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Biopolitical Reflections:
Cognitive, Aesthetic and Reflexive Mappings of Global Economies

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We have associated new materialism with renewed attention to the dense causes and effects of global political economy and thus with questions of social justice for embodied individuals. – Diana Coole and Samantha Frost

It is not a question of effacing what can be felt, but of multiplying the powers of producing what can be felt and making them intersect. – Jacques Rancière

Maps to me are tricky and insidious, and they've always fascinated me. – Mark Bradford

In this essay I reflect on Fredric Jameson's suggestion that 'an aesthetic of cognitive mapping [of social processes] is an integral part of any socialist political project' in light of recent theories of embodied cognition. I first explore mappings of social processes in connection with popular media accounts of the global economy of coltan (a metal used in consumer electronics). I then consider possibilities for a reflexive orientation to the processes shaping such mappings. That is, I consider what happens when we try to map the political economy of our embodied and mediated perceptions of political economies. Reflexive mapping of this kind leads quickly to a series of limits and paradoxes. However, I argue that an encounter with such limits comprises an important component of a materialist politics. Moreover, I find encounters of this kind are also staged in popular media. Insofar as this is the case, I conclude, such media can contribute to what John Dewey called a properly 'aesthetic' experience of global life, namely a rhythmic movement between emotional provocations, critical reflections and practical itineraries.

Totalities and Itineraries

In a typically eloquent and delightfully cranky essay originally delivered at a conference on Marxism and the interpretation of culture in 1988 (he declares he considers himself the only Marxist present), Fredric Jameson surveys various attempts to mediate what he describes as the 'growing contradiction between lived experience and structure, or between a phenomenological description of the life of an individual and a more properly structural model of the conditions of existence of that experience.'[1] Whereas in simpler times 'the immediate and limited experience of individuals is still able to encompass and coincide with the true economic and social form that governs that experience', the complex global economies forged by monopoly capital preclude any direct phenomenological access. A gulf emerges between lived experience and its economic basis, or as Jameson puts it, 'The phenomenological experience of the individual subject […] becomes limited to a tiny corner of the social world, a fixed-camera view of a certain section of London or the countryside or whatever. But the truth of that experience no longer coincides with the place in which it takes place. The truth of that limited daily experience of London lies, rather, in India or Jamaica or Hong Kong'.[2] Largely invisible to those who participate in diverse networks of production, exchange and consumption, the economy enters experience only through a 'play of figuration', a series of distorted expressions of what Althusser described as the 'absent cause' of our lived experience, namely a multinational capitalist system (350).[3] In subsequent writings, Jameson assigns these expressions to a 'postmodern' culture symptomatic of late

[1] Frederic Jameson, 'Cognitive Mapping', in Cary Nelson and Lawrence Grossberg, eds., *Marxism and the Interpretation of Culture* (Urbana.: University of Illinois Press, 1988), 349.
[2] Jameson, 'Cognitive Mapping', 349.
[3] Jameson, 'Cognitive Mapping', 350.

capitalism. From this perspective, all manner of artistic and political discourses, from the 'thematics of mechanical reproduction' to various conspiracy theories, amount to so many allegories for the dislocation of structure from agency and experience.[4]

Jameson proposes that rather than play with figures, we might instead try to cognitively map the social processes that determine our locally embodied experience. His account of cognitive mapping combines Althusser's account of ideology – the representation of an imaginary relation to material conditions of existence – with Kevin Lynch's studies of colloquial 'cognitive maps' of urban geography. Jameson argues, 'the incapacity to map socially is as crippling to political experience as the analogous incapacity to map spatially is for urban experience. It follows that an aesthetic of cognitive mapping in this sense is an integral part of any socialist political project.'[5] Jameson does not propose that political subjects should possess a complete diagram of the complex material networks of labor, exchange, consumption and communication in which they are immersed. Instead, he calls for an as-yet unrealized vision of a 'social totality', that encompasses all who participate in the global economy. Absent a recognition of capital's dominant 'fundamental laws' of profit, etc., he argues, a progressive person "is doomed to social democracy, with its now abundantly documented treadmills of failures and capitulations. Because if capital does not exist, then clearly socialism does not exist either [...] without a conception of the social totality (and the possibility of transforming a whole social system), no properly socialist politics is

[4] Jameson, 'Cognitive Mapping', 356; *Postmodernism, or the Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991); *The Geopolitical Aesthetic* (Bloomington: Indiana University Press, 1992).
[5] Jameson, 'Cognitive Mapping', 353.

possible."[6] Jameson avows that he has no idea what this 'new aesthetic' would look like. He would later endorse Michael Hardt and Antonio Negri's vision of a global confrontation between Empire and the Multitude (see Shapiro, 2003).

Notice in these passages the slippage from an *aesthetic* of mapping to a *conception* of totality. Seeking the 'truth' of daily experience in the latter, Jameson sets up parallel oppositions between local and global spaces, on one hand, and between phenomenological experience and conceptual understanding on the other. As Jameson well knows, oppositions of this sort are at odds with Althusser's account of ideology as a situated, material practice. By the same token, they run counter to the insights of new philosophies and sciences of embodied cognition, which flesh out, so to speak, the material character of ideology. (See Coole and Frost, 24) On this view, there is no conception of totality that is not also an aesthetic experience, meaning it is imbued not only with sensory experience (including visual images) but also with affects and dispositions. Moreover, sensory capacities, affects and dispositions are also conditioned by global economic processes. In light of these insights, how might we map the global processes that determine our local, embodied experience?

To recover aesthetic dimensions of global mappings we might first go back to Lynch. As Jameson notes, the colloquial image of urban space Lynch describes provide users neither with a fixed-camera view, nor with a conception of totality. 'Lynch's subjects are rather clearly involved in pre-cartographic operations whose results traditionally are described as itineraries rather than as maps.'[7] Rather than an

[6] Jameson, 'Cognitive Mapping', 354-5; cf. 'The political form of postmodernism, if there ever is any, will have as its vocation the invention and projection of a global cognitive mapping, on a social as well as a spatial scale.' *Postmodernism,* 54; *The Geopolitical Aesthetic*, 4.
[7] Jameson, *Postmodernism*, 51-2.

encompassing vision of social spaces and relationships, itineraries involve various heuristic distortions and simplifications., The "image" Lynch describes parcels the city into various paths, edges, districts, nodes and landmarks.[8] That is, it consists of a series of figures much like those that Jameson repudiates.

> The image itself was not a precise, miniaturized model of reality, reduced in scale and consistently abstracted. As a purposive simplification, it was made by reducing, eliminating, or even adding elements to reality, by fusion and distortion, by relating and structuring the parts. It was sufficient, perhaps better for its purpose if rearranged, distorted, 'illogical.' It resembled that famous cartoon of the New Yorker's view of the United States.[9]

Urban itineraries, furthermore, are replete with remembered and anticipated encounters, sensations and actions. The image is not simply a visual picture, but a complex blend of intention, expectation, memory and diverse sensory cues.[10] As Jonathan Flatley notes, "our spatial environments are inevitably imbued with feelings… and these emotional valences… affect how we create itineraries." (Flatley 77) Legibility therefore not only confers instrumental competence, but also 'heightens the potential depth and intensity of human experience.'[11]

How might Lynch's 'image' be extended to global social processes? How do we develop a legible map of such processes? How do they become navigable, or gain depth and intensity? Furthermore, in what sense do such maps coincide with the truth (as

[8] Lynch, *Image of the City, 46*.
[9] Lynch, *Image of the City*, 87. The cartoon in question is Saul Steinberg's View of the World from 9th Avenue - March 29, 1976 (New Yorker March 29, 1976). http://archives.newyorker.com/?i=1976-03-29 (accessed 9/10/2014) Looking west, the cartoon reduces everything between the Hudson river and the Pacific to several landmarks (Nebraska, Chicago, etc.) and a couple of mountains, comprising perhaps half the scale of several New York avenues.
[10] Kevin Lynch, *Image of the City* (Cambridge: MIT Press, 1960), 4-5.
[11] Lynch, *Image of the City*, 4-5.

Jameson puts it) of complex material relationships in which they are embedded? Although we may not grasp them as a whole, we most certainly possess images of trans-national economies. With contemporary media and the technological prosthetics that extend our senses across the globe, our everyday perceptions of the relations in which we participate most definitely include India and Hong Kong. Like those of the urban landscape, moreover, our maps of global economies are not only cognitive but also aesthetic.. As Lynch suggests, the image we gather of our surroundings comes not from a fixed, but a moving camera, both in the sense that it plots the past and present movements of our bodies, and that the image is invested with affects.

Aesthetic Mappings

Consider, for example, the image of global political economies staged in a *New York Times* article on cassiterite (tin ore) miners in the Congo. In one of several vivid reports, Lydia Polgreen traces a complex series of material processes linking her largely Western readers to the miners about whom they now read. She writes, 'This is Africa's resource curse: The wealth is unearthed by the poor, controlled by the strong, then sold to a world largely oblivious of its origins.'[12] She then arouses the oblivious with a harrowing account of the economies in which they unwittingly participate. Cassiterite is widely used in electronics such as laptops and cell phones. Though she does not harp on the point (others have), it is possible that the laptop on which we read the article contains traces of the metals harvested in those muddy tunnels. In related articles, we learn that not only the bodies of miners and prostitutes but also populations of mountain gorillas and large tracts of rainforest are despoiled in conjunction with the mines.

[12] Lydia Polgreen, 'The Spoils, Congo's Riches, Looted by Renegade Troops', *New York Times* (15 November 2008), <http://www.nytimes.com/2008/11/16/world/africa/16congo.html>.

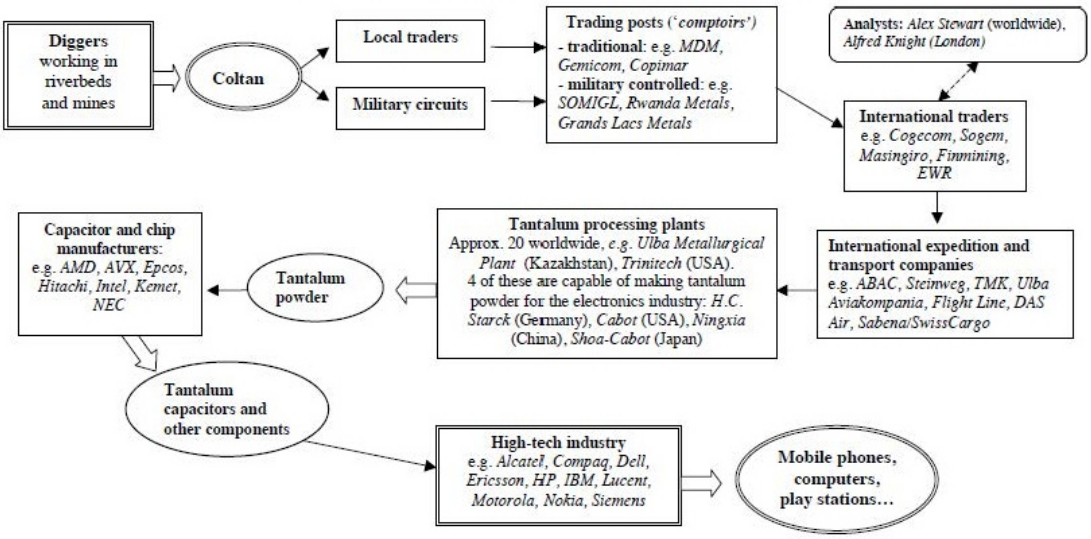
How should we characterize the mapping of global economies that corresponds to reading this article? Like the hydrogen and oxygen atoms in our cells, the metals and silica in our machines and the electronic signals they configure have traveled across the globe, circulating through bodies and places we can only (partially) imagine. Surveying the relationships between violent militias, state politics, mining camp economies (including prostitution), international corporations and western consumers, we move from the unconscious immediacy of our technologically supplemented experience to the abstraction of global networks of law, technology and biology, then back to the local scale of our participation in these networks on which we now sentimentally reflect. We thus encounter a complex blend of intimacies and abstractions that intersect but do not neatly coincide. Let us briefly consider each in turn, and then reflect on their entanglement.

We can start with attempts to become conscious of our participation as consumers and producers in the networks of a global capitalist bio-economy, what in Marxist terms might be called de-fetishizing investigations of commodity relationships. Following the social labor invested in our everyday use objects, Polgreen's article leads us into a maze of inter-connected bodies, from guerillas to gorillas.

Some of these connections are captured in the following diagram.[13]

[13] See 'Supporting the War Economy in the DRC.' Report by IPIS (International Peace Information Service), p.10. http://users.skynet.be/ipis (Accessed 9/23/2014)

Coltan: from the Congolese war zones to your mobile phone



Sources: Kristi Essick, 'A call to arms', The Industry Standard Magazine, 11/6/01; E. Bruyland, 'Bloed aan uw GSM?', Trends, 19/4/01; Tantalum-Niobium International Study Center (www.tanb.org); Didier de Failly, "Coltan, pour comprendre...", in L'Annuaire des Grands Lacs, Antwerp, November 2001.

However, this diagram hardly captures the phenomenological encounter staged by Polgreen's article.[14] Rather than provide a complete diagram of the myriad processes linking western consumers to mines in the Congo, Polgreen's article highlights what might be called nodes and landmarks of production, exchange and consumption. It lends depth and intensity to complex social processes by bringing the reader into contact with the lives of particular individuals caught up in the cassiterite economy in the Congo through anecdotal descriptions of despotic generals, quotations from weary but aspiring miners, and photographs of their hard labor. As Lynch argued regarding urban spaces, simplification and distortions of this kind are the preconditions of pragmatic and sentimental legibility. Regarding the latter, one recent study suggest that empathy wanes as soon as we contemplate more than one life (people tend to donate less to a brother and

[14] A more extensive description of the relevant economic agents and processes can be found at the website of the Tantalum-Niobium International Study Center. See http://tanb.org/ (accessed 9/12/2014)

sister pair than to a single orphan), a rather low threshold of complexity.[15]

Taking these insights to heart, activists seeking to mobilize public campaigns against what they call "blood phones" often supplement complex diagrams of commodity chains with simplistic, evocative images. Some of these images visualize what the phrase implies, namely that the technologies that disembody our communication are wrought by flesh and drenched in blood.[16]

By means of such images, people are moved to pay attention, to investigate and to act. To this end, the author of one online article devoted to the subject of mineral auditing required under the Dodd-Frank bill begins by collapsing the distance created between bodies by global trade:

What if I told you that the distance between you and a Congolese rape victim was

[15] Shankar Vedantam, *The Hidden Brain* (New York: Spiegel & Grau, 2010), 253-4.
[16] See http://merahza.wordpress.com/2009/05/04/coltan-blood-on-your-cell-phones/ (Accessed 9/25/2014)

> three feet? Take a look around. There is probably at least one electronic product within a three-foot radius around you right now. It may be the BlackBerry in your pocket, the MacBook Pro sitting next to you, or the iPod blasting from your headphones. Regardless, the true connection between you and a Congolese rape victim sits in every one of those electronics.[17]

Thus, the author inverts the parochial distortions of the aforementioned New Yorker cartoon, bringing what is distant into the foreground.[18]

We may be suspicious of being emotionally manipulated this way, but should we prefer not to be moved? David Harvey – who has done as much as anyone to trace material relays between the aesthetics of urban experience and global economies – has argued for a politics in which 'the long-lost techniques of empathy and translation across sensory realms is reconstituted as a vital way of knowing to supplement (and in certain instances to transcend) introspection and all the various objectivizing modes of enquiry that exist mainly in the sciences and social sciences.'[19] Harvey does not merely promote the stimulation of empathy. Rather, he implores social scientists to avow the communication of sensory, aesthetic experience as a condition of legibility, and so to question not only their epistemology but also their discursive techniques. One might compare his arguments in this regard to those of John Dewey, who charged artists with the task of an aesthetic communication of social consequences. As he put it, "Artists have always been the real purveyors of news, for it is not the outward happening in itself

[17] 'Bloody BlackBerrys: the true cost of today's electronics' Kathleen Brophy, <http://www.weliveoneworld.org/?p=266> (accessed 4/15/2011).
[18] For concerned consumers, the 'Enough Project' has compiled a graph that ranks companies for their relative responsibility in sourcing minerals: http://www.raisehopeforcongo.org/content/company-rankings (accessed 3/29/12). See their updated report, 'from congress to congo', somewhat hopeful: http://www.enoughproject.org/publications/congress-congo-turning-tide-conflict-minerals-closing-loopholes-and-empowering-miners
[19] David Harvey, *Spaces of Hope* (Berkeley: University of California Press, 2000), 225.

which is new, but the kindling by it of emotion, perception and appreciation." (Dewey 1927, 184) The work of 'blood phone' activists, and that of others like the 'Beehive Collective', which provides traveling exhibits of the 'true costs' of coal, can be seen in this light.[20]

Reflexive Mapping

Polgreen's article provides what might be called an aesthetic map of the cassiterite economy, lending it not only visibility but also depth and intensity. But in what sense does the reader's image of this economy coincide with what Jameson calls the "truth" of the social processes shaping that experience? Reading Polgreen's description of the tin mines and looking at the accompanying photos, we may tear up. But the empathy that now inhabits the same body linked by cassiterite to those whose suffering it now imagines has other sources than the mines and miners in the Congo. In the case of the Times article, the image we develop is inflected by the local media genre (or 'genre groove' as advertisers put it) as well as the space in which it is read, a genre geared for empathic recognition or for trans-national activism, a café with an upscale weekend brunch crowd or a classroom for students enrolled in a community development sequence. *To map the processes shaping our local experience, we have to trace not only the material processes involved in producing objects we consume, but also those that shape our perceptions, ethical judgments and sentimental dispositions toward them.*

A reflexive orientation to embodied experience at any scale quickly leads to the

[20] The Beehive Collective is a popular group on college campuses, which uses educational posters and celebratory gatherings to promote activist movements against agricultural biotechnology and coal industries. These activists draw attention to the 'true costs' of coal, bringing factors externalized by market calculations to our attention. However, their posters and gatherings also frame information concerning industrial processes and their effects with sentimental metaphors, cartoons and celebratory communal gatherings. See <http://www.beehivecollective.org/> (accessed 02/07/2012).

challenges facing any materialist philosophy. As John Dewey argued, the Darwinian insight that organs of perception and cognition also evolve by variation leaves us with two alternatives: 'We must either find the appropriate objects and organs of knowledge in the mutual interactions of changing things; or else, to escape the infection of change, we must seek them in some transcendent and supernal region.'[21] The mutual interactions in question encompass both social processes and the organs by which they are apprehended. Speaking metaphorically, Arjun Appadurai describes the effects of mutual interactions among disjunctive global "scapes" of finance, technology, media and migration as a 'globally variable *synaesthesia*'.[22] In his account of aesthetic experience, Dewey suggests a parallel with sensuous experience. Much as a commodities congeals global flows of labor and material, he suggests, emotions congeal diverse sensory phenomena as distinctive qualities or tones of feeling.

> Physical things from far ends of the earth are physically transported and physically caused to act and react upon one another in the construction of a new object. The miracle of mind is that something similar takes place in experience without physical transport and assembling. Emotion is the moving and cementing force. It selects what is congruous and dyes what is selected with its color, thereby giving qualitative unity to materials externally disparate and dissimilar. It thus provides unity in and through the varied parts of an experience.[23]

Returning physical transport and assembly to the mind, the neuroscientist Antonio Damasio describes emotions as neural 'maps' of potential relationships between

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[21] John Dewey, 'The Influence of Darwin on Philosophy', *The Influence of Darwin on Philosophy and Other Essays* (New York: Henry Holt and Company, 1910), 6-7.
[22] Arjun Appadurai, *Modernity at Large* (Minneapolis: University of Minnesota Press, 1996), 37.
[23] John Dewey, *Art as Experience* (London: Penguin Books, 1934), 44.

objects and bodies. In his language, the affective unities Dewey describes are 'qualia.' (Damasio 2003) We need only add that the processes of the brain are embedded in those of the body and its environment, including the global economy, with manifold reciprocal influences and exchanges. That is, the transport and assembly involved in sensory experience is not only analogous to, but literally intertwined with that of commercial objects. In the words of one Starbucks advertising campaign, 'Geography is a Flavour.'[24]

Of course, figural conflations and confusions of this kind are precisely what Jameson laments in both postmodern culture and post-Marxist theory:

> We have already experienced a dramatic and instructive meltdown of the Althusserian reactor in the work of Barry Hindess and Paul Hirst, who quite consequently observe the incompatibility of the Althusserian attempt to secure semiautonomy for the various levels of social life, and the more desperate effort of the same philosopher to retain the old orthodox notion of an 'ultimately determining instance' in the form of what he calls 'structural totality'. Quite logically and consequently, then, Hindess and Hirst simply remove the offending mechanism, whereupon the Althusserian edifice collapses into a rubble of autonomous instances without any necessary relationship to each other whatsoever.[25]

Jameson would have us believe that without a supernal region of determination structural

[24] <http://www.starbucks.ch/en-US/_Worlds+Best+Coffee/Geography+is+a+flavour.htm> (accessed 3/20/2012).
[25] Jameson, 'Cognitive Mapping', 354

relations give way to so many fragments of rubble.[26] However, our incapacity to map the totality of forces defining our local experience – including that of global economies - does not leave each consciousness a closed world in 'impossible' coexistence, or what Jameson calls a 'monadic relativism' – a Leibnizean formulation that invites a complementary God's eye view. Rather, each participates in a plurality of partial encounters. Our maps of the material processes in which we are embedded are not 'ships in the night, a centrifugal movement of lines and planes that can never intersect.'[27] To the contrary, as Lynch argues, our images of social totalities frequently overlap. A 'public image,' he suggests, is composed by the

> overlap of many individual images. Or perhaps there is a series of public images, each held by some significant number of citizens. Such images are necessary if an individual is to operate successfully within his environment and to cooperate with his fellows. Each individual picture is unique, with some content that is rarely or never communicated, yet it approximates the public image, which, in different environments is more or less compelling, more or less embracing.[28]

So understood, the overlap that constitutes a public image would not be a common set of ideas or values, but rather a convergence of moving itineraries.

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[26] Similar worries drive other critics. Thus, for instance, Jonathan Edwards allows that capital is discontinuous and everyday life composed of interdependent but relatively autonomous practices, capable of altering broader patterns of reproduction, only to conclude by admonishing the radical leaps of new materialists. He protests, 'For most people, everyday life continues to be experienced in the shape of interactions with a hierarchical ordering of material practices in a given, lived space that is governed by the state and the geopolitical system.' Jonathan Edwards, 'The Materialism of Historical Materialism' in Diana Coole and Samantha Frost, eds., *New Materialisms* (Durham: Duke University Press, 2010), 296. He does not explain just what that ordering might be, how it enters experience, or what distinguishes the experience of most people from others. Lived experience is 'given' differently in different media, genres and spaces, between which people shift with varying degrees of automatism, adjustment, confusion or shock.

[27] Jameson, 'Cognitive Mapping', 350

[28] Lynch, *Image of the City*, 46.

Meta-Affects, Dizzying Maps

'No one knows what associations define humanity.'[29] – Bruno Latour

By virtue of circulating media, our images of social processes include some of the distant economies that produce the machines through which we perceive them. But might these images also include those processes shaping the organs of those perceptions? Might such images also intersect, making these such processes into matters of public concern and responsiveness? We are less often prompted to reflect on the political economy of our sentimental dispositions than we are on that of our consumer electronics. This appears to be changing, however, as recent theorists of a 'new materialism' explore the contributions of nonhuman matter to perceptions, feelings and judgments.[30] Insights concerning what Jane Bennet calls 'agentic materialism,' moreover, are making their way into popular and commercial discourse. Staying with the *Times*, we find a move in this direction in a curious article by the evolutionary biologist and columnist Olivia Judson in which she speculates on the possible effect of obese pregnancies on the political affiliation of offspring.[31] Judson outlines scientific studies showing the effects of different in-utero conditions on the personalities of mammals (affecting their startle responses) and connects them with political studies showing links between personality and political threat perceptions. She then notes the effects of obesity on the hormonal composition of pregnant women. She speculates,

when an obese woman becomes pregnant, her fetus is exposed to various 'fat'

[29] Bruno Latour, *Politics of Nature* (Cambridge: Harvard University Press, 2004), 156.
[30] See Coole and Frost, *New Materialisms;* Jane Bennett, *Vibrant Matter* (Durham: Duke University Press, 2010); William Connolly, *A World of Becoming* (Durham: Duke University Press Books, 2011).
[31] Olivia Judson, 'Weighing the Vote', *New York Times* (21 October, 2008). PROVIDE LINK?

> hormones. Whether these hormones shape someone's personality is unclear. But since exposure to hormones in the womb affects personality in so many other cases, it strikes me as possible that it could here too. In the United States, the obesity epidemic began about 30 years ago. We are now at a point where one third of all pregnant women are obese. Their children will be voting in about 20 years' time. If an 'obese' environment in the womb has an impact on aspects of personality that affect political views, we may soon be seeing a big shift in the body politic. (Ibid)

To be clear, I do not simply endorse Judson's speculations, much less take the studies she reports at face value. These speculations, in any case, do not take account of the many factors shaping political dispositions, nor does she claim they do, for that matter. They do not allow us to assign a value to the effects of corn syrup on American voting behavior. Nonetheless, her article suggests that values and judgments are conditioned by nutritional and ecological contexts as well as by ideological discourses, and it exemplifies the way such connections are becoming objects of public scrutiny, contemplation, and potentially of action.

Judson's speculations could readily be linked with studies of agribusiness and nutritional science as they bear on the U.S. obesity epidemic.[32] They highlight the effects of economic practices not only on human morphology, but also on sentiments and dispositions. They find their academic counterpart in recent work by thinkers such as Bennet, who proposes that political theory take account of, among other things, 'the

[32] Consider Michael Pollan's influential discussions of the effect of corn subsidies on the fast food industry. See Michael Pollan, *The Omnivore's Dilemma* (New York: Penguin, 2006). Links can also be drawn to the role of 'endocrine disruptors' in commercial products. See Nicholas D. Kristof, 'How Chemicals Change us', *New York Times* (5 March, 2012), <http://www.nytimes.com/2012/05/03/opinion/kristof-how-chemicals-change-us.html?hp> (accessed 03/11/2012).

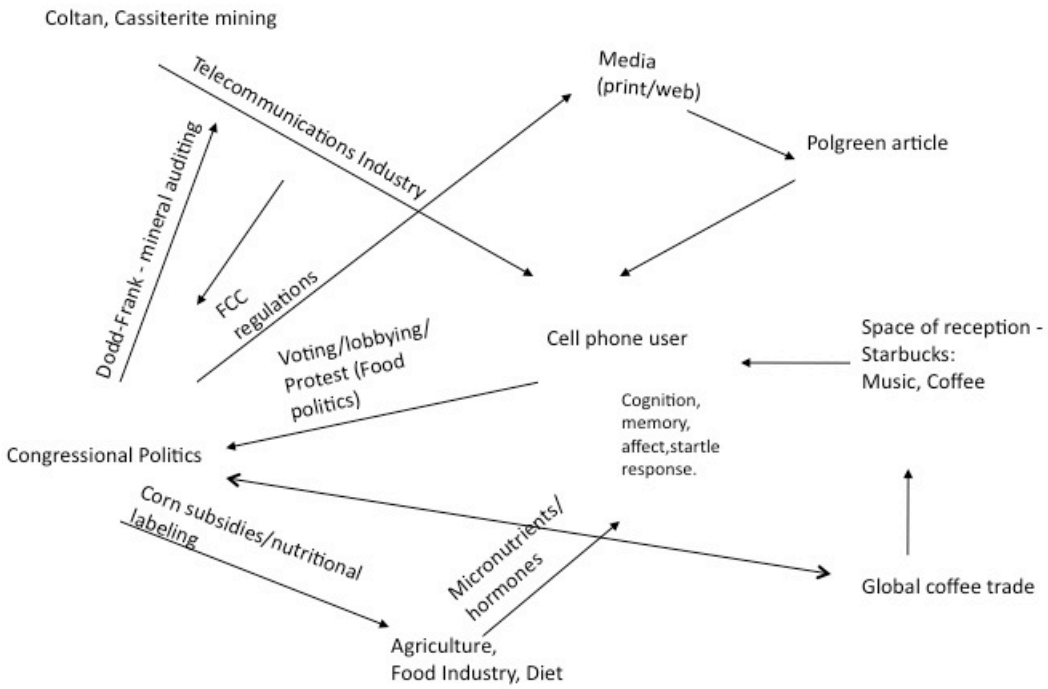
strivings and trajectories of fats as they weaken or enhance the power of human wills, habits, and ideas.'[33] For a better-understood and more widely accepted example of the political-economic constitution of interpretive capacities, consider the role of micronutrients (such as iodine) in determining intelligence.[34] More evidence of such entanglements might be sought in the emerging field of 'behavioral epigenetics', a field whose popular allure has already attracted critical suspicions.[35]

Judson's article suggests that, in effect, global economies modify sentimental and ideological perspectives on global economies. Simply put, how people grow what you eat may affect how you think and feel about the political messages you encounter about how people grow what you eat (flavor, after all, also has a geography). Of course, so does what you read and what you watch. The insights here hardly encompass the myriad social processes whereby perception and judgment are influenced. Nonetheless, they expand our understanding of the registers and sites of that influence, bringing reflexive attention to bear. An expansion of this kind is also at work in the popular television show *House*, in which medical conditions are frequently diagnosed by analyzing the personality traits of patients, highlighting the reciprocal interaction of bios and ethics. Such interactions extend to the abrasive personality of its eponymous protagonist, Gregory House, whose diagnostic virtuosity may in part depend upon his chronic pain, his addiction to opiates or

[33] Bennett, *Vibrant Matter*, 43. Cf. Masters and Coplan, 'Inasmuch as the aggregated effects of environmental toxins can be shown to have deleterious effects upon judgment and behavior, the implication is that cleaning up the environment or changing diet may be more efficacious than incarcerating disaffected urban youth.' Cited in Coole and Frost 2010, 18.
[34] Nicholas D. Kristof, 'Raising the World's I.Q.', *New York Times* (4 December, 2008). <http://www.nytimes.com/2008/12/04/opinion/04kristof.html >
[35] Miller, Greg. 'The Seductive Allure of Behavioral Epigenetics', *Science* 329/5987 (2010), 24-27, http://www.sciencemag.org/content/329/5987/24.summary (accessed 08/03/2013).

the effects of a syphilis infection.[36] Studies have indicated that viewing the show affects the bioethical perspective of medical residents.[37]

When we extend our reflections on social processes to those shaping subjective perceptions and judgments, we enter a *mis-en-abyme* of meta-reflections, or as one of Judson's readers put it in the public comments section appearing with her article, we get dizzy.



Dwell for a moment on this (admittedly crude) diagram of social processes shaping the

[36] See House, Episode 4-13C, "No More Mr. Nice Guy." In this episode, the improbable 'niceness' of a patient is attributed to brain damage caused by syphilis. When House's blood also tests positive for the disease, his students ponder the ethics of treating him that might contribute to the dispositions and capacities on which his life-saving medical insights rely. In other episodes the same question arises for his addiction to pain killers, resulting from treatment of an embolism in his thigh muscle.

[37] 'The House Debate: Can a Jerk Doctor Teach Ethics? And What about the "Gattaca" Effect on Perceptions of Medical Cloning?', <http://scienceblogs.com/framing-science/2008/12/the_house_debate_can_a_jerk_do.php> (accessed 03/15/2012).

embodied perception of the coltan economy, some referenced in this paper. Even in this schematic form, the relationships in question challenge conceptual, purposive and sentimental legibility. Furthermore, the diagram you now contemplate is being composed by a set of intertwined activities, including the energy resources and technologies that generate the script on the page (or screen), the light in the room, and all your sensory and cognitive processes.

Now, what is the political value of this sort of dizziness? We can imagine what Jameson would say, if he could stop laughing. Yet several contemporary thinkers attuned to affective dimensions of politics have suggested that dizziness of this kind might comprise a salutary meta-affect, opening subjects to critical reflection on their sentimental responses to commercial and political messages. In her book *Ugly Feelings*, for example, Sianne Ngai describes affective disorientation as the definitive affect of critical inquiry. 'Despite its marginality to the philosophical canon of emotions, isn't this feeling of confusion *about* what one is feeling an affective state in its own right? And in fact a rather familiar feeling that often heralds the basic affect of "interest" underwriting all acts of intellectual inquiry?'[38] As Ngai point out, this meta-affective confusion can be evoked by systematic formal techniques, namely that of a fixed camera, which can function precisely to draw our attention to what is not visible, the challenge of allegorical perspective for Jameson. She explains, 'the dysphoric affect of affective disorientation – of being lost on one's own "cognitive map" of available affects – is concretely rendered through a spatial confusion made possible by a notoriously unstable narrative technique that film scholars have credited the genre of film noir with most fully instrumentalizing:

[38] Sianne Ngai, *Ugly Feelings* (Cambridge: Harvard University Press, 2005), 14.

subjective or first-person camera.'[39] The first-person camera leaves us uncertain of the position-slash-person through which we look, generating an anxiety usually relieved by the reverse shot but placed in suspense where the latter is delayed or absent. Similarly, being instructed in the political economy of our own affects may give us pause, reminding us we are all unreliable narrators of our own experience. Of course, affective disorientation can lead to anxiety and reactionary hostility of the sort Appadurai describes. It can also paralyze action altogether. As William Connolly puts it in his reading of another noir, Hitchcock's *Vertigo*, adding a little touch of dizziness can stimulate thinking, but a lot can 'freeze you into a zombie'.[40] In the case of Judson's article, one presumes the dizziness in question is commonly experienced at a comfortable remove from urgent demands for action, softened by a pleasant space of reception, etc.

In his book, *Affective Mapping*, Jonathan Flatley suggests that a reflexive mapping of affective experience could serve as a correlate to Jameson's 'cognitive' orientation. He finds such mappings promoted by texts that both induce and describe affects, allowing the reader to trace the historical basis of their sensuous experience. He writes, 'Such a representation is accomplished by way of a self-estrangement that allows one to see oneself in relation to one's affective environment in its historicity, in relation to the relevant social-political anchors or landmarks in that environment, and to see the others who inhabit this landscape with one.'[41] In his Freudian example, 'The effect is not unlike the moment in a therapy when the analyst says: "Hmm, well, perhaps this is about those early conflicts with your father."'[42] However, reflecting on origins of those affects

[39] Ibid.
[40] William Connolly, *Neuropolitics* (Minneapolis: University of Minnesota Press, 2002), 16.
[41] Jonathan Flatley, *Affective Mapping* (Cambridge: Harvard University Press, 2008), 80.

that (as in Flatley's example) associates the city of Detroit with a fear of crime, does not lead to a thorough reconstruction of the diverse historical forces that shape the post-industrial landscape along with those informing perceptions of danger.[43] Instead, it points us to 'landmarks' among those forces by which we navigate the totality of their historical determination in a partial, heuristic manner.[44] Contrasting such mapping with the cognitive mapping Jameson describes, he writes, 'The difference with the social map is that where the totality of Boston is quite representable, the "totality which is the ensemble of society's structures as a whole", conversely, is not.'[45]

As Lynch argued, to the contrary, a legible image of the city is not grounded in an encompassing representation. Rather, we encounter the totality of a city much as we do that of the global economy. In urban experience as Henri Lefebvre describes it, 'opacity and horizons, obstacles and perspectives implicate one another because they complicate one another, imbricate one another to the point of allowing the Unknown, the giant city, to be glimpsed or guessed at. With its diverse times: rhythms'.[46] Moreover, he argues, 'No camera, no image or series of images can show these rhythms. It requires equally attentive eyes and ears, a head and a memory and a heart.'[47] Thus, Lefebvre suggests that amidst our itineraries, or between them, reflection alerts us to the totality of forces we encounter in parts. The result is not a complete picture but a different sensibility. Or, more precisely, it is a series of overlapping pictures accompanied by a sense of their incompleteness.

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[43] Flatley, *Affective Mapping*, 78.
[44] Flatley, *Affective Mapping*, 80. At times, Flatley suggests that a more encompassing view will result, as when he compares the navigation of affective maps to a 'global positioning device that tells you where you are at this particular moment, giving you a satellite view of your life' (84).
[45] Flatley, Affective Mapping, 77.
[46] Henri Lefebvre, *Rhythmanalysis* (London: Continuum, 2004), 33.
[47] Lefebvre, *Rhythmanalysis*, 37.

Conclusion: Rhythms and Itineraries

Flatley and Lefebvre describe mappings that oscillate between guidance and estrangement, figures and reflection. Taken together, Judson's and Polgreen's articles – which appear in the same publication, at different times - might be said to engender a similar rhythm. First, they illustrate some of the complex economic networks in which we participate. Second, they stimulate a set of sentimental responses, including sympathy, but also aversion, etc. Third, they instruct us in the indirection of our own cognitive and sentimental responses, inflecting our perspective with a little dizziness. In 'Art as Experience,' Dewey attributed a rhythm of this kind to aesthetic experience as such. As he describes it, such experience begins with the disruption of equilibrium between organism and environment, that is, of a harmonious coordination of changing states and external conditions. It is (provisionally) completed when a new coordination is established by way of increasingly complex, encompassing co-ordinations, or 'representations.' 'Order is not imposed from without but is made out of the relations of harmonious interactions that energies bear to one another.' In other words, experience is also formed by the interaction of changing things, rather than from a transcendent region. Moreover, it 'develops', that is, 'It comes to include within its balanced movement a greater variety of changes.'[48]

Dewey's proposals for the aesthetic education of reflexive public sensibilities (attuning people to the relationships that define their shared social worlds) are commonly contrasted with Walter Lippmann's more skeptical view. Yet Lippmann also had hopes for reflexive orientations to embodied cognition. Keenly aware of what he called the 'bigotry' of science in favor of measurable quantities, he hoped comparative psychology

[48] Dewey, *Art As Experience*, 13.

might allow experts to investigate their own influences and motivations. Like Flatley, he gathered from Freud 'a technique for cutting under the surface of our thoughts', or at least those of others. 'We now ask of an economist, who his friends are, what his ambitions, his class bias.' Science, he proclaimed, can thus become 'its own critic' and 'control its own bias.'[49]

In some respects, the reflexive disposition Lippmann advocated for the scientist conforms with that Dewey sought for the public. 'The more we see, the more we think; while the more we think, the more we see in our immediate experiences, and the greater grows the detail and the more significant and articulateness of perception'.[50] Much hinges, however, on the difference between the enhancement of perception and the control of bias. Dewey did not propose that a democratic public learn to control its own bias, an ideal that would forfeit interests and desire to an objective standard he repudiated.[51] He therefore not only had more faith in publics, but also less faith in experts than Lippmann. Whereas Lippmann thought that public reflection on complexity of social processes might inculcate a deference to experts, Dewey hoped it might encourage an experimental attitude. By extending reflection to the processes shaping cognitive and sentimental capacities, new materialisms do not complete public knowing (an approach Lippmann dismissed as the 'homeopathic fallacy'), but rather create possibilities for different itineraries.

Bibliography

[49] Walter Lippmann, *Drift and Mastery* (New York: Henry Holt and Co., 1917), 274.
[50] Lippmann, *Drift and Mastery*, 295.
[51] Dewey, *Art As Experience*, 46.

Appadurai, Arjun, *Modernity at Large* (Minneapolis: University of Minnesota Press, 1996).

——*Fear of Small Number* (Minneapolis: University of Minnesota Press 2006).

Bennett, Jane, *Vibrant Matter* (Durham: Duke University Press, 2010).

Brophy, Kathleen. 'Bloody BlackBerrys: the true cost of today's electronics' <http://www.weliveoneworld.org/?p=266> accessed 4/15/2011.

Connolly, William, *Neuropolitics* (Minneapolis: University of Minnesota Press, 2002).

——*A World of Becoming* (Durham: Duke University Press Books, 2011).

Coole, and Samantha Frost, eds., *New Materialisms* (Durham: Duke University Press, 2010).

Damasio, Antonio, *Looking for Spinoza* (New York: Mariner Books, 2003).

Dewey, John, 'The Influence of Darwin on Philosophy', *The Influence of Darwin on Philosophy and Other Essay* (New York: Henry Holt and Company, 1910), page #s.

—— *The Public and its Problems*. (New York: H. Holt Press, 1927)

——*Art as Experience* (London: Penguin Books, 1934).

Edwards, Jonathan. 'The Materialism of Historical Materialism' in Diana Coole and Samantha Frost, eds., *New Materialisms* (Durham: Duke University Press, 2010), 281-297

Harvey, David, *Spaces of Hope* (Berkeley: University of California Press, 2000).

Flatley, Jonathan, *Affective Mapping* (Cambridge: Harvard University Press, 2008).

Jameson, Frederic, 'Cognitive Mapping', in Cary Nelson, and Lawrence Grossberg, eds., *Marxism and the Interpretation of Culture* (Urbana: University of Illinois Press, 1988), 347-360.

——*Postmodernism, or the Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991).

——*The Geopolitical Aesthetic* (Bloomington: Indiana University Press, 1992).

Judson, Olivia, 'Weighing the Vote', *New York Times* (21 October 2008).

Kristof, Nicholas D., 'Raising the World's I.Q.', *New York Times* (4 December 2008).

——'How Chemicals Change us', *New York Times* (5 March 2012) <http://www.nytimes.com/2012/05/03/opinion/kristof-how-chemicals-change-us.html?hp> accessed 11 March 2012

<http://www.nytimes.com/2008/12/04/opinion/04kristof.html?scp=1&sq=micronutrients%20salt&st=cse>.

Latour, Bruno, *Politics of Nature* (Cambridge: Harvard University Press, 2004).

Lefebvre, Henri, *Rhythmanalys* (London: Continuum, 2004).

Lehrer, Jonah, 'Cartesian Metaphors'. *The Frontal Cortex*. <http://scienceblogs.com/cortex/2010/02/cartesian_metaphors.php> accessed 20 February 2010.

Lippmann, Walter, *Drift and Mastery*, (New York: Henry Holt and Co., 1917).

——*Public Opinion* (1922), (New York: Free Press, 1997).

——*The Phantom Public* (1925), (New York: The MacMillan Company, 1930).

Lynch, Kevin, *Image of the City* (Cambridge: MIT Press, 1960).

Miller, Greg, 'The Seductive Allure of Behavioral Epigenetics', *Science* 329/ (2010), 24-27. <http://www.sciencemag.org/content/329/5987/24.summary>

Massumi, Brian, *Parables for the Virtual* (Durham: Duke University Press, 2002).

Ngai, Sianne, *Ugly Feelings*, (Cambridge: Harvard University Press, 2005).

Ong, Aihwa, *Neoliberalism as Exception*, (Durham: Duke University Press, 2006).

Pollan, Michael, *The Omnivore's Dilemma* (New York: Penguin, 2006).

Polgreen, Lydia, 'The Spoils, Congo's Riches, Looted by Renegade Troops', *New York Times* (15 November, 2008). <http://www.nytimes.com/2008/11/16/world/africa/16congo.html>

Pearlman, Wendy, 'Emotions and the Microfoundations of the Arab Uprisings', *Perspectives on Politics* 11/02 (2013), 387-409.

Protevi, John, *Political Affect* (Minneapolis: University of Minnesota Press, 2009).

Shapiro, Kam, 'The Myth of the Multitude', *The Empire's New Clothes* (New York: Routledge, 2003), 289-314.

Steinberg Saul. View of the World from 9th Avenue New Yorker (29 march 1976) http://archives.newyorker.com/?i=1976-03-29 (accessed 9/10/2014)

Vedantam, Shankar, *The Hidden Brain*: *How Our Unconscious Minds Elect Presidents, Control Markets, Wage Wars, and Save Our Lives* (New York: Spiegel & Grau, 2010).