitalism. Thus, the fluids which were circulating outside and between bodies, are folded onto themselves in order to be channeled within the solid walls of the organism/self/subject.”<sup>37</sup>

In this context, “The body becomes abstracted and organized so that it can be trained: trained to reproduction within a thermodynamic cycle of accumulation and expenditure; and trained to work.”<sup>38</sup> However, with the further expansion of capitalism in the late twentieth century and its disorganization pressured by globalization, structural adjustment and flexibilization, Parisi and Terranova argue that there is a shift in

biopolitics, a shift from disciplinary societies to what Deleuze refers to as “societies of control.”<sup>39</sup> Control is the effect and the condition of possibility of an investment in the reorganization of material forces, of bodily matter.

Parisi and Terranova suggest that to understand the extension of biopolitics in the passage from discipline to control, it is necessary to understand the changing relationship of information to bodies, labor, and energy, from industrial capitalism to the present globalization of finance capitalism, from the nineteenth century elaboration of the first and second laws of thermodynamics to the late twentieth century elaboration of complexity theory. This movement in the theorization of information begins with a closed mechanical system, where, as the second law of thermodynamics states, the increase in entropy is inevitable as an irreversible process of heat-death. Here entropy is defined as energy that can no longer be put to work, no longer organized to do something, having become chaotic, like micro-particles moving out of order, without aim or purpose. Entropy is the measure of turbulence or disorder in a closed system.

It is this idea of entropy that would undergo change with the theorization of information by Claude Shannon in the late 1940's who defined information mathematically as positively correlated with entropy or noise.<sup>40</sup> For Shannon, information is the measure of the (im)probability of a message going through a channel from sender to receiver. Information, in the mathematical account, Terranova suggests, “represents an uncertain and probabilistic milieu by reducing it to sets of alternatives that determine more or less likely sets of possibilities on the basis of a given distribution of probabilities as determined by the relation between channel and code.”<sup>41</sup> As such, meaning is secondary to information; information is primarily a matter of contact and



connectibility, a modulation of affectivity and attention by fashioning or reducing the real through the exclusion of possibilities.

In contrast to Shannon's theorization of information in the late 1940's, Norbert Wiener's theorization of information at around the same time was more directly linked to biology and 'life itself.' Wiener conceived of information differently than Shannon did. Shannon had theorized information as positively correlated with entropy such that the more entropy, the more improbable the message being sent, and therefore, the more information. Wiener proposed that information was an organization or an ordering in the indifferent differences of entropy or noise, and thus, was to be understood to decrease entropy. For Wiener, information is a local organization against entropy, a temporary deferral of entropy—that is life. Even as entropy increases in the universe as a whole, information can prevent entropic collapse temporarily as extrinsic resources of informational order or energy arise.<sup>42</sup> If we take Shannon's definition of information to hold at the point of sending the message and Wiener's at the point of receiving the message, these definitions are not contradictory as they first seem; both fit the mathematical definition of information.

But when Wiener's understanding of information as a negentropic decrease of entropy is put along side Shannon's understanding of information as positively correlated with entropy, a retheorization of information is once again invited. This time, in the latter part of the twentieth century, information is theorized in terms of open-systems under far-from-equilibrium conditions of metastability. Here, irreversibility or the passing of time is disconnected from heat-death or the entropic closed system, and is understood instead in terms of the movement from disorder to order and from order to disorder in the

metastability of an open-system, where microstates are ontologically probabilistic; they are in a nondeterministic nonlinear relationship with the metastability they constitute. As such, the negentropic decrease of entropy can be understood to decrease information (or to increase the probability of the range of microstates that make up a metastability) while at the same time, an increase of complexity or turbulence can emerge at another level, thus increasing information (or the improbability of any particular microstate at this level). This is what Ilya Prigogine and Isabelle Stengers capture in theorizing dissipative structures that emerge by chance in open-systems under far-from-equilibrium conditions of metastability and dissipate the dissipation of entropy or temporarily reverse it. Order turns to disorder turns to order across various levels of microstates.<sup>43</sup> To ‘see’ matter as informational is to recognize the chance for emergence out complexity, to see matter’s inherent capacity for self-organizing out of the complexity of microstates, or “the imperceptible speed of matter.”<sup>44</sup>

It is in these terms that it becomes possible to think the body as an open-system, beyond the containment of the organism, and therefore, to think of pre-individual bodily capacities or affectivity in relation to the passage from discipline to control. In control societies, the body, as Parisi and Terranova argue, “no longer corresponds to the fleshy representation or phenomenon of the human subject, but rather is opened up to particles, waves and attractors, which constitute it as a far-from-equilibrium system.”<sup>45</sup> What is perceived as the body “is the movement of forces, the process of composition of differential elements which defines the origin of life as turbulent rather than derived from entropic collapse. In contemporary technoscience, lethal entropy becomes vital

turbulence.”<sup>46</sup> It is in these terms that bodily matter is conceived as infinitely productive and control becomes a matter of strategizing an optimized reproduction.

The bodies of control society are a composition of dynamic matter invested into being, an investment of capital and technoscientific experimentation. This investment of bodies for control is part of a reconfiguration of state and economy, the nation and civil society, the public and private spheres. As Foucault argued, in disciplinary societies, the "governmentalization of the state" enables the state to extend its disciplinary practices through institutions such as the church, the school, the prison, the family, and the union, what he called “the enclosures of civil society.”<sup>47</sup> Foucault’s revision of Hegelian thought about socializing laborers to the ideology of the nation state explores the way the state moves deep into the lives of individual subjects through disciplining, through complex strategies of socialization that the institutions of civil society deploy in managing individuals subjected to the moral order. Disciplining engages a politics of representation; it is part of a cinematic regime of representation by which familial and national ideological apparatuses function to constitute subject identities, and wherein resistance to these identities and the transgression of the institutional norms that support them, is possible, at times even enabled, by the instability of the strategies of disciplining.

The target of control is not the production of subjects whose behaviors express internalized social norms; rather, control aims at a never-ending modulation of moods, capacities, affects, and potentialities, assembled in genetic codes, identification numbers, ratings profiles, and preference listings, that is to say, in bodies of data and information (including the human body as information and data). Control is an extension of what Foucault referred to as biopolitics, where the individual body is not so much the focus as

is the species body and the regularities of the aggregate effects of individual bodies which institutes a politics of population. Control is a biopolitics that works at the molecular level of bodies, at the informational substrate of matter.

The production of normalization is no longer simply entrusted to the family, kin groups or other institutions of civil society; it also involves the investment in and regulation of a market-driven circulation of affect and attention. No longer captured in the disciplined body, the subject's desire passes beyond the enclosed spaces of the home, the school and the labor union, beyond the opposition of normal and deviant. As Massumi puts it: "The normative undergoes rapid inflation, as classificatory and regulative mechanisms are elaborated for every socially recognizable state of being.... 'Normal' is now free-standing, no longer the opposite and necessary complement of 'abnormal,' 'deviant,' or 'dysfunctional,' as it was under disciplinary power, except in limit cases."<sup>48</sup> The meaning of normative is changing, having become more about a group's "collective visibility and social operativity," about their practices for increased self-control in self-effacing or self-aggrandizing programs that are meant to modulate illness and health, limitation and freedom, life and death.

Rather than ideological interpellation of the subject, there is the deployment of "generic figures of affective capture," which provide a "gravitational pull around which competing orbits of affect and thought are organized." Generic figures, Massumi argues, do not indicate an absence of determination, "but the continuity and coexistence of determinabilities." A figure can be determined when needed and when it is so determined, it brings forth "competing bureaucratic bodies of control procedure and political command centers."<sup>49</sup> And all of this plays its part in the production of value. For

Massumi, who follow Deleuze's thinking about control, control is linked to the tendency in capitalism toward what Marx referred to as real subsumption, where capital shifts its domain of accumulation to life itself, to pre-individual bodily capacities, such that value is produced through modulating affect. All of this is enabled by technoscientific experimentation; all of this is inseparable from technoscientific experimentation.

Control societies call into question the politics of representation and subject identity, even as a method for achieving representation for those who had not been subjects of representation, or who had been traumatically excluded from voice. The shift to control calls into question autobiographical experimental writing; it calls into question the political effectiveness of self-reflexivity in the production of knowledge. Instead an experimental writing is called forth which shifts from critically responding to discipline to critically responding to control, moving as well from privileging the organism as the figure of life to considering pre-individual bodily capacities or affect. Experimental writing veers toward affectivity and control by way of rethinking materialism, memory, bodies, time and repetition. Experimental writing assembles with information technologies and something passes into the writing from the outside, another technological flow, reassembling images, sounds, languages and bodies.

Thinking in terms of control societies is itself an experiment, a theoretical experimental response to the turbulence of a global capitalist economy arising in the late 1960's and early 1970's, near and around the 1973 oil crisis. There is at that time, an intensification of the flexibilization of capital and labor, structural adjustment around the world and the ongoing investment in a post-cybernetic understanding of energy, information, labor and technology. These political, economic and cultural transformations

pressure a shift in capitalist accumulation to the domain of affects or pre-individual bodily capacities—to ‘life itself.’ That is to say, there is a putting into play something like a “primitive’ accumulation” for the reorganization of value around bodily capacities. Pre-individual bodily capacities are made the site of capital investment for the realization of profit—not only in terms of biotechnology, bio-medicalization and genetics but also in terms of a technologically dispersed education/training in self-actualization and self-control at the pre-individual, individual, communal, national and transnational levels.

### **From production and consumption to the circulation of affect**

Just a week before September 11<sup>th</sup> and the bombing of the World Trade Center, my course on *The Sociology of Bodies* began. I had assigned for our first meeting two readings: George Caffentzis’s 1980 “The Work Energy Crisis and The Apocalypse” and Antonio Negri’s 1999 “Value and Affect.”<sup>50</sup> I intended to use the readings as a way to get students to think about the post-cybernetic bodies of the early twenty-first century by means of reconsidering the relationship of energy, entropy, work, information and capital. Following September 11, the class discussion of this relationship continued, but frenetically, as we set out to explore the U.S. response to September 11<sup>th</sup>. As we thought about an affect economy conjoined with biopolitical control, we also began to focus on two social issues: mass incarceration and post-prison experience, and the deployment of human rights/human security frameworks in the context of counter/terrorism, massacre and war.<sup>51</sup> As our interest in control, information, and affect was stretched from U.S. mass imprisonment to the transnational concern with security in relationship to global capital, we began to think that the horrifying point of contact between the two, or the switching point from one to the other, is the growing numbers of persons who have been

categorized as “human waste,” to use Zygmunt Bauman’s term, and in the intensification of the operation of “necropolitics,” as Achille Mbembe would describe it.<sup>52</sup>

A number of the essays focus on affective labor and rethink capitalism, as it moves from formal subsumption to the real subsumption of ‘life itself.’ The essays take up paid and unpaid affective labor, both in relationship to nationally based and global economies in the age of structural adjustment. In his “Women’s Work and the Ambivalent Gift of Entropy,” David Staples rethinks 1970’s Marxist Feminist studies of women’s housework and their unpaid labor. He argues that these studies function within the limits of “a restricted political economy,” rather than “a general political economy.” He takes this distinction from Georges Bataille, which serves Staples in his elaboration of what Gayatri Chakravorty Spivak calls, “an expanded textuality of value.” Staples takes up the general economy of the gift in the figure of home based labor and traces the tendency of home based laborers to go outside the operation of a closed system of the “restricted” economy of orthodox Marxian and neo-classical political economics as well. Taking note of Jacques Derrida’s reflection on the gift, Staples finally finds a way to address the “post-thermodynamic” speculations appropriate to unpaid reproductive labor in the era of structural adjustment. In “Always on Display: Affective Production in the Modeling Industry,” Elizabeth Wissinger focuses on the work of fashion models. Arguing that understanding the body in terms of affective capacities proves a more effective model for researching postmodern bodies, Wissinger traces links between the growth of imaging technologies, the growth of the modeling industry, and increased investment in the means of modulating affective flow between bodies. Wissinger points to the socialization of affect or affective capacity in late twentieth century capitalism as a way to think beyond the subjectivist bent of traditional critiques of consumer culture. Melissa Ditmore’s “In Calcutta, Sex Workers Organize” takes up labor in an affective economy in order to

understand prostitution as sex work and to argue that abuses connected to prostitution and trafficking, which policy and law mean to legislate, would be better treated as labor issues aimed at the empowerment of sex workers. In “More Than a Job: Affect and Control in the Training and Education Industry for Health Care Workers,” Ariel Ducey focuses on allied health care workers—nursing assistants, technicians, and other paraprofessional workers—and on the educational and training industry which enrolls these workers into schooling for most of their careers as workers. While meeting the desires of workers to make their work “more than a job,” the job training and education industry not only prospers. It invests in the health care workers’ affect, strongly contributing to the generalization of service work for an affect economy.

George Caffentzis discusses the energy crisis of 1973 and the investment in technoscience around that time in the context of the changing relationship of profits and wages. Focusing on the movements beginning in the late sixties, which were linked to the identity politics of gender, sexuality, race, ethnicity and nation, Caffentzis argues that these movements forced a break up of the Keynesian-Fordist regime of accumulation, In the Keynesian-Fordist development of a welfare state along with the extension of mass consumption, the reproduction of the laborer is drawn into the market. There is a formal subsumption of labor to capital and mass consumption becomes a force of production. At the same time, there is an intensifying of the productivity of labor power given the expansion of work-saving technologies. As a result, an imbalance between wages and profit arises, intensified by the movements of liberation and the refusal of their participants to produce or reproduce. Capitalists respond by readjusting the organic composition of capital investment and accumulation.



For Caffentzis what this means is that starting in the early 1970's, there is an increased investment in the high investment end of capital, in the capital intensive industries of information and communication, resulting in the increase in the prices of these commodities but without real increases in labor's productivity. As profits diverged from the production of surplus value, there is a break with the Keynesian link of wage, profit and increases in productivity. Wages become disconnected from production and from the use value of labor so that the wage and increases in the wage become political; wages must be fought for politically through management-labor union agreement, as laborers seek wage hikes based on demands for schooling for themselves and their children, for health care, for therapy, for leadership training, and more. In such circumstances, it is not the wage which the capitalist has to manipulate in order to increase profit but the prices of commodities generally.

To manipulate all commodity prices, capitalists in the early 1970's manipulated the price of a basic commodity, one that could affect all others, that is, the price of energy. Thus, the oil crisis! But, how was it possible to increase the price of energy, an increase that demanded as well an increase of capital investment in the already capitalist intensive or high investment sector of energy production? From where did the surplus for investment come from? As Caffentzis sees it, the surplus available for investment comes from the surplus value of labor extracted from the profoundly expanded low investment sector of the service economy, an expansion that would bring women into the labor market, as the tasks of social reproduction, which women once performed without wage, would become waged. As such, reproductive services are commodified and globalized, all this pointing to the subsumption into capital of global reproduction. It is from this low

end sector of labor, expanding all around the world, that surplus value is extracted from long hours of work, often done by women from all over the world, and is transferred for investment in the high end sector of energy, along with investment in information and information technologies.

But, how, Caffentzis asks, did the investment in energy become an investment in information? He answers by pointing to a number of ways in which technoscientific development is needed in relationship to the investment in energy in late twentieth century capitalism. First, the service industry is intensely decentralized and requires information and communication technologies to make it work. Second, information and communication technologies are also needed in the transfer of surplus value extracted from the low investment sector of the service industry to the high investment sector of high priced commodities, the sector of information and communication. Third, there is a need to self-police constant capital; the investment of technoscience must be protected from accident and sabotage, even to the point of waging war. Surveillance technologies are central to an economy dependent on information and communication technologies.

So, while there is ongoing need for research and development as science and technology become more apparently inextricable from each other, part of this research and development is geared toward technological protections of the constant capital of technoscience itself. In this situation, the need for hyper-simulation of risk translates into control mechanisms being made immanent to information and communication flows; information and communication technologies subsume or internalize self-reflexivity. The need to discipline labor by interpellating laborers to the ideology of nation and family is surpassed or brought into capital so fully that a shift to direct control is made possible.

Thus, the shift to control does not mean that the labor of service workers and low-end factory workers all around the world do not produce surplus value. Yet, in pointing to the drive toward control, and its becoming immanent to information and communication technologies, central to capital accumulation, Caffentzis's analysis also suggests rethinking the organic body, machinic assemblages and information in relationship to work, energy and the tendency to the real subsumption of labor or 'life itself' to capital. After all, while it has been in the interests of capitalists to displace laborers with technology, this had been done only up to a certain threshold, that is, without risking the reproduction of the lives of human laborers. With real subsumption of labor into capital, it not only is the reproduction of the life of human laborers, but 'life itself,' which is set to an economy of risk. Life is risked where the risk is estimated to be worth it. To rethink the importance of human labor in this context is to rethink the relationship of bodies and value, the body-as-organism and labor.

Negri suggests that the relationship of labor, the body-as-organism and value is changed because the use value of labor cannot be measured; it is no longer outside capital, as in feudalism, for example. Nor is it simply inside of capital because labor's reproduction, having been subsumed by capital, has become a force of production and therefore is not simply a non-waged reproduction of the laborer, added to labor's use value. With real subsumption, labor is situated in a "non place" in relationship to capital—no place and all-over-the-place, where work goes on all-of-the-time, such that "labor finds its value in affect, if affect is defined as 'the power to act.'"<sup>53</sup> As such, capital produces its own outside from inside the viscera of life, accumulating at the level of pre-individual bodily capacities, and putting pre-individual bodily capacities to work. On one

hand, biotechnology seeks to make possible and profitable the control of the “labor performed routinely by cells, proteins, and DNA.”<sup>54</sup> On the other hand, the processes of laboring, socializing and entertaining are changed as they become directly engaged in modulating affectivity.

In an affect economy, value is sought in the expansion or contraction of affective capacity. In this sense, affect is power or potential which cannot be limited. Power or potential face obstacles to expansion rather than limitation. As such, labor power becomes itself, “a subset of attention, one of the many kinds of possible attention potentially productive of value...”<sup>55</sup> It is in this context that education turns into a profitable biopolitical control or what Massumi refers to as the “powering-up—or the powering-away—of potential.”<sup>56</sup> Institutions of social reproduction become nodes of control in a network of economic flows, where capitalism “usurps” “the very expression of potential. The movement of relationality. Becoming-together. Belonging.”<sup>57</sup> Institutions like the school, the labor union, the hospital and the prison function as switch points for circulating bodies, along with information and capital, through channels, not with the aim of arrival but with the aim of keeping the flows moving at different speeds. In this circulation, new channels also can be opened, however, creating new possibilities inside capital for making an outside for capital, and the potential for change.

While affective labor is not the primary form of labor world wide, agriculture is still that, there is however a world-wide meshing of biopolitics with an affective economy. There is a marking of populations, some as valuable life and others as without value. Increasingly it is in these terms that differences such as those of ethnicity, race, gender, class, sexuality and nation are materialized. Some bodies or bodily capacities are

derogated making their affectivity super-exploitable, or exhaustible unto death, while other bodies or body capacities collect the value produced through this derogation and exploitation.<sup>58</sup> This can be seen in the relationship made between victimized, terrorized and hated bodies brought forth for the discourse and practices of counter/terrorism, surveillance and unending war.<sup>59</sup> There also are examples to be drawn from the world-wide treatment of HIV/AIDS, trafficking in persons, drug trade, or inter-country adoption, which point not only to a global affect economy but to the shift in governmentality toward biopolitical control at a global level, where as João Biehl puts it, there is an intensifying “contradiction between a generalized culture of human rights and emergent exclusive structures through which these rights are realized, biologically speaking, but only on a selective basis—who, for how long, and at what cost? In this context, “letting die” is a political action, continuous with the biomedical and political power that ‘makes live.’”<sup>60</sup>

It would seem that one of the often unintended consequences of organizations of social management which are engaged in all sorts of relief work, including human rights work at the national, regional, and global levels, is to open up channels for economic flows, also contributing to the expansion of information technologies and biotechnologies all around the globe. These organizations lend themselves to the extension of a political economy of security and control. As they function in the wake of imposed structural adjustment of economies of debt, they are asked to manage the devastating effects. Assisting in making debt more productive by treating it with a micro-financed affect economy shaped in the demand for human rights and human security policy commitments, these organizations come to play a part in tilting world political economy

to affect and the deployment of biopolitical control. These organizations also can serve to provide the moral justification for “exceptional” political intervention, if not (para)military intervention, overriding national sovereignty.<sup>61</sup>

The shift from discipline to biopolitical control in a global affect economy harkens back to the rise of the modern state, where, as Giorgio Agamben puts it, the demand for “the free life,” “the good life,” resulted in drawing biological life or “bare life” under the control of the state’s calculations.<sup>62</sup> But commenting on Agamben’s take on biopolitics, Mbembe argues that colonialism played an important role in the development of biopolitics, such that, in neocolonialism, biopolitical control only is intensified, where politics (state and non-state politics) has become the deployment of the right to kill on the basis of enmity within systems that can only function in the turbulence or complexity of a state of emergency. In this context, a new machinic assemblage emerges out of turbulence and complexity, where necropolitics intensifies biopolitics, that is, when politics is a form of war, provoking the ongoing activity of what Deleuze and Guattari describe as “a war-machine.”<sup>63</sup> As a military power that is bought and sold, the war machine arrives in part with the failure of the state to maintain an economic infrastructure of political authority, such that war can be waged by those who have no state but who have gained control over a given territory.

With this form of war, a question is raised as to how bodies, life and death are related to power. This question is raised not only because the technologies of destruction are now “more tactile, more anatomical and sensorial.” The question also is raised because the practices of necropolitics, as Mbembe sees it, “are less concerned with inscribing bodies within disciplinary apparatuses as inscribing them, when the time

comes, within the order of the maximal economy now represented by the ‘massacre.’”<sup>64</sup> The war machine not only kills outright but it also takes possession of the resources for life in a given territory, an economic function of the war machine that either disperses populations or immobilizes them, leaving them to a life of living death.

Under these conditions, Bauman argues, there can be no security. Rather, there are situations of “unalloyed contingency” and “unaccountable accidents,” where any attempt to govern faces “ad hoc alliances of powers held together or dismantled by bribery or blackmail.”<sup>65</sup> There is a generalization of criminality mixed with governance posing as legitimate. Everyone is at risk of arrest, even as this risk is in fact differently borne by different populations, different bodies. Indeed, as Massumi suggests, “crime is itself the figure of the limit-case (particularly ‘crimes against community’ and ‘against humanity,’ which by their generic nature tend to subsume all other varieties).”<sup>66</sup> In this situation, Bauman argues, “one can possibly avoid being a victim, but nothing can be done to escape the fate of being a collateral casualty.” For Bauman, this is the “sinister dimension” of turbulence and complexity.<sup>67</sup>

## **In Conclusion**

Michael Taussig writes: “What if it is not a system but ‘a nervous system,’ in which order becomes disorder the moment it is perceived?”<sup>68</sup>

Deleuze writes: “Chaos and catastrophe imply the collapse of all the figurative givens, and thus they already entail a fight, the fight against the cliché, the preparatory work (all the more necessary in that we are no longer ‘innocent’). It is out of the chaos that the ‘stubborn geometry’ or ‘geologic lines’ first emerge and this geometry and geology

must in turn pass through the catastrophe in order for colors to arise, for the earth to rise toward the sun.”<sup>69</sup>

Returning to Colombia in May 2001, Michael Taussig keeps a diary. He will publish diary entries from the two weeks he spent there in a town under paramilitary control imposed by “law and order through selective assassinations.” The term ‘paramilitary’ is an elusive term, Taussig proposes, since it points to soldiers who are not really soldiers, “but more like ghosts flitting between the visible and the invisible between the regular army and the criminal underworld of killers and torturers that all states seem to have no trouble recruiting when their backs are up against the wall.”<sup>70</sup> Ghostly soldiers drain the potential of honoring the ghosted, the haunted, as a form of social criticism: the violence comes more easily, too quickly, and without legitimacy but also without much resistance.

But, there still are honorable ghosts just as representation, discipline, ideology, subject identity and the extraction of surplus value from human bodies conceived as organic, all still matter. There still are traumatized subjects who matter. But there is something else, something about the sociality of a system, a nervous system, which pulls us to complexity, to turbulence, to far-from-equilibrium conditions—pulling us to critically engage the sinister side of the system as well as its potential for freedom. We are drawn as well to and beyond a techno-ontological threshold and asked to think pre-individual affectivity, where the politics of mourning ghosted bodies is too slow to engage pre-individual affective capacities which a capitalist political economy already maps and mines.



So, we take Deleuze's words as a motto for critical theory, although it might seem obscene. It is after all difficult to see the sun with which he lights up the collapse of all the figurative givens and energizes the preparation to fight the cliché in order to find in chaos, colors arising. It is difficult when the changes which are rendered in the affective turn are those brought about by, or at least along with, great violence, and the disinterest and the arrogance of those who control, no matter for how brief a time and over whatever rigged up geo-political arrangement, often with the support of what Fred Moten and Stefano Harney have named the "negligence" of the professionalization of the academic disciplines.<sup>71</sup>

Against the turn to this professionalization of "know how" for administering the world (away), Moten and Harney propose "stepping out of this skeptical of the known into an inadequate confrontation with what exceeds it and oneself..."<sup>72</sup> Inadequate confrontation: it is this because the disciplines, having gone professional, can only judge what is not already marked for their easy assimilation, as inadequate, unprofessional, even unethical or criminal. The essays which follow go right ahead and step out into an inadequate confrontation with the social, changed and changing which exceeds all efforts to contain it, even our efforts to contain its thought in the affective turn. So we have what is left, the remains of learning together, encouraging us to be braver, more creative and even less adequate next time. So we leave you not only with our honored ghosts but with bodies, and bodily capacities, affective capacities to act, to attend, to feel, to feel alive.

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<sup>1</sup> Brian Massumi, “Requiem for Our Prospective Dead (Toward a Participatory Critique of Capitalist Power),” in *Deleuze and Guattari, New Mappings in Politics, Philosophy, and Culture*, ed. Eleanor Kaufman and Kevin Jon Heller (Minneapolis: University of Minnesota Press, 1998), 59.

<sup>2</sup> All of the authors of the following essays have studied with me. They have taken classes with me and I have mentored them in their dissertation work. They have also been part of what we refer to as the “book group,” which met to prepare the essays for this collection.

<sup>3</sup> I am paraphrasing slightly a definition of affect offered by Brian Massumi in his notes on translation of Gilles Deleuze and Felix Guattari’s *A Thousand Plateaus, Capitalism & Schizophrenia* (Minneapolis: University of Minnesota Press, 1987), xvi. I am also drawing on Mark Hansen for his treatment of autoaffection, see, “The Time of Affect, or Bearing Witness to Life,” *Critical Inquiry* 30 (2004), 584-626.

Also see my *Autoaffection: Unconscious Thought in the Age of Teletechnology* (Minneapolis: University of Minnesota Press, 2000) While I have been interested for some time in autoaffection, my earlier interest focused on the critique of autoaffection as that which allowed for the presence of the self-same Subject of Western discourse, a critique linked to Jacques Derrida’s work. The rethinking of autoaffection in this work and in my work with students is part of my engagement with the different approach to affect in Deleuze’s work, which only had begun to have an influence on my thinking as represented in *Autoaffection*. Beside the conceptualization of affect which I am pursuing here, there have been a number of disciplines which have taken up a discussion of affect in which the meaning of affect varies. In literary studies, discussion perhaps began with

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the publication of Eve Kosofsky Sedgwick and Adam Frank's *Shame and Its Sisters : A Silvan Tomkins Reader* (Durham: Duke University Press, 1995). Also see, Sianne Ngai, *Ugly Feelings* (Cambridge: Harvard University Press, 2005) and Elizabeth Wilson's treatment of affect, including her review of neurological and psychological treatments of affect in *Psychosomatic: Feminism and the Neurological Body* (Durham: Duke University Press, 2004).

<sup>4</sup> Brian Massumi, *Parables for the Virtual* (Durham: Duke University Press, 2002), 30.

<sup>5</sup> *Ibid.*, 25.

<sup>6</sup> Eugene Thacker argues for maintaining scare quotes around life itself to guard against any concurrence with the idea that an essence is discoverable—as life itself. But since the term has been used by molecular biologists since the 1950's, Thacker keeps it. See, *The Global Genome* (Cambridge: MIT Press, 2005), 60-61).

<sup>7</sup> For an interesting discussion of the social in relation to complexity and far-from-equilibrium conditions see, Immanuel Wallerstein, *The Uncertainties of Knowledge* (Philadelphia: Temple University Press, 2004).

<sup>8</sup> Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis* (New York: W.W. Norton & Company, 1981), 55.

<sup>9</sup> Ruth Leys "Death Masks: Kardiner and Ferenczi on Psychic Trauma," *Representations* 53 (Winter 1996): 44-73. In this essay, Ruth Leys summarizes psychoanalytic approaches to trauma, drawing on the works by Sigmund Freud, Sandor Ferenczi and Abram Kardiner. In her more recent work, *Trauma, A Genealogy* (Chicago: University of Chicago Press, 2000), Leys points out that there are various approaches to trauma within psychoanalytic discourse but in treating these, Leys focuses especially on the indefinite

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oscillation across various authors' works and within various individual author's works between a mimetic and an antimimetic approach to trauma. The mimetic approach suggests that the traumatized subject has identified with, indeed is fixated on, the object or event of trauma and therefore the representation of trauma is impossible, although the symptoms suffered in place of re-presentation of trauma, may be narrated. The antimimetic approach, according to Leys, does not recognize identification and therefore imagines that the trauma comes from outside of the subject and can eventually be represented even if the process of doing so takes a great deal of time and is difficult to accomplish. In the work students and I did on trauma, we leaned toward the mimetic view. But as Leys points out it is easy to be drawn toward the antimimetic view, especially when writing about subjects of trauma. In this later work on trauma, Leys also makes reference to Mikkel Borch-Jacobsen who engages Freud's writing on trauma and the ways in which Freud (at least in some of his writings) links trauma to affective bonds. The description of affective bonds offered by Mikkel Borch-Jacobsen is interesting given the shift being made by students and me from a psychoanalytic approach to desire to affect. According to Borch-Jacobsen, for Freud, affect is an early form of identification which is not "a question of optical representation (not an 'ideal,' 'objectivizing' and 'spatial' identification.>"). Before the identification of the mirror stage, affective identification "gives birth to the ego." Even for Lacan, Borch-Jacobsen argues, there is at times an understanding of the proprioceptive sensations that constitute affective relationships, prior to the identification of the mirror stage. (See: Borch-Jacobsen's *Lacan, The Absolute, Trans* by Douglas Brick, Stanford: Stanford University Press, 1991), 65-71.

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- <sup>10</sup> Nicolas Abraham, "The Notes on the Phantom: A Complement to Freud's Metapsychology," in *The Shell and the Kernel*, ed. Nicolas Abraham and Maria Torok (Chicago: University of Chicago Press, 1994), 171-186.
- <sup>11</sup> Jacqueline Rose, *States of Fantasy* (Oxford: Clarendon Press, 1996), 30-31.
- <sup>12</sup> Petar Ramadanovic, "When 'to die in freedom' Is Written in English," *Diacritics* 28 (Winter 1998): 62.
- <sup>13</sup> Judith Butler, *Gender Trouble* (New York: Routledge, 1990). For a provocative engagement with Butler's work along with other work on trauma and embodiment also see: *Loss: the Politics of Mourning*, ed. David Eng and David Kazanjian (Berkeley, CA: University of California Press, 2003).
- <sup>14</sup> Pheng Cheah, "Mattering," *Diacritics* 26(1996): 108-139.
- <sup>15</sup> *Ibid.*, 113
- <sup>16</sup> *Ibid.*, 120.
- <sup>17</sup> Manuel De Landa, "Nonorganic Life," in *Incorporations*, ed. Jonathan Crary and Sanford Kwinter (New York: Zone Books, 1992), 134.
- <sup>18</sup> Keith Ansell Pearson, *Germinal Life, The difference and repetition of Deleuze* (New York: Routledge, 1999), 139-185.
- <sup>19</sup> Sigmund Freud, *Beyond the Pleasure Principle*, Trans. James Strachey (New York: W. W. Norton & Company, 1961).
- <sup>20</sup> Humberto Maturana and Francisco Varela, *Autopoiesis and Cognition* (Boston: Reidel, 1980).
- <sup>21</sup> Pearson, 170.
- <sup>22</sup> *Ibid.*, 170.

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<sup>23</sup> Ibid., 170.

<sup>24</sup> Following Pearson, I am drawing on Lynn Margulis, *Symbiosis in Cell Evolution*, (San Francisco: W.H. Freeman, 1981) and Lynn Margulis and Dorion Sagan, *Microcosmos: Four Billion Years of Evolution From our Microbial Ancestors* (New York: Summit Books, 1986). Also see, Luciana Parisi, “Information Trading and Symbiotic Micropolitics,” in *Social Text*, ed. Patricia Ticineto Clough, 80 (2004):25-50.

<sup>25</sup> For a discussion of Deleuze’s treatment of the virtual and the actual see, Gilles Deleuze, *Bergsonism*, Trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1991).

<sup>26</sup> For the discussion of the time-image in contrast to the movement image, I am referring to Deleuze’s *Cinema 2, The Time-Image*, Trans. Hugh Tomlinson and Robert Galeta (Minneapolis: University of Minnesota Press, 1989). For an insightful treatment of the time-image as electronic see, Richard Dienst, *Still Life in Real Time* (Durham: Duke University Press: 1994), 144-169.

<sup>27</sup> For a discussion of the “crack” see, Gilles Deleuze, *The Logic of Sense* Trans. M. Lester with C. Stivale (London: Athlone Press, 1990).

<sup>28</sup> Pearson, 196.

<sup>29</sup> Ibid., 196.

<sup>30</sup> Gilles Deleuze and Felix Guattari, *What is Philosophy?* Trans. G. Burchell and H. Tomlinson (London: Verso, 1994).

<sup>31</sup> See, N. Katherine Hayles, *How We Became Posthuman, Virtual Bodies in Cybernetics, Literature and Informatics* (Chicago: University of Chicago Press, 1999).

<sup>32</sup> Eugene Thacker, *Biomedica* (Minneapolis: University of Minnesota Press, 2004), 40.

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- <sup>33</sup> Martin Heidegger, *The Question Concerning Technology and Other Essays*, Trans. William Lovitt (New York: Harper and Row, 1969) and John Johnston "Machinic Vision," *Critical Inquiry* 26(1999), 27-48.
- <sup>34</sup> Donna Haraway, *Modest Witness@Second Millennium. Female Man Meets OncoMouse* (New York: Routledge, 1999).
- <sup>35</sup> Walter Benjamin, "One-Way Street," *Reflections* (New York: Harcourt Brace Jovanovich, 1978), 61.
- <sup>36</sup> Luciana Parisi and Tiziana Terranova, "Heat-Death, Emergence and Control In Genetic Engineering And Artificial Life," *CTheory*, [www.ctheory.com/article/a84.html](http://www.ctheory.com/article/a84.html), 5.
- <sup>37</sup> *Ibid.*, 4.
- <sup>38</sup> *Ibid.*, 5.
- <sup>39</sup> Gilles Deleuze, "Postscript on Societies of Control," *October* 59 (1991), 3-7. See also, Michael Hardt, "The Withering of Civil Society," *Social Text* 45: 27-44 (1995).
- <sup>40</sup> See, Claude Shannon and Warren Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949). While Shannon published his theory in 1948, in 1949 this larger work was published including Shannon's theory with commentary by Warren Weaver.
- <sup>41</sup> Tiziana Terranova, *Network Culture, Politics for the Information Age*. (London: Pluto Press, 2004), 24.
- <sup>42</sup> See, Norbert Wiener, *The Human Use of Human Beings*. (Boston: Houghton Mifflin, 1950).
- <sup>43</sup> Ilya Prigogine and Isabelle Stengers, *Order out of Chaos* (New York: Bantam Books, 1984).

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<sup>44</sup> Terranova, *Network Culture, Politics for the Information Age*, 33.

<sup>45</sup> Parisi and Terranova, 9.

<sup>46</sup> *Ibid.*, 8-9.

<sup>47</sup> Michel Foucault, "Governmentality," in *The Foucault Effect. Studies in Governmentality*, ed. Graham Burchell, Colin Gordon and Peter Miller (Chicago: University of Chicago Press, 1991), 87-104.

<sup>48</sup> Massumi, "Requiem for Our Prospective Dead (Toward a Participatory Critique of Capitalist Power)," 57.

<sup>49</sup> *Ibid.*, 54.

<sup>50</sup> George Caffentzis, 1992. "The Work Energy Crisis and the Apocalypse." in *Midnight Oil: Work, Energy, War, 1973-1992* (Midnight Notes 11: Autonomedia, 1992) and Antonio Negri, "Value and Affect," *boundary 2* 26, Summer (1999), 77-88.

<sup>51</sup> Nearly all of the authors have been participants in two projects which I organized as the Director of the Center for the Study of Women and Society at the Graduate Center CUNY. The projects have involved two seminars: "The Conviction Project Seminar" and The Rockefeller Foundation funded seminar, "Facing Global Capital, Finding Human Security, A Gendered Critique," which were respectively focused on issues of mass incarceration and post-prison experience and the evaluation of the effectiveness for women of the human rights/human security frameworks in the context of global capitalism, counter/terrorism and war. The two seminars offered an opportunity to further develop our thinking about biopolitical control, information, affect and non-organic life in relationship to politics, policy and activism.



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<sup>52</sup> Zygmunt Bauman, *Wasted Lives, Modernity and its Outcasts* (London: Polity Press, 2004);

Achille Mbembe, "Necropolitics," *Public Culture* 15, Winter (2003), 11-40.

<sup>53</sup> Negri, 79.

<sup>54</sup> Thacker, *Global Genome*, 201.

<sup>55</sup> Jonathan Beller, "Capital/Cinema," in *Deleuze and Guattari, New Mappings in Politics, Philosophy and Culture*, ed. Eleanor Kaufman and Kevin Jon Heller (Minneapolis: University of Minnesota Press, 1998), 91.

<sup>56</sup> Massumi, *Parables for the Virtual*, 88.

<sup>57</sup> *Ibid.*, 88.

<sup>58</sup> Ann Anagnost, "The Corporeal Politics of Quality (Suzhi)," *Public Culture* 16(2004): 189-208.

<sup>59</sup> Sara Ahmed, "Affective Economies," *Social Text* 79(2004), 117-139; also see, Jasbir K. Puar, "Abu Ghraib: Arguing Against Exceptionalism," *Feminist Studies*, 30 (Summer 2004).

<sup>60</sup> João Biehl, "Vita: Life in Zone of Social Abandonment," *Social Text* 68, Fall (2001), 138.

<sup>61</sup> Michael Hardt and Antonio Negri. *Empire* (Cambridge: Harvard University Press, 2000), 34-41.

<sup>62</sup> Giorgio Agamben, *Homo Sacer, Sovereign Power and Bare Life* Trans. Daniel Heller-Roazen (Stanford: Stanford University Press, 1998).

<sup>63</sup> Gilles Deleuze and Felix Guattari, *A Thousand Plateaus, Capitalism & Schizophrenia* Trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 351-423.

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<sup>64</sup> Mbembe, 23.

<sup>65</sup> Bauman, 89.

<sup>66</sup> Brian Massumi, “Requiem for Our Prospective Dead (Toward a Participatory Critique of Capitalist Power),” 57-58.

<sup>67</sup> Bauman, 89.

<sup>68</sup> Michael Taussig, *Law in a Lawless Land* (New York: New Press, 2003), xi.

<sup>69</sup> Gilles Deleuze, *Francis Bacon: The Logic of Sensation* (Minneapolis: University of Minnesota, 2003), 91.

<sup>70</sup> Taussig, 17-18.

<sup>71</sup> Fred Moten and Stefano Harney, “The University and the Undercommons, Seven Theses,” *Social Text* 79(2004), 108.

<sup>72</sup> *Ibid.*, 109.