The Affect Theory Reader

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In memory of Eve Kosofsky Sedgwick 1950–2009

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ACKNOWLEDGMENTS

Partway through the introduction to this collection, it will become clear why it was significant that I read Greg's final draft while I was cramped on the floor of a late train during a long and crowded commute. I write these words from a new home, having embarked on an experiment to disrupt some old habits and hopefully allow more time to register "the stretching."

By sheer coincidence, during the final stages of this project both Greg and I moved house on opposite sides of the world in the very same week. This is just one of the sweet synergies and sympathies we have shared over the years that I hope will continue long after this publication. It is Greg's venerable alacrity as a reader that makes me so delighted that *a book* now stands as an archive of the hope and sustenance I have gained from a defining intellectual friendship. Greg's brilliant mind, graceful words, and contagious hospitality have made this a far greater achievement than I could have imagined.

Our contributors have been more than generous in offering words, affirmation, and patience during the long gestation of this collection. We thank them for believing in us and persisting through the many stages—and hope they enjoy the result.

matter or matter's capacity to be informational, to give bodily form. But if what has allowed us to "see" matter as informational or as self-organizing "is the advance in technology that materially supports (nonlinear) mathematics, and with it mathematical technology" (DeLanda 1992, 134), then the biomediated body is not merely technological all the way down. More importantly, the biomediated body exposes how digital technologies, such as biomedia and new media, attach to and expand the informational substrate of bodily matter and matter generally, and thereby mark the introduction of a "postbiological threshold"[2] into "life itself."[3] Therefore, while I am drawing on critical discourses on new media and biomedia that define these media as technically expanding what the biological body can do while, however, remaining biological, I also am pointing to the postbiological threshold as the limit point of these discourses.[4]

In offering a sampling of some scholars who are critically engaging affect, biomedia, and new media, I want to take the affective turn beyond the body-as-organism that the discourses of affect, biomedia, and new media still often privilege. I want to do so in order to elaborate the historically specific mode of organization of material forces that the biomediated body is, both in relationship to what I will discuss as capital accumulation in the domain of affect and the accompanying relations of power in the shift of governance from discipline to biopolitical control, a shift that depends on a certain deployment of racism.

The turn to affect in critical theory and cultural criticism provides the opportunity for so expansive an exploration precisely because the cultural critics and critical theorists engaged with affect, especially those to whom I am about to turn, have treated affect both in terms of what is empirically realized and in terms of the philosophical conception of the virtual. It is at the crossing of the empirical and the virtual that the postbiological threshold inserted into "life itself" is both exposed and shielded from view. At this threshold the virtual is the potential tendency of biomedia and new media to realize the challenge to autopoiesis of the body-as-organism that the biomediated body poses. It is here too that the virtual is met by the reach of political economic capture.

Affect, Bodily Capacities, and the Virtual

In what has become a canonical text about affect that links it to the philosophical conceptualization of the virtual, Brian Massumi defines affect in terms of bodily responses, autonomic responses, which are in excess of

conscious states of perception and point instead to a "visceral perception" preceding perception (Massumi 2002).[5] But if this reference to autonomic responses seems to make affect the equivalent of the empirical measure of bodily effects, registered in activity such as the dilation of pupils, the constriction of intestinal peristalsis, gland secretion, and galvanic skin responses, Massumi uses such measures for a philosophical escape to think affect in terms of the virtual as the realm of potential, unlivable as tendencies or incipient acts, indeterminant and emergent.

So, for Massumi the turn to affect is about opening the body to its indeterminacy, the indeterminacy of autonomic responses. It is therefore necessary for Massumi to define affect in terms of its autonomy from conscious perception and language, as well as emotion. He proposes that if conscious perception is to be understood as the narration of affect—as it is in the case of emotion, for example—there nonetheless always is "a never-to-be-conscious autonomic remainder"; "a virtual remainder," an excess of affect (2002, 25). Further, it is this excess out of which the narration of emotion is "subtracted," smoothing it over retrospectively "to fit conscious requirements of continuity and linear causality" (29). Consciousness is "subtractive" because it reduces a complexity. It is "limitative," a derived function in a virtual field where any actualization becomes, at that same moment of actualization, the limit of that field, which otherwise has no pre-given empirical limit. Affect and consciousness are in a virtual-actual circuit, which defines affect as potential and emergent.

Massumi's turn to the body's indeterminacy, then, is not a return to a "pre-social" body. Arguing that affect is not to be misunderstood as pre-social, Massumi proposes that it is "open-endedly social," that is, "social in a manner 'prior to' the separating out of individuals" (2002, 9). When there is a reflux back from conscious experience to affect, it is registered as affect, such that "past action and contexts are conserved and repeated, autonomically reactivated but not accomplished; begun but not completed"(30). There is an intensification of affect. There is bodily memory—"vectors" or "perspectives of the flesh"—what Massumi calls "memory without content," which, however, remains indeterminate, the indeterminate condition of possibility of determinant memory and conscious perception (59). Affect refers to the metastability of a body, where the unstable pre-individual forces, which make up the body's metastability, are neither in a linear relationship nor a deterministic one to it. The temporality of affect is to be understood in terms of thresholds, bifurcation, and emergence—the temporality of the virtual.

It is its participation in the virtual that gives affect its autonomy—its escape from the particular thing that embodies it. As such, affect refers to the openness of a body, an openness to participation in what Massumi, following David Bohm, refers to as the quantum indeterminacy of an "implicate order" (Massumi 2002, 37). As implicit form, affect is potential that as soon as it begins to take form dissolves back into complexity across all levels of matter, as quantum effects feed the indeterminacy appropriate to each level—the subatomic, the physical, the biological, and the cultural. As Massumi sees it, quantum indeterminacy puts affect at every level of matter such that the distinctions of living and non-living, the biological and the physical, the natural and the cultural begin to fade (37).

If Massumi's turn to autonomic responses of the body is in fact a way to think the sociality of metastability, it also brings materiality closer to the nonphenomenal, the incorporeal, through the philosophical conceptualization of the virtual played out against theories of nonlinearity and metastability, open systems and the quantum indeterminacy of implicate order. What is at issue in these philosophical-theoretical connections is not merely the affectivity of the human body but, I would argue, the affectivity of matter, matter's capacity for self-organization, its being informational. It is this understanding of matter as affective, as informational and self-organizing, that connects the autonomic responses of the body, or what Massumi calls the "infraempirical" experience of the human body, to the incorporeal, nonphenomenal complexity that is the condition of possibility of the empirical, what Massumi calls the "superempirical" (2002, 144–61). Just as the virtual falls away with each actualization, the superempirical falls away with the emergence of the empirical.

But if it is increasingly possible, as I am proposing it is, to register the dynamism of the superempirical as the dynamism of matter, it is because the superempirical is not only a philosophical conceptualization of the virtual but also a technical expansion that reveals matter's informational capacity. To get at this, it is necessary to return to Massumi's illustrations of affectivity in experiments measuring bodily responses and to notice the technology or technical framing required to make the experiments exemplary illustrations of affectivity. For example, one illustration involves measuring participants' verbal and physiological responses to images, which leads Massumi to distinguish the effect of an image's intensity, its affect, from the content of the image. Another illustration concerns monitored bodily reactions that show participants' brain activity to occur a half-second before they can consciously register the reactions. Another illustration involves a device that is used to strike the retina with the full spectrum of color in order to research the physical and physiological conditions of vision.

While for Massumi these experiments both illustrate the autonomy of affect and leave a trace of the superempirical, which he expands temporarily with a philosophical conceptualization of the virtual, I am proposing that these experiments are technical and conceptual framings of bodily responses that produce affect and reveal the capture of the virtual. Massumi's exemplary illustrations of the autonomy of affect not only show what the body can do; they show what bodies can be made to do. They show what the body is becoming, as it meets the limit at a postbiological threshold, which draws to it the dynamism of matter that had been hidden in oppositions held in place by the body-as-organism, between the living and the nonliving, the physical and the biological, the natural and the cultural. It is to this postbiological threshold, I want to argue, that the critical discourses taking up affect, new media, and biomedia are drawn and with which they are ambivalently engaged.

New Media and Biomedia: The Technical Framing of Affect

In an impressive set of readings of poststructural thought and new media criticism, Mark Hansen revisits the relationship of technology, digitization, and the body (2000, 2004a). While recognizing the severe anti-mimesis of the digital image, whose infrastructure, after all, is only layers of algorithmic processing or a matrix of numbers that has severed all reference to an independent reality, Hansen surprisingly makes this the very possibility for rethinking new media, as he focuses on the relationship digitization invites between the digital image and the body's internal sense of its movement, its tendencies or incipiencies, which, following Massumi, Hansen refers to as affect (2004a, 7). Hansen argues that digitization engages bodily affect, inviting it to give information a body. Bodily affect is called to transform "the unframed, disembodied, and formless into concrete embodied information intrinsically imbued with (human) meaning" (13). While Hansen's treatment of new media is important in that it uniquely draws out the relationship of digitization and bodily affect, it does so, however, while shielding the autopoiesis of the body-as-organism from the challenge his treatment of digitization seems to pose.

For Hansen, the relationship of bodily affect and digitization requires that we rethink the image as informational. With digitization, he argues, the image itself has become a process, which not only invites the user's interaction but rather requires the human body to frame the ongoing flow of information. New media require the affectivity of the body, just as new media allow for an experience of affectivity by expanding the body's sense of its own affective indeterminacy. Returning to Bergson's treatment of the body as a privileged image or center of indetermination that in its movement draws out or "subtracts" perception from the world taken as an aggregate of images, Hansen argues that bodily affectivity, its capacity to act, to move, is central to, indeed "forges," the digital image. Thus, what links the subject and technology is bodily affectivity itself. For Hansen, focusing on the affective capacity of the body allows us to grasp the way in which technology enters the human subject first and foremost through the body, in the case of digital by "tingeing or flavoring the embodied perceptual present" (Hansen 2004b, 605).

Digitization engages this bodily sense of the present specifically by engaging the body's capacity to affectively sense the passing of time in the present. The digital image inserts a technical framing into the present, expanding bodily affectivity and thereby allowing us to experience "the very process through which our constitutive living present continually (re)emerges, from moment to moment—that is the selection from a nonlived strictly contemporaneous with it" (Hansen 2004b, 614). For Hansen, this nonlived that is contemporaneous with the present can be captured by the digital and, as such, the digital acts as a technological intensification or expansion of the nonlived, nonlinear complexity, or indetermination of bodily affectivity. For Hansen, affective capacity and digitization are a coupling framed by the body-as-organism.[6] Here, Hansen draws on Francisco Varela's discussion of affect and the neural dynamics constitutive of conscious perception that connect affect to the flux of time.

Hansen focuses especially on Varela's discussion of the abrupt perceptual shift or reversal of images in such phenomena as the Necker cube, pointing to "the depth in time" in neural dynamics that this shift implies (Varela 1999). Varela argues that this "depth in time," a depth of presence, makes the perceived reversal of the image possible "as a sudden shift from one aspect to the other, and not as a progressive sequence of linear changes" (Hansen 2004a, 250–51).[7] In that sudden shift or depth in time, there is "a stabilization," a vectored assembling of "the distributed cognitive system, while the

'depth' or 'thickness' correlates with the host of competing distributed neural processes from out of which this stabilization emerges" (251). This is to say, "the microphysical elements of a neural dynamics are selectively combined in aggregates (cell assemblies) that emerge as 'incompressible but complete cognitive acts'" (251). Varela concludes: "The relevant brain processes for ongoing cognitive activity are not only distributed in space, but they are also distributed in an expanse of time that cannot be compressed beyond a certain fraction of a second, the duration of integration of elementary events" (Varela 1999, 7). For Varela, there is a "frame" or "window of simultaneity" that corresponds to the duration of the lived present, in which aggregates assemble, emerging from complexity. This frame is "a horizon of integration," where integration, however, is always emergent and intrinsically unstable, a metastability (Hansen 2004a, 251).

This fraction of a second, this impossible timing of the present in the passing of time registered neurophysiologically, is not unlike the half second of brain activity before a subject indicates a conscious response to stimuli that Massumi points to. They are illustrations of affect as bodily capacity, or incipient act. Varela too treats this fraction of a second in which "the self-organization of elementary events" occurs as a matter of affect, arguing that implicated in this fraction of a second of organizing is affect's very nature as "tendency, a 'pulsion' and a motion that, as such, can only deploy itself in time and thus *as time*" (Hansen 2004a, 253). As Hansen sees it, Varela's analysis opens up "to the microphysical domain in an unprecedented manner" (250) and therefore shows the function of affectivity "in the genesis of time consciousness," as affectivity links "the striving of the human being to maintain its mode of identity with the embodied basis of (human) life. In sum, affectivity comprises the motivation of the (human) organism to maintain its autopoiesis in time" (250).

While Hansen recognizes that digitization challenges "the human to reorganize itself," nonetheless the affective body with which Hansen begins this reorganization remains the body-as-organism. In returning to the body's autopoiesis by finding it in the neurophysiological registering of affect, Hansen withdraws his treatment of new media from the larger technological environment that includes biomediation. What Hansen sees as the immateriality of information in this larger technological environment is matter's capacity for self-organization or its capacity to in-form itself—a materiality specific to information made visible and manipulable through digitization not only as a matter of new media art but political economy as well. At the

crossroads of genetics and informatics, the body's being informational not only raises the question of the relationships being forged between biology and information, matter and information, "life itself" and information. It also raises a question about the productivity of these relationships, their materiality in political economic production.

Whereas Hansen's treatment of new media insists on the difference between the human body and human-machine assemblages, between bodily affect and digitization—differences that harken back to the differences that haunted constructionism—Eugene Thacker's treatment of biomedia reveals the informational substrate of the body and the impossibility of the distinctions Hansen seeks to maintain. Thacker argues that the body of biomediation is not merely a body-as-constructed, given that "constructionism formulates an ontological division between the 'bio' and the 'media,' such that the latter has as its main task the mediation of some unmediated 'thing'" (Thacker 2004, 12). Instead, Thacker defines biomedia as a technical reconditioning of biology, a technological framing that enables biology to perform in novel ways beyond itself, while remaining biological (14–15).

Thacker proposes that in thoroughly integrating the computational logics of computers and biology, biomedia produces a body that is informational. This is not merely a matter of technology representing DNA as information but rather understanding information as inhering in DNA as "a technical principle," as biology's computational capacity (Thacker 2004, 39). For Thacker, "information 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" (40).

Thacker is not endorsing the equation of biology or life with DNA, recognizing as he does the "the multitude of heterogeneous elements that collectively form an operational matrix," in which DNA is only a part (Thacker 2005b, 98). Rather, his focus on DNA is meant to point to the ongoing investment of capital and technoscientific discourses in the molecular level of the body as an informational body, the biomediated body. The biomediated body, therefore, is not disembodiment. Rather it is a recent complexification in bodily matter at the molecular level as its informational capacity is made more apparent and more productive. What is unique to biomedia, Thacker argues, is that it is biology that both "drives production" and is "the source material." Biology is "the process of production" and in replacing machines, biology "is the technology" (2005b, 201). In the technological framing of the "labor performed routinely by cells, proteins, and DNA," biomedia produces the biomediated body as a laboring body (201).

Biomedia, therefore, is the infrastructure of a political economy that aims to continually transform informatics-based products into "the long-term generation of information" (Thacker 2005b, 80). Thacker gives the example of genetic-specific drug development. On the one hand, the drug has potential for economic gain, for which the consumption of the drug is necessary, "connecting information to the biological body" (79). On the other hand, what is more lucrative than the sale of drugs is the "booming industry of diagnostic tests" and the production of databases. There is the economic gain sought in maintaining "the recirculation of products (pills, testing technologies) back into information (databases, test results, marketing and media campaign" (85). But in the development of "database management, data analysis, software design, infomedicine, and of course diagnostics," the bodies that consume these commodities, Thacker argues, will be touched "only to the degree the body and 'life itself' are understood in informatic ways" (85).

While Thacker has gone a long way in exploring the political economy of biomedia, he does not register how the biomediated body, in its appropriation of biology's capacity to mutate or create, challenges autopoiesis (characteristic of the body-as-organism) as biomedia introduces into "life itself" what Keith Ansell Pearson calls "a techno-ontological threshold of a postbiological evolution" (1999, 216). It is to treatments of the postbiological threshold in evolution and to the biopolitical economy of the biomediated body that I now turn.

Labor, Energy, Information, and the Body-as-Organism

If by the late nineteenth century the body of disciplinary industrial capitalism could be described as the body-as-organism, characterized by autopoiesis, it would not be until the late twentieth century that Humberto Maturana and Francisco Varela would theorize the autopoiesis of the organism in order to refuse genetic reductionism (1980). After all, in defining the organism as engendering its own boundary conditions, and therefore as informationally closed to its environment, Maturana's and Varela's theorization of the organism's autopoiesis gives more weight to the organism's drive to preserve its homeostasis and equilibrium than it does to its component parts or its genetic structure. Yet, in doing so, autopoiesis makes it difficult to think the

organism in terms of evolution. N. Katherine Hayles has pointed out that the circularity of autopoiesis, preserved in every situation of the organism, is contradictory with evolution, where species evolve through continuity but also through change and genetic diversity (1999). Keith Ansell Pearson goes further than Hayles, situating his critique of autopoiesis in terms of what he calls "a 'machinic' approach to questions of evolution" (1999, 3).

Not only is autopoiesis inconsistent with the Darwinian theory of genetic diversity, but, as Pearson proposes, autopoiesis "blocks off access to an appreciation of the dynamical and processual character of machinic evolution," which "connects and convolutes the disparate in terms of potential fields and virtual elements and crosses techno-ontological thresholds without fidelity to relations of genus or species" (1999, 170). As Pearson sees it, the organism must be rethought as an open system that places it "within the wider field of forces, intensities and duration that give rise to it and which do not cease to involve a play between nonorganic and stratified life" (154). This would introduce into autopoiesis "the complexity of non-linear, far-from-equilibrium conditions," which bring the human to "a techno-ontological threshold of a postbiological evolution" (216). Pearson's rethinking of autopoiesis looks to the ongoing investment in the informatics of biology, an investment in the biomediated body's introduction of the postbiological threshold into "life itself." He also takes a look back to the evolutionary history of genetic reproduction.

In critiquing autopoiesis, Pearson draws on Lynn Margulis's and Dorion Sagan's theorization of endosymbiosis, which suggests that machinic evolution not only befits the biomediated body but also has a long evolutionary history (1986). Margulis and Sagan point to the parasitic and symbiotic relations that precede the appearance of reproduction through nucleic DNA, a process called endosymbiosis. They also point to the process of endosymbiosis continuing in the body of the cell, challenging the model of evolution based on linear or filiative evolution. Endosymbiosis, that is, involves cellular elements other than nucleic DNA, elements, such as mitochondria, that are captured in the cell body without losing the autonomy of their reproductive machinery, their own method of information transmission. Mitochondria reproduce symbiotically, in a bacteria-like way, assembling (through contact or contagion) across phyla without fidelity to relations of genus or species. As Luciana Parisi puts it, endosymbiosis adds turbulence—"microbial memories and cellular parasitism"—to reproduction through nucleic DNA (2004, 175). This turbulence links endosymbiosis and biomediated reproduction; both transmit information without fidelity to species and genus.

Parisi also links biodigital sex and machinic evolution to the philosophical conceptualization of the virtual. She suggests that there is political economic investment in the virtual, as biodigital sex is meant to stretch "the unpredictable potential to differentiate beyond expectation," capturing "the interval between states" (2004, 157). For Parisi, this means an investment in the tendencies of recombinant information understood in terms of matter: matter as informational, with the capacity to self-organize. Biodigital sex, then, is an investment in a mapping of the "portals of immersion in the swerving flows of matter" (165), an investment in the "ceaseless modulation of information that follows the auto-transmutation of matter by changing its activity of selection from one moment to the next" (133).

For this understanding of matter and information, Parisi points to the various efforts to theorize the relationship of information, energy, entropy, and "life itself," stretching from the nineteenth-century interest in thermodynamics and entropic closed systems to the late twentieth-century interest in dissipative structures and open, nonlinear systems under far-from-equilibrium conditions.[8] This movement in the theorization of information suggests that in a closed mechanical system, as the second law of thermodynamics states, the increase in entropy is inevitable as an irreversible process of heat-death. Meanwhile in terms of open systems, irreversibility or the passing of time is disconnected from heat-death or the entropic closed system, and it is understood instead in terms that extend and revise Claude Shannon's take on entropy as the condition of possibility of information (1948). Offering a mathematical theory of information, Shannon argued that information is the measure of the (im)probability of a message going through a channel from sender to receiver. Information, in this mathematical account, makes meaning secondary to information; information is primarily a matter of contact and connectibility, a modulation of attention or affect by fashioning or reducing the real through the exclusion of possibilities.

Although Shannon's theorization of information in the late 1940s followed his dissertation dealing with "the algorithmic and combinatoric properties of genetic code," (Thacker 2005b, 52), Norbert Wiener's theorization of information at around the same time was more directly linked to biology and "life itself" (1950). 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. 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.

This understanding of information as a negentropic decrease of entropy, along with the understanding of information as positively correlated with entropy, makes it possible to theorize information once again, this time in terms of open systems, where information is connected both to the movement from disorder to order and from order to disorder in relationship to the irreversibility of time. If open systems are understood in terms of the nonlinear, nondeterministic relations of metastability, where the microscopic forces are ontologically defined as probabilities, then information's negentropic decrease of entropy can be understood to decrease information (or to increase the probability of the range of microscopic forces) at the same time that an increase of complexity or turbulence, a disordering of order, can emerge, thus increasing information (or the improbability of any particular microscopic force). This is what Ilya Prigogine and Isabelle Stengers capture in theorizing the dissipative structures that emerge by chance in far-from-equilibrium conditions, such that the dissipation of entropy is itself dissipated or temporarily reversed in the chance emergence of a dissipative structure (1984). Here information as contact or connectibility is not only a matter of the real arising in the exclusion of all other possibilities as the mathematical theory of information proposes. Rather theorizing information in terms of metastability under far-from-equilibrium conditions allows for the virtual, or potential emergence, that is, the deferral of entropy, or the dissipation of negentropic dissipation across different scales of matter, bringing into play their different dimensions, speeds, or temporalities.

Drawing on Prigogine and Stengers, Parisi argues that turbulence is the norm in the biophysical world, where now the "asymmetrical relationship between pre-individual and individuated multiplicities composing all assemblages of energy forces" is intensified (2004, 158–59). It is this turbulence out of which order and disorder emerge that is captured in the biomediated body with its potential for viral expansion or bacterial recombination of information, or where the "symbiotic assemblage of non-analogous modes of information . . . multiply the lines of transmission—stimuli and receptions—between all modes of communication: a virus, a human being, an animal, a computer" (134).

The shift in the relationship of the empirical and the virtual at the post-biological threshold also turns on what Parisi describes as the "real subsumption of all machines of reproduction" (including most recently the machine of biodigital sex, working at the molecular level) into capital (2004, 127–40), such that capital has begun to accumulate from within the very viscera of life, as "life itself" refers to some abstraction of life to some new unit for negotiating an equivalency between the cost of energy expenditure and its reproduction or replacement—an abstraction of life meant to control if not prevent postbiological evolution, as much as to provoke it. At the same time, the dynamic of capital itself becomes governable by immanent controls rather than by external criteria of fitness.

The Political Economy of the Biomediated Body

When the turn to affect was invited in cultural criticism and critical theory in the early and mid-1990s, the invitation had a certain resonance with the fast capitalism of an intensified financialization, as capital propelled itself around the globe along with the innovative technologies that made its lightning speed possible, while at the same time transforming ideological institutions—those of the state under the pressure of transnationalism, and those of the private and public spheres under the pressure of global expansion of commodity markets and media technologies. In cultural criticism and critical theory there was the accompanying celebration of border cultures, hyphenated identities, and queered subjectivities that yielded, however, in the latter half of the 1990s to the elaboration of melancholy, a focus on trauma, a worrying about memory that shifted remembering and forgetting to the body. In this context, the turn to affect, as Eve Kosofsky Sedgwick proposed, could lead cultural criticism from the "paranoid strong" theorizing of deconstructive approaches, while making it possible to reverse the effects of trauma (2003, 1995). It would do so because affect, it was argued, is "freer" than the drives as theorized in psychoanalysis, and therefore affect is more amenable to change.

In such accounts, the affective turn's privileging of movement, emergence, and potentiality in relationship to the body was often returned to the subject, the subject of emotion, as a surplus of freedom that could be aligned with what was referred to as globalization in the wake of the breakup of the Fordist-Keynesian regime of capital accumulation, a breakup thought to offer possibilities, even as its downside was foreshadowed in the focus on melancholy and trauma in cultural criticism and critical theory. There were, however, critical theorists and cultural critics who had turned to affect recognizing that the transformation of the Fordist-Keynesian regime into the turbulence and complexity that accompanied what David Harvey called

"flexible accumulation" marked the passing from formal subsumption to real subsumption (1989). This transformation provided political, economic, and cultural relevance for taking the affective turn.

As a regulation of overaccumulation, the Fordist-Keynesian regime had overseen the drawing of laborers' reproduction into the exchange relationships of an expanding commodity market, a "formal subsumption," accompanied by the development of the state apparatuses of civil society aimed at the socialization of laborers, along with the expansion of mass media in facilitating mass consumption of the output of mass production. Subsumed into capital, the reproduction of the laborer becomes itself a force of production further motivating the appropriation of every aspect of reproduction and communication by technology, further widening the reach of mass media with the development of information technologies and further enlarging the service economy.

While formal subsumption was meant to be a solution to the problem of overaccumulation, it too produced overaccumulation as wages rose in response to laborers' demand for higher wages in order to meet the cost of reproducing themselves and their families through the market exchange in commodities and services. But they also demanded more in terms of quality of life, expressed as a frustration magnified in social movements of identity and recognition. By the early 1970s, as the relationship of work and life was restructured, the wage became a matter of political demand, severing the production of surplus value from the laborers' surplus production. On the one hand, there was an attempt to stabilize prices and wages through manipulating a basic resource of energy in the oil crisis of 1973. On the other hand, there was a drive to technological development that transformed the very function of media; there was a shift from selling products to manipulating affect, an expansion of the service economy and the technological autonomization of its functioning (Caffentzis 1992).

Social reproduction had become a matter of time, capital-invested time realized in images to be consumed by the consumer, for example, in watching television, but also in doing therapy or going to the gym (Dienst 1994). The function of the media as a socializing/ideological mechanism had become secondary to its continuous modulation, variation, and intensification of affective response in real time, where bodily affect is mined for value. There is a socialization of time as media makes "affect an impersonal flow before it is a subjective content," as Massumi would put it (1998, 61).

In this context, the circuit from affect to emotion is attached to a circulation of images meant to simulate desire already satisfied, demand already met, as capital extracts value from affect—around consumer confidence, political fears, and so forth, such that the difference between commodification and labor, production and reproduction are collapsed in the modulation of the capacity to circulate affect. If all this seems only to characterize first-world economies, actually formal subsumption necessarily had a global reach. The media and digital technologies that would allow for the outsourcing of capitalist production to regions all around the world beginning in the early 1970s, when they themselves globalized, set off financialization in various parts of the world other than the first world, bringing nations and regions, unevenly to be sure, into a worldwide capitalist economy.[9]

In this global situation, the connection of affect and capital is not merely a matter of a service economy's increasing demand for affective labor or media's modulation of the circuit from affect to emotion. Rather, pre-individual affective capacities have been made central to the passage from formal subsumption to the real subsumption of "life itself" into capital, as the accumulation of capital has shifted to the domain of affect. Whether appearing as the expansion of affective labor and media modulation of the circuit from affect and emotion, or as international exchange in body organs and other body parts, or as the demand for adherence to normative procedures for guarding life, such as human rights protocols, in order to control entrance into economic circuits (see Thrift 2005, Virtanen 2004, Chow 2002, Negri 1999b), capital accumulation in the domain of affect is seeking at a deeper level to measure energy, in the human body and "life itself" in terms of their informational substrate, such that equivalencies might be found to value one form of life against another, one vital capacity against another. With information providing the unit, capital accumulation in the domain of affect is an accumulation and an investment in information as the dynamic immanent to matter, and its capacity for self-organization, emergent mutation, and creation. In this passage from formal to real subsumption, the tendencies of capitalism are moved toward the techno-ontological post-biological threshold.

Biopolitical Racism and the Biomediated Body

If capital accumulation in the domain of affect means that there is an "assimilation of powers of existence, at the moment of their emergence (their phased passing)," this assimilation, Massumi argues, also serves biopolitical

governance, as the powers of existence are made to pass "into a classificatory schema determining normative orbits around which procedural parameters for negotiation and advocacy are set" (1998, 57). Biopolitical control is not the production of subjects whose behaviors express internalized social norms; rather, biopolitical control is an effect and cause of the "normative" undergoing "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" (57). For Massumi, control transforms the subject of discipline into "generic figures of affective capture" that provide a "gravitational pull around which competing orbits of affect and thought are organized" (54). These figures are not individual subjects but rather what Deleuze referred to as "dividuals" (1995, 180), statistically configured in populations that surface as profiles of bodily capacities, indicating what a body can do now and in the future. The affective capacity of bodies, statistically simulated as risk factors, can be apprehended as such without the subject, even without the individual subject's body, bringing forth competing bureaucratic procedures of control and political command in terms of securing the life of populations.

The linking of control and political command with the risk factors of statistically produced populations is a form of power that Michel Foucault called biopolitics. In contrast to disciplining, biopolitics turns power's grasp from the individual subject to "life itself." As Foucault put it: "So after a first seizure of power over the body in an individualizing mode, we have a second seizure of power that is not individualizing, but, if you like, massifying, that is directed not at man-as-body but at man-as-species" (2003, 243). But biopolitics is not without any interest in the individual; biopolitics individualizes as it massifies. In linking biopolitics to biomedia, Thacker argues that "biopolitics accounts for 'each and every' element of the population, the individual and the group, and the groups within the group (the poor, the unemployed, the resident alien, the chronically ill)" (Thacker 2005b, 25). However, if populations, in this gradated approach, "can exist in a variety of contexts, defined by territory, economic class groupings, ethnic groupings, gender based divisions, or social factors," they do so "all within a framework analyzing the flux of biological activity characteristic of the population" (25). What makes the biopolitics of the biomediated body a political economy, then, is the break into biology or "life itself" by carving out various populations in order to estimate the value of their capacities for life, or more precisely, their capacities to provide life for capital. Foucault described this deployment of populations as racism (see Mbembe 2003).

For Foucault, racism permits a return of something like the sovereign right to kill in the context of biopolitics. As he put it: "If the power of normalization wished to exercise the old sovereign right to kill, it must become racist" (2003, 256). Although speaking to events of the first half of the twentieth century, even while remembering nineteenth-century colonialism, Foucault offers an important take on the racism at play in contemporary biopolitics. He argues that it is "far removed" from the racism that takes the "form of mutual contempt or hatred between races," or the sort of "ideological operation that allows states or a class to displace the hostility that is directed toward them or which is tormenting the social body onto a mythical adversary" (258). This racism deploys something like a crude evolutionism that permits the healthy life of some populations to necessitate the death of others, marked as nature's degenerate or unhealthy ones. Of course, the mutual hatred among races, or the projection of hate and fear onto a population that makes it into a mythical adversary, may come to function as a support of evaluations of populations, marking some for death and others for life (see Ahmed 2004b).

If this racism is central to the political economy of the biomediated body, it is because it is a racism that is deployed each and every time a differentiation is made among and in populations, constituting additional bodies of data. In contrast to the racism linked to the body-as-organism and its skin-morphology, the racism that Foucault points to gives the biomediated body its differences, even as the biomediated body gives racism its informatic existence. Although the visibility of the body-as-organism still plays a part, the biomediated body allows the raced body to be apprehended as information. Here the very technologies of surveillance and security, which presently operate to race populations, do so by monitoring bodily affect as information, ranging from DNA testing to brain fingerprinting, neural imaging, body heat detection, and iris or hand recognition—all are proliferating as "total/terrorism information awareness technologies."[10] The biopolitical racism of the biomediated body engages populations in terms of their "vulnerable biologies"—vulnerable not only to illness, life, and death, but also to national and international regulatory policies, military research programs, and a range of social anxieties concerning the level of threat (Thacker 2005b, 228).

Conclusion

In pointing to the devastating potential of biopolitical racism at the postbiological threshold, it is important to remember, however, that a threshold is indeterminate. It is the limit point beyond which there will have been change irreducible to causes. To elaborate the political economy of the biomediated body is not to determine the political economic as the cause of the biomediated body or its potential. It is rather to offer a back-formed analysis of the conditions of possibility of arriving at this threshold—which will help to move thinking about political economy away from a retrospective analysis and toward strategies for what is to be done. While the political gain expected of the affect turn—its openness, emergence, and creativity—is already the object of capitalist capture, as capital shifts to accumulate in the domain of affect and deploys racism to produce an economy to realize this accumulation it is important to remember the virtual at the threshold. Beyond it, there is always a chance for something else, unexpected, new.

Notes

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1 For a recent review of the turn to affect in cultural and literary studies that takes up the difference of emotion and affect but which also exemplifies the way in which such criticism ends up with feelings and emotions, see Ngai 2005. Also see Clough 2007.

2 I am taking this term from Pearson 1999.

3 I am following Eugene Thacker who puts the scare quotes around "life itself" to indicate that there is no essence that is discoverable—as life itself. But since the term has been used by molecular biologists since the 1950s, Thacker keeps the term. I also argue that life itself is being abstracted through capital accumulation in the domain of affect (Thacker 2005b, 60–61).

4 Brian Massumi argues, "It is only by reference to the limit that what approaches it has a function: the limit is what gives the approach its effectivity, its reality." The reality the limit gives "is movement or *tendency*. . ." (Massumi 2002, 147).

5 Massumi argues that "visceral sensibility immediately registers excitations gathered by the five 'exteroceptive' senses even before they are fully processed by the brain. . . . The dimension of viscerality is adjacent to that of proprioception, but they do not overlap" (2002, 60–61).

6 Hansen has more recently revisited the question of the body and digitization and has extended his argument to proposing that the body has a primordial technicity; nonetheless he still privileges the human body as that which gives meaning to digitized information. See Hansen 2006.

7 Hansen is drawing from Varela 1999.

8 My discussion of the following information draws on a number of sources besides Terranova 2004 and Hayles 1999, including Johnston 1998 and Taylor 2001.

9 I am borrowing here from David Harvey's (2003) discussion of "accumulation by dispossession," giving it my own spin.

10 *I am drawing here on discussions with Jasbir Puar regarding her book Terrorist Assemblages: Homonationalism in Queer Times (2007).*