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# The New Empiricism
## Affect and Sociological Method

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**Abstract**
This article offers a review of the relationship of methodological positivism and post-World War II U.S. sociology, especially its transformations in the last three decades of the twentieth century. With this as context, sociological methodology is rethought in terms of what cultural critics refer to as infra-empiricism that allows for a rethinking of bodies, matter and life through new encounters with visceral perception and pre-conscious affect. Thinking infra-empiricism as a new empiricism at this time means rethinking methodology in relationship to the changing configuration of economy, governance disciplinarity and control in the early twenty-first century.

**Key words**
■ affect ■ bodies ■ digitization ■ matter ■ method ■ sociality

In his writings on empiricism, or what he called a 'transcendental empiricism', Gilles Deleuze distinguished between transcendence and the transcendental (Deleuze, 1991, 2001). Pitting the latter against the former, Deleuze called for an empiricism that can take flight from transcendence or what has become ground or has settled in. Transcendental empiricism is a superior empiricism in that it critiques every idea or imagining that there is some substance behind the play of forces, a substance that grounds or transcends perception. As Deleuze sees it, transcendental empiricism returns us to delirium, chance and indifference involving us both in a temporality that is always starting up again in the midst and in relations based not in identification and recognition but in encounter with newness. Newness, however, is nothing but the eternal return of the new. Its temporality is no mere disruption of a linear time. Rather, it is the temporality of the virtual, the potential of the futural, which is the very force of transcendental empiricism.

Drawing primarily on Deleuze's conceptualization of empiricism, cultural critics have called for a rethinking of empiricism especially in relationship to cultural studies where for some time it has been refused. Brian Massumi has argued that in the last decades of the twentieth century, the fear of 'a reductive empiricism' and a 'naive realism' led cultural critics to see culture as offering the

only dynamic of change, insisting on cultural mediation of what otherwise would be 'dumb matter' (Massumi, 2002: 1). Massumi suggests that this dogged focus on culture led to a failure to conceive of the movement, the potentiality or the becoming of matter, including the matter of the human body. Subjecting cultural criticism to a transcendental empiricism has led cultural critics to address the movement, potentiality or virtuality immanent to matter. In doing so, they have developed what can be called an 'infra-empiricism' that allows a rethinking of bodies, matter and life through new encounters with visceral perception and pre-conscious affect.

While the resurfacing of empiricism has had its effects on cultural studies, there has been little discussion of the 'new empiricism' in U.S. sociology; it is my aim to further that discussion here. But since empiricism is foundational to sociological methods, to rethink empiricism in relationship to U.S. sociology, it is necessary to rethink its methodological assumptions, or what George Steinmetz recently has referred to as U.S. sociology's 'epistemological unconscious' (Steinmetz, 2005).[1] Focusing primarily on the post-World War II rise of a Fordist welfare state and then more briefly on post-Fordism beginning in the late 1960s, early 1970s, Steinmetz draws on regulation theory to give a historical account of the relationship of sociological methodology to the state's management of capital accumulation or the state's role both in regulating the economy and bringing sociality, culture and personality in line with it throughout the last half of twentieth century. Steinmetz concludes that in the post-World War II period, a 'methodological positivism' became the epistemological unconscious of U.S. sociology which 'resonated' with the culture, economy and politics of a Fordist welfare state.[2] Steinmetz argues further that the non-positivist methodological approaches that arose in the 1970s and were developed through the 1980s and 1990s, although resonating with a post-Fordism, did not undo a methodological positivism which still characterizes U.S. sociology today. Steinmetz claims that there is a lack of resonance between the positivistic methodological orientation of U.S. sociology and the larger social, political and cultural environments of post-Fordism.

Both his proposal for an epistemologically and historically oriented analysis of methodology and his conclusions with regard to sociological method in Fordism and post-Fordism lead me to the questions I will take up here. What became of the non-positivist methodological approaches of the late twentieth century, and what is the relationship of methods to governance and economy, sociality and subjectivity, knowledge production and science in these times? Are these times still best characterized as post-Fordist? In addressing these questions I will not only draw on the recent elaboration of infra-empiricism by cultural critics but I also will trace the relationship they have drawn between this new empiricism and the reconfiguring of governance and economy in the late twentieth and early twenty-first centuries.

## Regulation and Method

By drawing on regulation theory, Steinmetz does not mean to suggest that there is a one-to-one relationship between political economy and knowledge production, the former determining the latter or vice versa. For him, it is a matter of resonance between two different forms of practice, a matter of 'formal and structural homologies rather than any sort of direct mimesis' (Steinmetz, 2005: 125). Steinmetz finds in regulation theory a way to line up sociality, governance, economy, knowledge production and science without directly indicting sociological method for supporting, even being deeply complicit with the aims of Fordism or post-Fordism. However, it is hard not to hear in his descriptions of method the stronger claim that a deep complicity between sociological methodology and governance and economy was instituted in the post-World War II years. After all, the notion of an epistemological unconscious evokes that which is and must remain un-thought in the methods of sociology. I am reminded of Michel Foucault who pointed to the productivity of what he called a 'positive unconscious of knowledge', arguing that the doing of a science is made possible by what cannot be thought in the terms of that science (Foucault, 1970: xi).

A stronger claim about sociological methods even comes through in Steinmetz's description of U.S. sociology in the post-World War II years, when, in his own view, a positivistic, empiricist, quantitatively oriented methodology was developed in the social sciences that sociology embraced as it aimed to become a predictive and usable social science, privileging researchers doing organized full-fledged empirical studies to meet the needs of a Keynesian economy in regulating business cycles and surveying populations to bring their practices in line with mass production and mass consumption and eventually to cooperate with U.S. imperialism providing counter-insurgency intelligence in the context of internationalism of states with national economies pressured to be responsive to modernization. With the further linking of a positivist empiricist methodology to a behaviorism that rejected any structural depth, a *statistical personage* is constructed as the subject of social science generally and sociology in particular (Steinmetz, 2005: 129–30). Steinmetz concludes:

> The muting of capitalist crisis made it increasingly plausible that social practices really were repeatable in ways that could be captured by statistical models and replicable experiments. One could imagine that a wide range of human practices could be construed as constant conjunctions of events while ignoring the historical conditions of possibility of this patterning. (2005: 129)

It also should be mentioned that in the same post-World War II years, a qualitative methodology was fashioned in U.S. sociology as a dissenting and often marginalized response to quantitative methodology. But while qualitative methodology would continue to be an artisanal small N approach, the case study and the ethnography for examples, qualitative methodologists did not break with many of the assumptions of a methodological positivism. Most importantly, qualitative methodology privileged empiricism as methodological positivism does. Qualitative

methodologists were inclined to explain what was observed with other observable features. So, although most qualitative methodologists assumed that empirical reality is only meaningful through interpretive processes, theses processes were understood to be open to empirical investigation through 'naturalistic observation'.[3] The naturalistic method of observation presumes the obdurateness of the empirical world, or the independence of the empirical world from interpretation, while it takes for granted participants' interpretations of their social worlds without suspecting participants of being subject to structurally informed limitations to their understanding or interpretations. Participants' interpretations are simply part of the empirical world.[4]

Indeed, until the late 1970s, qualitative methodologists might best be characterized as resistant to the assumptions of a dominant structural functionalism or those frameworks that held structuralist assumptions such as psychoanalysis and Marxism, or structuralism itself. Qualitative methodologists even found uninviting the turn of Marxism and psychoanalysis to a phenomenological orientation concerned to recover the depth and reflexivity of the life world from what was presumed to be its ongoing colonization by capitalism, the state, mass media and a state-oriented science. Given that the phenomenological approach elaborated the very notion of an imperiled life world at a time when a positivist, empiricist, behaviorist social science was becoming influential and marginalizing philosophical reflection, the phenomenological reduction or bracketing became and remained a prescription for a self-questioning suspiciousness about the production of scientific knowledge, if not a self-distancing from any taken-for-granted scientific methodology.[5] The arrival of post-structuralism, including deconstruction, was easily understood as an extension and intensification of this self-questioning and self-distancing from the methodology at hand, although this would not be quite accurate; post-structuralism and deconstruction, while drawing on phenomenology, also are a strong critique of it, specifically its privileging of human consciousness (see Hunter, 2006: 78–112).[6]

From the late 1970s through the 1980s, it would be U.S. sociological theorists, not qualitative methodologists, who would take some notice of post-structuralism and deconstruction.[7] It would take time for qualitative methodologists to realize that post-structuralism and deconstruction were not just elaborations of semiotics and generally on the side of qualitative methodologies against quantitative methodologies. Instead post-structuralism and deconstruction and the crisis of representation that they brought about were critiques of those presumptions about subjectivity, interaction, language, situated-ness, structure and agency that were shared by qualitative and quantitative sociologists alike. In the light of deconstruction and post-structuralism, both quantitative and qualitative sociologists were shown to be subject to the epistemological unconscious of a post-World War II positivist empirical sociology. It was precisely this unconscious that post-structuralism and deconstruction were revisiting, suggesting a thorough critique of sociology as a method of the post-World War II Fordist welfare state.

Eventually qualitative methodologists, especially those who became critics of ethnography, did take up post-structuralism and deconstruction as critiques of

authority and knowledge production, writing and narration. Following the theoretical perspectives that were influencing cultural studies and which would come to be influenced by post-structuralism and deconstruction – queer theory, feminist theory, postcolonial theory and critical race theory – qualitative methodologists joined in the installation of the 'other' of western discourse as a subject of writing and narration. In imagining a subject coming to speak for herself in the invention of new genres of expression, among them auto-ethnography and performance ethnography, these critical qualitative methodologists, however, risked returning methodology to the speaking or the voice of a conscious subject – that is an uncritical return to aspects of phenomenology.[8]

Steinmetz also points to the critical theories influenced by post-structuralism and deconstruction that were taken up in sociology and he sees them as resonant with the shift from Fordism to post-Fordism. He also sees these critical theories as articulating the challenge offered by the social world to a methodological positivism (Steinmetz, 2005: 140). For Steinmetz, the challenge posed to methodological positivism goes beyond the decline of the triumphalist social narrative of progress to the growing centrality of digitization and networks, and with them, an engagement with contingency, adaptability, flexibility that also affects changes in the understanding of causality itself. Yet, as Steinmetz notes, positivism has remained the orthodoxy in sociology, rarely publicly ascribed to but nonetheless richly rewarded in practice.

Today sociologists are mainly positivists but under cover and the cover is a reclaimed social constructivism – reclaimed that is from cultural criticism, where it more often has functioned as a discursive constructionism involving the play of unconscious desire in the workings of a particular subject formation.[9] Reclaiming social constructionism without the unconscious, sociologists can deploy social constructionism as a generalized phenomenology while keeping sociality free from the over-determinations of the unconscious, the biological and the physical, ironically just as these – the unconscious, the biological and the physical – are being taken up and reconfigured anew by cultural critics who have refashioned the post-structuralist critique of phenomenology in an exploration of an expanded empiricism, infra-empiricism, under the rubric post-humanism.

Since the early 1990s, post-humanism has become a way to critically engage information and communication, genomics and microbiology, quantum physics and complexity theory while finding resources as well in the development of studies of biocapitalism, biopolitics, securitization and an economy of affect. Post-humanism has accompanied a rethinking of science, technology and causality, shifting focus from epistemology of human consciousness to a 'quantum ontology' of matter and time-space. Post-humanism also has accompanied a turn in cultural criticism, what I have called the affective turn, that is drawn to a changing relationship between governance and economy, constituting a sociality that no longer is best described as post-Fordism and might better be described as a conservative neo-liberalism where a certain configuration of war, counterterrorism, nationalism and internationalism both serve and trouble neo-liberalism, perhaps to the point of its exhaustion but also its rigidification.[10]

At least, questions must be raised as to the extent to which the extraordinary post-9/11 strategies of security are an intensification of what may become an ordinary relationship of governance and economy, a changed relationship, where a preemptive logic, the logic of securitization, comes to be lived as everyday reality albeit differentially for different populations in different social milieu. If, as I will argue, the relationship between governance and economy has become, that it has become a matter of modulating the affective background of a way of life, rather than a matter of governance regulating economy and bringing culture and personality in line with it, then sociological method, I also will argue, has become part of that affective background as a formulator modulating the affect of populations, which is central to the logic of preemption shared by economy and governance in a conservative neo-liberalism.

## Affect, Causality and Method

In his canonical text on affect, Massumi defines it as the capacity to affect or be affected – not an action but a capacity for activation. Taking up affect first in terms of human bodily responses, autonomic responses, Massumi argues that affect is in excess of conscious states of perception, pointing to a pre-conscious 'visceral perception' that is the condition of possibility of conscious perception. Thus, if conscious perception is to be understood as the narration of affect – as Massumi argues it is in the case of emotion, for example – there nonetheless always is 'a never-to-be-conscious autonomic remainder', 'a virtual remainder' of affect (Massumi, 2002: 25). Or to put this another way, there always is a reflux back from conscious experience to affect which is registered as affect, such that 'past action and contexts are conserved and autonomically repeated', pre-consciously reactivated as affect (2002: 30).[11]

Yet the turn to affect is no 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).[12] Affect is not only pre-conscious; it is pre-individual. It refers to inde-terminacy, metastability, where the unstable pre-individual forces, molecular forces, are neither in a linear nor deterministic relationship to the individuated molar body which these pre-individual forces nonetheless constitute. This be-coming individuated, or 'individuation', as Gilbert Simondon describes it, refers to an indeterminate becoming out of pre-individual affective forces in a process of emergence (Simondon, 1992).[13]

Ontologically speaking, affect is an implicit form. Affect subsists in matter as incorporeal potential. As soon as it begins to in-form, it dissolves back into com-plexity across all scales of matter, like quantum effects feeding the indeterminacy appropriate to each scale of matter: the subatomic, the physical, the biological and the cultural. Connecting affect to what quantum physicists call 'the impli-cate order', Massumi moves his discussion of affect from the indeterminacy of the pre-individual forces of the human body to the indeterminacy of all matter,

as the distinctions of living and the inert, the biological and the physical, the natural and the cultural begin to fade or are reconfigured in terms of becoming, a becoming at different scales of matter.[14] Affect is the non-human becoming of the human, the non-human becoming of all matter; its ontology is a probabilistic or 'quantum ontology'.[15]

That affect is a dynamism or a self-informing immanent to all matter, any method of attending to affect will profoundly unsettle any conception of method as being in the control of human agency or human consciousness inhering in the human subject. Any method of attending to affect will necessarily become entangled with an immanent dynamism, with the potential for individuation. Method attending to affect necessarily is performative, having become entangled or assemblaged with affect's capacity of self-information-ality.[16] Any method of attending to affect cannot simply be a matter of containment; it also cannot simply be a matter of interpretation, meaning, signification or representation. Method cannot help but produce affective resonance, attunement, that is, the intensifying or the dampening of affect

If a method attending to affect necessarily becomes entangled with or assemblaged with affect's enactable capacities for activation or informing, it also will be subject to a causality that necessarily is a quasi-causality, where future effects – what will be activated – causes activation in the present. That is to say, affect draws the future into the present as indeterminate state of activation, what can become a constant alertness. Taking the circuit between fear and threat as an example, Massumi suggests that while threat in the future causes fear in the present, nonetheless, without the presence of fearful feelings or bodily irritation in the present, the threat of the future would have no hold on the present. There is 'a kind of simultaneity between the quasi-cause and its effect, even though they belong to different times' (Massumi, 2005: 36). Fear and threat are of a piece as present and future. They are indissociable dimensions of the same event. Here event is a matter of multiple time-spaces in an immediacy, an indeterminacy, a virtuality or a superposition enfolding multiple time-spaces to use the terms of quantum physics, such that quasi-causality refers to an emergence that probabilistic measure cannot help but induce and can only fail to reduce.[17]

Massumi argues that in moving through the smallest of smallest circuits from virtual to actual to virtual, affect can become the nonphenomenal background of existence or the affective tone or generic context of a way of life. In relationship to fear, we can say that threat activates action such as running that turns bodily irritation, affect or fearful feeling into the feeling fear. But, even when affect no longer propels or compels activation, that is, when fearful feeling has become the feeling fear, a content on the level of representation and narration, an actualization or individuation, there still is an excess of affect, a fringe of indeterminacy repeating as a remainder of anticipation. This repeating anticipation of intensifying affect can come to occur without circuiting through action. Here fearful feeling remains enveloped in its own potential, paralyzed in repetition of anticipation. So now the very emergence of bodily irritation or fearful feeling preempts action, even as the feeling, thrown back on affect, intensifies affect.

When affect can regenerate itself without the detour through actual movement or action, it has become self-abstracted. Drawing on Charles Pierce, Massumi argues that self-abstracted fear has become a 'thought sign' that is, a sign 'that has no rational dependence upon the meaning of the sign' (Massumi, 2005: 42). In becoming thought of itself, fear retriggers activation of itself not only without actual action but even without fearful feeling. As Massumi puts it, 'as thought sign, affect is now intensively coupled with an incalculably qualitative unfeeling on which it has "no rational dependence"'. This introduction of a vanishing point of an unexperience is 'at the very limit of the phenomenal' (2005: 43). As such, fearful feeling has become an affective background or surround of a way of life, seeking only to grab attention.

This is a dynamic background, a probabilistic, statistical background which provides an infra-empirical or infra-temporal sociality, the subject of which is, I want to propose, the population, technologically or methodologically open to the modulation of its affective capacities. Sociality as affective background displaces sociality grasped in terms of structure and individual; affective modulation and individuation displace subject formation and ideological interpellation as central to the relation of governance and economy.[18] As such, the probabilistic measuring of sociological methodology shifts from merely representing population, even making populations, to modulating or manipulating the population's affective capacities, whether it means to or not.

Here sociological methods, methods or technologies of affective modulation or what Jordan Crandell calls 'affective formulizers' (Crandell, 2007) make it possible to mobilize/modulate the affect of a population which, as Tiziana Terranova argues, is not 'a collection of subjects of right – constituted by the partial alienation of their natural rights to the sovereign – but a dynamic quasi-subject constituted by a great number of variables' pertaining to the 'the environmental milieu that constitute and affect it' (Terranova, 2007: 136). Populations not only refer to human populations; populations of genes, stem cell lines or blood banks also can be calculated along with populations of terror-risks, mass deaths from HIV/AIDS or at-risk for incarceration. The life of a population is unpredictable or improbable at the preindividual level but reveals 'probabilistic regularities once considered at the mass level' (2007: 137).[19] Probability, therefore, brings along with regularity the potential of improbability. There always is an excess of affect keeping a population metastable, or in 'a continuous state of drift – caught up in deterritorializing movements of migration, mutation, recombination and creolization' (2007: 136). With a conservative neo-liberalism, I want to argue, it is the (im)probable, however, that is sought and to which the operation of sociological methodology is put.

No matter which technology we might imagine to be an affect-modulating technology – from all versions of teletechnologies to a whole range of biometric techniques, genetic or biotechnologies – these technologies open up method to a quantum ontology.[20] Following the argument that

> there is no ontology that does not legislate for its own empowerment technologically in the sense of prescribing the means for its own enablement and that there is no technology that is not an expression of ontology, of presumptions concerning the fundaments of existence said to enable technology to be . . . technological (Dillon, 2003: 547),

then the quantum ontology of affect calls forth a new technology or understanding of techniques or method, just as much as this technology makes the new ontology of affect possible. Therefore, on the one hand, affect has called forth a method or technique that records and transmits at the pre-conscious, pre-individual scale of matter with quantum effects. On the other hand, this technique or method makes possible an experience of affect at the very limit of the phenomenal. We can speak then of an empiricism of sensation, not an empiricism of the senses, not the sense knowledge underpinning methodological positivism, but an empiricism of the 'in-experience' of affect at the very limit of the phenomenal.

Mark Hansen argues that digitization because of its fine control of speed makes measuring at the infra-empirical or infra-temporal scale of matter possible. But, in doing so digitization fundamentally changes the idea of recording and transmitting; that is to say, digital coding is not merely a technical inscription of movement but is rather a performative measuring: a measuring that assembles with the self-informing capacity of matter or matter's affective capacity. Digitization meets the dynamism or self-informing capacity of matter and it meets that dynamism as digitally code-able (Hansen, 2004, 2006, 2007).[21] Or better, digitization intensifies the self-informing capacity of matter with zeros and ones or the protocological language of digital code which Alexander Galloway defines as 'hyperlinguistic, not sublinguistic', 'a language that is executable', 'a language that actually does what it says' – one that is 'materially affective' (Galloway, 2004: 165, 244).

This coming-together dynamically of affect and code is an interference in movement that is not a simple negativity or perturbation. This coming together is dynamic and is 'not reducible to the bare fact of having objectively come together'. Massumi uses the term 'relationality' to refer to this dynamism that cannot be accounted for by the elements in play when considered as discrete elements or when considered as an interaction of these elements. Instead coming to belong together modulates affect and can bring affect to a qualitative change beyond a threshold of a quantitative change in the intensity of affect (Massumi, 2002: 224–5). It is in this way that digitization enables methods and techniques to modulate or manipulate affective capacities at the population level, assuming an affective background as sociality, while modulating the affect of that background. While each individual is responsive to the sociality of an affective background in its own manner, it is modulating affect at the population level, I want to propose, that turns the life of the population over to the preemptive logic of securitization.[22]

## Affect and the Logic of Preemption

It is not surprising then that the manipulation of the affect of populations has concerned cultural critics who also are rethinking the relationship of governance and economy in terms of what they have called a logic of preemption, a logic that is dependent on the quasi-causality of affect. So the focus on fear was not just any example of affective surround of experience. Like that of other cultural critics, Massumi's focus on fear and on affect more generally has served in an

exploration of a changing relationship of economy and governance in the late twentieth and early twenty-first centuries, a time in which, it is argued, governance and economy together have taken as their primary function the evaluation and management of risk through processes of securitization.

This focus on the securitization of risk, Randy Martin has argued, enables us to see how common techniques of management join otherwise disparate elements (across governance and economy), while 'appreciating as with the (financial) derivative, how 'seemingly small interventions are linked to widespread effects' (Martin, 2007). After all, the financial derivative is not a wager on the probability of a certain future; it wagers on the volatility of the future. It is the very speculative-ness of the future that is being wagered, securitized and lived in the present. Not only has a digitally supported technique of management been central to securitization, so too has the technically enhanced production of fear. In its becoming background or surround of experience seeking to grab attention, affect and its modulation displace socialization and disciplining as central to sociality, a displacement which has been essential to installing a conservative neo-liberalism and extending biopolitics into securitization in the general context of the on-going crisis of 'life-itself'.[23]

Pointing to conditions brought on by crises like Katrina, the war in Iraq, and the war on terrorism, Massumi first treated conservative neo-liberal governance in terms of the strategic oscillation between limited government intervention in the domain of life-itself, on one hand, and on the other, the deployment of sovereign command in intervening when there is catastrophe or crisis (2005). In other words, in a conservative neo-liberalism, there is a temporary deployment of sovereign command that tries to make life normal again after crisis but when having done so is expected to withdraw, setting up or leaving in place self-organizing processes of technical systems that can keep things going. The business of life is then passed back to the workings of the economy.

In Aiwha Ong's terms, neo-liberalism both functions as a sovereign exception and by making exceptions to neo-liberal strategies (Ong, 2006). It is a sovereign exception in its flexible deployment of command, or biopolitical governance to assemble an array of technical systems to induce 'self-animation' and 'self-government' so that some populations can 'optimize choices efficiency and competitiveness in turbulent market conditions' (2006: 6). However neo-liberalism also produces exceptions by excluding those populations rendered unable to meet neo-liberal criteria for life or liveliness, putting into play what can be called a 'population racism'.[24]

While Ong is concerned to trace the disarticulation and rearticulation of citizenship in relationship to neo-liberal economy, and therefore to focus on the making and unmaking of populations in order to distinguish them in relationship to each other and as such to subject them to a distribution of life chances or affective capacities, other cultural critics have turned more recently to a discussion of a logic of preemption that speeds up the oscillation between limited regulation and intervention after crisis and allows the system to be in a far-from-equilibrium metastability in a situation of indeterminacy haunted by crisis. Rather than

aiming to restore homeostasis or depending on the self-stabilization of technical systems, there is an anticipation of future crises not to prevent them but to pre-empt them, leading not so paradoxically to proliferation of crisis but also a repetition of the indeterminacy of the event.[25]

Thus there is a bringing of futurity into the present while sustaining government and economy in a joint management strategy of securitization. The logic of preemption deployed in a strategy of securitization has changed the valuation of populations from distinguishing them in relation to each other in a distribution of life chances to putting populations into circulation – market circulation primarily – and thus opening up populations to the event of an unexpected creation of value in the modulation of their affective capacities or life chances. Rey Chow offers an example in tracing how body parts taken from political prisoners in China become exchangeable in a global market while the government releases some few prisoners now and again in exchange for trade privileges and opportunities in the global market – the currency of these exchanges: the evaluation of human rights abuses (Chow, 2002).

Here we are at some distance from the regulation theory that is utilized by Steinmetz which presumes a relationship between government and economy that is not the ideal of a conservative neo-liberalism. As Martin has noted, whereas 20 years ago economy or financialization was about the opportunities of the market while risk was about society's providing damage control, especially for technological threats, now securitization brings economy and governance and society into a grand, nonlinear matrix guided by a preemptive logic (Martin, 2007). For Massumi, the logic of preemption shifts the relationship of governance and economy from a past–future axis to future–present axis as the 'the mood of economic indexes' comes to define the well-being or lack thereof of the society and is often read back to legitimize or de-legitimize acts of governance (Massumi, 2005).[26] So here indexes function such that the future no longer is believed to be a linear extension of the past so that the accurate prediction of probabilities is imagined to provide wisdom. Instead the probability of future effects is deployed to assure or agitate affectively by power working on memory, tackling 'a universe of micro temporalities enabling the future not to be predicted by means of probabilities but for the future actively to occupy the present by means of immediacy' – that is, affectively (Parisi and Goodman, 2006: 6). Preemption, that is, is the unceasing inviting of probabilities but not to predict the future. Indeed, they cannot predict the future in that they are drawn immediately into the ongoing modulation of affect, giving populations over to being a probe or sensor of the improbable future.

If then we return to methods and to Steinmetz's argument that Fordism made it possible to believe that statistical probabilities could represent what human behavior is, while a qualitative methodology gave a human face to a statistical personation, now it would seem that this statistical humanism and its promise of what Matthew Hannah calls 'statistical citizenship' has become impossible, and can only be thought to be misleading if not deceiving (Hannah, 2001). Even in the following moment of post-Fordism when queer theory, feminist theory,

critical race theory, postcolonial theory and science studies fed a critical genea-
logical engagement with the constitution of various populations through various
standardizing instruments, even then, the affective turn already had begun to
follow the interest of governance and economy to the functioning of the improb-
able in the manipulation of the affective capacities of populations. Rather than
merely representing populations, probabilistic measure of sociological method
modulates populations' capacities to affect and be affected, thereby also modu-
lating the affective background or surround of a way of life. As such, sociologi-
cal methodology becomes the affective modulation of populations that is central
to the logic of preemption shared by economy and governance.

   If the turn to affect is a recognition that the infrastructural activity of our
world today to a large extent takes place at time-space scales far finer than those
of human perception, at the probabilistic scale of affect, then the affective turn
calls forth a shift in focus from ideological interpellation or subject formation in
the specular imaginary of a society born of a certain arrangement of state, nation,
economy, public and private spheres that was presumed during Fordism and even
in post-Fordism when this arrangement began to tremble. Ideological inter-
pellation and subject disciplining can no longer be the centerpiece of an under-
standing of sociality, even though disciplining and socializing go on. It would
seem necessary that we add to an understanding of sociality the modulations of
the affective background of a way of life. As sociological method has become a
technology of modulating the affect of populations central to the logic of pre-
emption shared by governance and economy, a critical rendition of method that
I have pursued here constitutes a transcendental empiricism seeking new process
lines to the virtual.

## Conclusion

If Deleuze's transcendental empiricism is to be understood as a philosophical
intervention into scientific method, including social science method, it inter-
venes by being speculative, by conceptualizing without objects or subjects for
that matter. In bringing forth an infra-empiricism in the late twentieth century
and the early twenty-first century, a transcendental empiricism sunk what had
become transcendent back into immanence, its process line, as Massumi puts
it, 'for the production of trans-situational linkage, or *affect*' (2002: 239). This
intervention of transcendental empiricism was primarily political in offering an
expanded empiricism, rich and non-reductive, with which to think politics anew
without any certainty of the outcome. And to rethink politics anew is to follow
the lines of process of transcendental empiricism, being open to a whole-field
modulation.

   While the work has just begun to rethink subjectivity, the unconscious, bodies,
technologies and populations more fully in terms of the sociality of affective back-
grounds, already the thought of affect settles in, becoming the infra-empirical
ground of sociological methodology in conservative neo-liberalism. This means

that affect already has begun its whole-field modulation of sociological method, as an infra-empiricism breaks up the configurations of empiricism, positivism and scientism that Steinmetz described as U.S. sociology's center of gravity. What becomes of positivism in relationship to infra-empiricism, I cannot address here. I can say, however, that infra-empiricism very much affects 'scientism,' which for Steinmetz refers to a certain way of presenting sociological knowledge. Indeed, it is the experimentation in presentation that an infra-empiricism calls forth that eventually will open infra-empiricism to the radical intervention of a transcendental empiricism, inviting cultural critics to set off again, seeking other process lines to the virtual.

## Notes

1  I am focusing on the U.S. and U.S. sociology following George Steinmetz whose work serves as the stage of my argument. It should be noted that sociologists elsewhere are taking up the question of empiricism, British sociologists, for example, as this collection of essays indicates.

2  For Steinmetz, an epistemological unconscious of methodological positivism points to the play of various combinations of positivism, empiricism and scientism, serving as sociological method's 'center of gravity rather than a common denominator' (2005: 119).

3  Naturalistic observation was first elaborated for Symbolic Interactionists by Herbert Blumer. I should point out then that in speaking of qualitative methodology without noting differences within the category I am in keeping with the understanding that qualitative methods in U.S. sociology were shaped early on by the Chicago School and continue to be shaped by the assumptions of Symbolic Interactionism. See Carol Warren and Tracy Karner's *Discovering Qualitative Methods: Field Research, Interviews, and Analysis* (2005); also see Norman Denzin (ed.) *Sociological Methods: A Source Book* (1978). For my earlier discussion of Symbolic Interactionism, realism and qualitative method, see *The End(s) of Ethnography: From Realism to Social Criticism* (1998).

4  Symbolic Interactionism takes pragmatism as its philosophical background, especially as it is developed in the works of George Herbert Mead. Since I am going to take up infra-empiricism, it might be noted that I am not proposing a critique of empiricism in order to refuse it but rather to expand it. If, however, in the case of an infra-empiricism, interpretation also is taken to be part of the empirical world, interpretation does not represent a privileged human perspective as it does in Symbolic Interactionism. An infra-empiricism is an expanded empiricism because it presents force from perspectives other than human conscious perception.

5  In the late 1960s and early 1970s, there were debates between Symbolic Interactionists and ethnomethodologists, the latter drawing on phenomenology but attending to the work of bracketing in those they studied as they made sense of their everyday life. In this way ethnomethodologists also were indifferent to assumptions about structure.

6  As I will make reference to Gilbert Simondon in what follows, it might be noted that he, the student of Merleau-Ponty, had a strong influence on Deleuze.

7  I am thinking particularly of the work of Steven Seidman, Charles Lemert, Stanley Aronowitz, Stephen Phofl, and Richard Harvey Brown.

8  I am thinking of the work of Norman Denzin, Carolyn Ellis and Laurel Richardson, to name but a few.

9  I am thinking here of how Louis Althusser's engagement with Jacques Lacan influenced the analyses of ideological interpellation, followed by analyses of discursive constructions of the subject influenced by Michel Foucault. See Judith Butler (1997) for an elaboration of this movement in critical theory's engagement with the Subject.

10  See my *The Affective Turn: Theorizing the Social* (2007) edited with Jean Halley, for a more detailed account of the turn to affect across a number of disciplinary fields.

11  Massumi speaks of bodily memory – 'vectors' or 'perspectives of the flesh'. Here the theory of affect draws on but also draws away from psychoanalytic theories of trauma that deeply informed analyses of discursive constructions of the Subject in its last moments of influence in cultural criticism. While psychoanalytic theory of trauma points to bodily memory, it usually does so in relationship to a constitutive lack in the Subject but affect is theorized here in terms of an in-excess, not lack.

12  In this canonical text, Massumi draws on experiments measuring autonomic bodily responses without however making much of the technology or technicity that is part of the experiments that make them exemplary illustrations of affect. 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. These technical framings also bring sociality into the discussion of affect in a way that Massumi does not explore but that I will treat below in my discussion of digitization.

13  Individuation is not to be understood, at least not primarily as the becoming of an individual or an individual subject although it can mean this. Rather it is the becoming of a form; or as will be discussed below, individuation is an explication of what is implicit or subsists as potential. As we will also see below, to talk of affect in relationship to the human body is limited. Affect being in excess of an individuated form challenges the presumption and privileging of the body-as-organism in discourses on the body, see my *The Affective Turn: Political Economy, Biomedia and Bodies* (2008). Also see the work of Eugene Thacker (2004, 2005). These challenges to the body-as-organism arrive in relationship to affect because of affect's link to biogenetic and nano-technologies, on one hand, and on the other, to a Foucauldian informed discourse on populations, where the organic body is not the unit.

14  The implicate order is David Bohm's term for an 'undivided universe' where everything is enfolded in everything else (1990, 1990a, 1993). All things unfolded in what Bohm calls 'the explicate order' emerge from the implicate order and return to it and while they exist, they are in a constant process of unfoldment and re-enfoldment. Bohm refers to 'active information' as a way to understand the potential of enfoldment – that is, the potential of any thing to inform or affect itself and to be affected or informed by its quantum field. But Bohm's conception of information differs from the conception of information as a representation proposed by theorists such as Niels

Bohr and Werner Heisenberg. For these theorists, quantum phenomena are *known* only through experimental frameworks and are thus inseparable from the apparatuses of measure (or representation). The phenomena are only endowed with real existence through the measuring apparatuses that represent them; they have no ontological status apart from these representations, which can only describe them 'analogically by probability'. Theorists like Bohr and Heisenberg argue that at the quantum level, a mathematical representation is all that remains of the physical world. In this argument, any ontological attribution of physicality to what is below the threshold of probability is thought to be merely metaphysical. While Bohm argues that the measuring and the measured 'participate irreducibly in each other', it is not for him a matter of epistemology, of how things are known, but a matter of ontology. As such, measuring for Bohm is a question of matter measuring itself or informing itself, where information is to be understood as physical. While quantum phenomena are indeterminate, they are real and their existence does not depend on their relationship to representations or measuring apparatuses. Quantum phenomena are ontologically indeterminate in relationship not to representation but to all that they are implicated with. While Bohm's theory is debated, the physicality of information is not, so that information theory is now thought in physics to be the more general theory of matter/energy and thermodynamics as a specific case of information theory. The above discussion appears and is further detailed in Patricia Ticineto Clough, Greg Goldberg, Rachel Schiff, Aaron Weeks and Craig Willse's *Notes Towards a Theory of Affect-Itself* (2007).

15  T.S. Murphy uses the term 'quantum ontology' in his treatment of Deleuze's notion of virtuality, linking the virtual to the work of the physicist David Bohm (1988).

16  There is genealogy of information theory implied in my treatment of method that moves through the development of cybernetic theory and comes to rest in quantum physics as indicated in note 14. In keeping with this genealogy, I am led to take information as in-forming, affective or activating, a matter of connecting or attention-getting/giving rather than meaning. This genealogy of information theory reveals a link to post-World War II technoscience and military research where the concept of system was central as it also was in U.S. sociological theory and method. (See Orr, 2006; also Hayles, 1999.) Recently Orit Halpern has taken up cybernetics, arguing that it is informed by a desire to turn over perception and memory, as these were treated by Sigmund Freud and Henri Bergson among others, to a programmable form that produces action immediately or without consciousness, a perfected control of the future (Halpern, 2007). My discussion below of digitization and affect in the late twentieth century and early twenty-first century is shadowed by the past to which Halpern's take on cybernetics refers. However, in pointing to the way in which the desire of cyberneticians has become what I will refer to below as an affective background of a way of life, I am suggesting that the desire of cybernetic technoscientists has become everyday or mundane, a way of life. In doing so, desire has left the realm of fantasy underlying a discipline and become the sociality of the day, a social affective background in a conservative neo-liberalism that is invested by capital and technoscience now not to control the future but to preempt it.

17  In other words, the conceptualization of event is important because it speaks of the unfolding and enfolding of time-spaces and therefore of the potential for the untimely, that is, the in-excess of measure. Because the conceptualization of the logic of preemption or preempting futurity that I will discuss below implies a giving of futurity over to measure, my interest in method also is an interest in measure – a

critical exploration (including the exploration of matter/energy/information refer-enced in note 14) of measuring that always will produce an in-excess in the measuring – what below I will call performative measuring. Furthermore, the interest in measuring affect goes back not only to sociological methods but to the works of Marxists, among them Antonio Negri, Paolo Virno and George Caffentzis, who have been debating the (im)measurability of affective labor, and therefore of surplus value with effects for labor politics based on measurable exploitation. For a review of this debate and comment see again Clough, et al. (2007).

18  These displacements also are figured in the shift from disciplinary society to what Deleuze called 'societies of control' (1995).

19  The examples of populations given suggest that populations are not only life-y; they also can be statistical collectivities of what is traditionally thought of as parts of living organisms, or capacities for living. Here the relevant background science is not physics but microbiology which also has deployed digitization and statistical probabilities in productive ways that alters what we take productivity to be. Eugene Thacker proposes that in assemblaging digital logics and biology, a biomedia is forms that produces a body that is informational. But this is not merely a matter of technology representing DNA as information but rather understanding information as inhering in DNA as 'a technical principle,' or biology's computational capacity (Thacker, 2004: 39). For Thacker, 'information is seen as constitutive of the very development of our under-standing of life at the molecular level' and the condition of possibility of a more productive biology (2004: 40).

20  Not surprisingly, Terranova, like so many other cultural critics, argues that digitized tele-technologies are fundamental to the constitution of the publics of populations because these technologies are most able to produce a public through the provisional capture and dissemination of affect (2007: 140).

21  See again my discussion of quantum ontology in note 14 to underscore that I am reading Hansen's many works on the relationship of digitization and the body through a Deleuzian/Bohm perspective. In doing so, I am taking a more radical ontological position than the feminist cultural critic and physicist, Karen Barad, who in her extensive study of Neils Bohr's ontology draws out implications for what she calls an 'agential realism' linked to the production of a phenomenon without consciousness (Barad, 2007). I am more interested, as discussed above, in the theoretical elaboration of the ontology of the subsisting unexperienced at the very limit of the phenomenal. I think together economy and governance also are interested in this – that is, in affect.

22  In her treatment of affect mostly in psychoanalytic terms, Teresa Brennan goes a long way to make a discussion of affect a matter of recognizing the individual subject in a larger field of energies, pitting a critical environmentalism against what she refers to as 'modernism's fundamental fantasy' of unlimited energy resources. It is in this context that Brennan takes up affect and distinguishes it from language or the symbolic. Pointing to 'the fleshy codes' or 'the informational channels of the flesh' that constitute a logic of life that is irreducible to the subject's standpoint, Brennan treats affect as a pre-conscious transmission which can slow down and distort the logic of life, what she calls 'negative affect' (Brennan, 2004: 139–64). Although affect is in-excess of language or the symbolic, Brennan nonetheless argues that it is through language, albeit an expanded one, that we can release affective blocks for the organically embodied individual subject and on behalf of the environment. It is precisely in confining affect to these psychoanalytic terms specific to an individual subject that in the end refuses the challenge that affect poses to our understanding

of sociality and its relation to the modulation affect at the population level. What to make of subjectivity, the unconscious, the human body in terms of affective sociality of populations is the challenge before us which, however, is not fully explored in this article.

23 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 1950s, Thacker keeps it (2005: 60–1).

24 I use the term population racism, drawing on and extending the recently translated lectures of Michel Foucault (2003, 2007). In these lectures, Foucault directs us to recognize how biopolitical governance affords sovereignty the right to kill but in the name of health or life, also allowing productive powers, powers of capital to 'shade into powers of existence', as Massumi puts it (2005: 2). 'Productive powers' being growth factors, powers of becoming, the relation of governance and economy is focused on securitizing affect, socializing the affective capacities of life-itself. Population racism therefore points both to the distribution of populations in terms of life capacities or the modulation of the affective capacities of populations as discussed above.

25 It is in Brian Massumi's work that I first encountered the logic of preemption but I also am drawing on the works of Luciana Parisi, Steve Goodman, Randy Martin, Tiziana Terranova and Melinda Cooper.

26 At present, the downward turn of the market is making the lack of well-being speak loudly, even to the point of calling into question the neoliberalist strategy of financial markets that has been championed in the U.S. Whether governance and economy will continue to be in the relationship I am describing here or whether there are modulations in relationship to more profound changes in the market is a question to be answered in future.

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