Population thinking: 
Difference and development in the socially extended mind

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INTRODUCTION

Overview

I will begin by noting two of the many convergences between my approach and that of Shaun Gallagher in his paper for the Socially Extended Mind workshop (Gallagher 2011). First, his insistence on the enactive – or what we could call the “dynamic interactional” – character of mind, countering the somewhat static view of classical EM (Extended Mind); and second, the move to a distributed notion of judgment, countering the lingering individualism of classical EM.

Instead of following up on these, however, I would like to intensify some aspects of Gallagher’s perspective here, a perspective that has also been elaborated in great detail in a series of works on “social interactionism” and “participatory sense-making” by Hanne De Jaegher in collaboration with Ezequiel Di Paolo, Tom Froese, and Gallagher himself (De Jaegher, Di Paolo, and Gallagher 2010; De Jaegher and Froese 2009; De Jaegher and Di Paolo 2007).

Let’s consider this formulation by Gallagher: “the mind as an enactive and emotionally embedded engagement with the world through which we solve problems, control behavior, understand, judge, explain, and generally do certain kinds of things” (2011: 8; emphasis on “we” added).

There are five aspects to be intensified, aspects that I want to remind us are often picked up on by Gallagher and De Jaegher elsewhere: (1) synchronic variation; (2) diachronic development; (3) political categorization; (4) negative impacts; and (5) the “socially invaded mind.”

In more detail:
(1) **synchronic variation** = breaking up the “we” by population thinking – focusing on the variation or distribution of affective-cognitive traits in a population of subjects – can help the critical engagement with the socially extended mind, countering the tendency to think a generic “subjectivity” or “the” subject;

(2) **diachronic development** = tracing the development of the capacities by which understanding, judging, etc. occur. To keep with point 1’s emphasis on variation, we need to focus on the embodied affective-cognitive development of a population of subjects in a field of multiple, overlapping, and resonating or clashing “subjectification practices,” countering the tendency to focus on adult subjectivity;

(3) **political categorization** = it does no good to go from an unmarked generic subject or the “we” to the sheer dispersal of individuals (or even more radically, sub-individuals: the plethora of drives, tendencies, mechanisms, what have you, that make up of the underworld of our subjectivity). Rather, we have to thematize politically important categories such as race and gender lying between generic human subjectivity and idiosyncratic personality or sub-personality;

(4) **possible negative consequences** = yes, sometimes social extensions help some subjects “solve problems,” but we also need to be aware of the way politically charged subjectification practices can limit access to, or produce negative reactions to, some socially extended affective-cognitive institutions;

(5) **reversal of direction** = we need to be able to think the limit case of a “socially invaded” mind, a reversal of polarity of the usual inside-out vector used in thinking the extended mind in which the initiation of action comes from a subject reaching out for help with cognition to elements in the world. We’ll provide some speculations about the utility – and the limits – of this formulation in regard to the case of Jared Loughner, the accused shooter in the assassination attempt on a US Congresswoman, Representative Gabrielle Giffords, in Arizona.

**Convergences**

I’m completely in agreement with the way Gallagher criticizes the Clark / Chalmers canonical formulation of EM for its belief-desire psychology, and its reliance on the whole apparatus of propositional attitudes, representations, intentional states, and so on. Classical EM, he says, assumes a model of the mind that it should instead be challenging. For Gallagher, minds are – or perhaps better, emerge in and as – dynamic interactions between organisms and environments – they are composed of “enactive cognitive processes and activities, e.g., problem solving, interpreting, judging” (Gallagher 2011: 3).¹

Similarly, I like the way in which, in insisting on the dynamic problem-solving character of the mind, Gallagher uses the legal system as an example of a “mental institution” (3-7; see also Crisafi and Gallagher 2009; Gallagher and Crisafi 2009) to combat a lingering individualism in EM, whereby what’s paradigmatically at stake is just me and my notebook, rather than a collective or at least shared / “distributed” judgment process.²

I should also note that I’m entirely in sympathy with Gallagher’s objection to the functionalism of classical EM and his insistence that mind is “enactively generated in the
specific interactions of organism-environment (where environment is social as well as physical)” and that mind is “an enactive and emotionally embedded engagement with the world” (Gallagher 2011: 8; emphasis added).

## INTENSIFICATIONS

Although I’ll keep the “socially invaded mind” as a separate section, I’ll treat the other four aspects together.

Gallagher and De Jaegher note the lingering individualism of almost all cognitive science, referencing Boden 2006 who also notes it. However, we shouldn’t forget that EM has in fact recognized "distributed cognition" when Clark and Chalmers refer to Edwin Hutchins's celebrated example of the cognitive co-operation of a ship's crew (Hutchins 1995) as “research on the cognitive properties of collectives of agents” (Clark and Chalmers 1998). As we recall, for Hutchins, each sailor, embedded in a techno-social assemblage—some working with charts, others with boiler room gauges, etc.—works with his comrades so that a distributed intelligent guidance of the ship emerges from their coordinated but decentralized cooperation. While this synchronic emergence from a decentralized network is an important concept to retain, EM, even in its distributed cognition guise, has not examined the political context for the diachronic emergence of each crew member's affective cognition skill set (the ability to remain cool under pressure, while still getting pumped up in times of crisis, indeed, the simple ability to get along well with others, are just some of the affective traits necessary for successful distributed cognition).

Now EM thinkers strive for a model of mind that is biologically "plausible" (Clark 1997; 2003). Thus they have incorporated population thinking in the evolutionary register, a prime theme of Clark’s 2003 Natural-Born Cyborgs. However, they have not yet carried this over into the developmental register, into the political context of the development of affective cognition capacities in a population of subjects. To understand fully the complex interplay of "brain, body, and environment," we have to understand the diachronic and not just synchronic social environment. That means we have to study populations of subjects and the way access to skills training and cultural resources is differentially regulated along political lines. ³

There’s a bio-sociality that we will have to consider here. Developmental Systems Theory (DST) proponents remind us that we have to think about the social environment in which affective-cognitive capacities develop. They are not genetically determined; genes are a developmental resource, but there are other resources, intra-organismic and extra-somatic, (e.g., recurrent social practices), that need to be taken into account. And once we’re in the social realm with regard to development, the cat is out of the bag. There can no longer be an abstract subject, but we must deal with populations of subjects, with varying distributions of capacities. And the practices that produce these capacities can be analyzed with political categories.
Lacking a population perspective on the development of affective cognition capacities, EM impoverishes its notion of "cultural scaffolding" by relegating the cultural to a storehouse of heuristic aids for an abstract problem-solver who just happens to be endowed with certain affective cognition capacities which enable it to interact successfully with the people and cultural resources to which it just happens to have access. Positing an abstract or generic subject neglects the way in which culture is the very process of the construction of bio-social subjects, so that access to certain cultural resources and to the training necessary to acquire certain forms of affective cognitive capacities—once again, not simply technical training for cognitive capacities in a restricted sense, but also the training necessary for acquiring positive and empowering emotional patterns, thresholds, and triggers—is distributed along lines analyzable by political categories.

As an example of the sort of abstract, apolitical subject posited by EM, let me cite a passage from Clark’s 2003 *Natural-Born Cyborgs*. A fascinating work brimming with insights, Clark's book thinks together DST biology, interactive technology, and cognitive heuristics embedded in cultural scaffolding, but still doesn't think the politics of subject production, positing instead a homogeneous subject, "us humans." Clark writes:

> A more realistic vision depicts us humans as, by nature, products of a complex and heterogeneous developmental matrix in which culture, technology and biology are pretty well inextricably intermingled. It is a mistake to posit a biologically fixed 'human nature' with a simple wrap-around of tools and culture; the tools and culture are indeed as much determiners of our nature as products of it. Ours are (by nature) unusually plastic and opportunistic brains whose biological proper functioning has always involved the recruitment and exploitation of nonbiological props and scaffolds (Clark 2003: 86).

This is all true, as far as it goes. But it needs to go further to examine the politics that regulate access to those "nonbiological props and scaffolds" and thereby regulates subject production. And not every subjectification practice is empowering. That is to say, some cultural practices harm individuals, instilling affective / cognitive traits that help keep them in subservient positions via an internalization of negative self-image and so on. The recent analyses of “stereotype threat” in Cordelia Fine’s *Delusions of Gender* (Fine 2010) could also be brought to bear here.

Now it could be said that I am being too harsh here, and should merely propose the population study of the production of subjectivities as a next step, rather than as the making up of a gap left in the study of cognition. After all, one could object, you cannot really blame people interested in cognitive science for looking for the abstract principles of cognition and leaving the empirical study of actually existing subjectivities to psychologists. Here we see a sort of replay of the critique the embodied-embedded mind school made of functionalists. For functionalists, the abstract principles of cognition were the important thing, and neurology need not be consulted, as it provided merely the "implementation details" of mind, the "hardware" to which cognitive "software" was indifferent.
The EM people are functionalists to the extent that they say that in some cases our cognitive software runs on a set of elements that cross the somatic boundary or “skinbag.” The enactivists, however, insisted that biology was relevant to the study of mind, so that whatever cognitive software was proposed could not be indifferent to its "wetware" instantiation. Thus as we noted above, Gallagher has shown the EM holds to a functionalism to which he objects, insisting that mind is “enactively generated in the specific interactions of organism-environment (where environment is social as well as physical” (Gallagher 2011: 8).

I think we can take Gallagher’s insistence on examining “specific interactions” in temporal terms. EM people look to evolutionary time scales (evolution of brain plasticity) and to behavioral time scales (the individual cognitive processes of me and my notebook), but overlook the developmental time scale. In other words, it’s not enough to say that during evolution human brains became plastic enough so that today they can take part in EM cognition episodes on the behavioral time scale. We also have to examine the kinds of social practice we see in the development in a population of subjects of a distribution of capacities for EM cognition episodes.

Here the question is the level of concretion required of philosophers. While we can leave individual personality idiosyncrasies to therapists, can philosophers really leave aside, for example, the gender differences produced by contemporary subjectification practices? If all concrete subjectivities are gendered—or at least have developed via gendering practices and have to navigate a world where gender matters—can we be satisfied with abstract principles of cognition that ignore gender effects? Is it enough to criticize computationalism and connectionism in the name of an embodied subject, and not realize that bodies are gendered, and that such gendering changes the sphere of bodily "competence" within which objects appear, as detailed in Iris Marion Young's famous critique of Merleau-Ponty, "Throwing like a Girl" (Young 2005)?

To recall the outlines of Young’s critique, for Merleau-Ponty, it is the practical abilities of the embodied subject that allow objects to appear as correlates of that subject's possible actions. But those capacities have to develop, and gendered subjectification practices will affect how those capacities do – or do not – develop, and how those capacities are distributed in a population of subjects. Thus feminized and masculinized embodied subjects can have different "spheres of competence": a flat tire can appear as a mildly irritating challenge or as an insurmountable problem; a subway entrance as the enticing gateway to the city or as an anxiety-producing danger.

But this foregoing treatment is still too simple. It does no good to replace a single generic human subject with two abstractions, "the" feminized and "the" masculinized subject. We need to think in terms of a range of gendering practices that are distributed in a society at various sites (family, school, church, media, playground, sports field …) with variable goals, intensities, and efficacies. These multiply-situated gendering practices resonate or clash with each other and with myriad other socializing practices (racializing, "class-ing," "religionizing," "nationalizing," "neighborhoodizing" ["that's the way we roll"] …).

Adopting a Deleuzean term, we have to think a complex “virtual” field of these differential practices; in dynamic systems terms, we could think a complex phase space
for the production of bio-social subjects or in my terminology “bodies politic,” with shifting attractor layouts as the subjectification practices clash or resonate with each other.

But even this is still too simple, as these gendering practices also enter into complex feedback relations with the singular body makeup of the people involved (very interesting work is summarized in Wexler 2006 on maternal rat licking behavior and demethylation of genes regulating oxytocin [92-93]); these corporeal constitutions are themselves regionalized slices of the virtual, modeled with a phase space of what that body can do, its own habitual yet variable patterns of attractor layouts. These complex dynamics cannot be analyzed into a relation of independent and dependent variables, no matter how powerful the regression analysis one attempts in order to isolate their effects. There is no one magic element that enables us to find the key to gender, to race, or to other politically useful categories.

**A CASE STUDY OF THE “SOCIALLY INVADED MIND”**

United States Representative Gabrielle Giffords was shot in an apparent assassination attempt on Saturday 8 January 2011 in Tucson, Arizona. She survived, though six others were killed.

After my initial horror at the case – a feeling that, my God, fascism is really here now, they are starting to assassinate their enemies – my philosophical interest was piqued by a short post at one of the blogs I frequent (Lawyers, Guns, and Money). I responded there and then made some posts on my own blog (New APPS) and as a guest on another (The Contemporary Condition) that elicited other responses. I was thus caught up in a give-and-take that began with issues of causality and eventually led me to the notion of the “socially invaded mind,” which I initially liked quite a bit, but have subsequently come to question.

Although I won’t spend too much time on it, there’s a meta-level discussion to be had here in terms of the socially embedded mind: the process by which give-and-take on blogs helped my thoughts crystallize. They’re my thoughts, but I wouldn’t have had them without this discussion. Or in other terms, there was social extension – me reaching out and making others think – and social invasion – thoughts coming to me from others. I’ll retain some of that give-and-take here in case we want to talk about this meta-level in discussion, though I’ve cleaned up some of the formulations and have inserted references.

Now I could have presented this all in my own voice, as if the dialectic of proposal and objection was mastered by me all along, as if there were no extension and invasion, just a self-contained dialogue, but that is a kind of trick that hides the inter-subjective process behind a seemingly self-contained product.
Causation

I noticed a binary being produced: either we can show a direct ideological link between right-wing rhetoric and the (journals / video) expressions of the alleged shooter, OR the case is utterly mysterious and “senseless.” For example, an early post at LGM put it like this:

John Sides at the Monkey Cage weights in with some social science on the relationship between militant metaphors in political speech and individuals’ willingness to engage in actual political violence against government officials. The findings he cites: an experimental study has shown there seems to be no effect on the overall population of exposure to “fighting words” in political ads, but there is an effect on people with aggressive tendencies. Moreover:

This conditional relationship — between seeing violent ads and a predisposition to aggression — appears stronger among those under the age of 40 (vs. those older), men (vs. women), and Democrats (vs. Republicans).

But his real point is that we should be cautious of inferring from this or any wider probabilistic data causation regarding a specific event:

To prove that vitriol causes any particular act of violence, we cannot speak about “atmosphere.” We need to be able to demonstrate that vitriolic messages were actually heard and believed by the perpetrators of violence. That is a far harder thing to do. But absent such evidence, we are merely waving our hands at causation and preferring instead to treat the mere existence of vitriol and the mere existence of violence as implying some relationship between the two.

My response:

So that’s it, a binary between “hand waving” and billiard ball causality? Somebody’s got a terribly impoverished view of “causation” here. I’d say it was an example of “physics envy” but contemporary physicists aren’t that crude.

Let me give an analogy to a biological principle, Schmalhausen’s Law (Lewontin and Levins 2007), to show that we can make sense of the interchange of environment and population w/o meeting an impossible billiard ball causality standard. Schmalhausen showed that in species-typical environments, developmental robustness hides a lot of genetic variation. In other words, in normal environments you can get roughly the same results in a population with genetic variance. But put that population under environmental stress and the previously hidden genetic variation shows up in a greater range of phenotypes. This is not “hand-waving” but neither does it adhere to an impossible physics-envy billiard ball causality standard.

The analogy here of course, is that today’s political rhetoric environment is so extreme that we can plausibly suppose that it will expose the psychological variation in the population that would otherwise remain unexpressed.
That is not hand-waving, and it shouldn’t be dismissed because it doesn’t match some ridiculous standard of a direct cause-and-effect of one statement to one act.

Some comments helped me clarify the initial point, which isn’t dynamic enough. The psychological variation at stake concerns thresholds for violent action, which are very high in most people (I have a chapter on the Columbine High School massacre in Protevi 2009 where I discuss these issues in some detail). Only direct immediate threats provoke violence in the overwhelming majority of people: we are an extremely peaceful species when raised in moderately secure urban environments – AND in very many pre-modern environments: there’s a huge anthropological debate about war and violence in non-urban settings, with a very strong case to be made for widespread peaceful co-existence (Fry 2007).

Here’s the comment, from “Scalinger”:

It's an interesting and (when you get down to cases) a sometimes difficult question what one should ask for in the way of evidence to exhibit a "quasi-causal” relation (sometimes referred to by the unhelpful word “influence”) between an agent’s acts (or intentions as inferred from acts) and their cultural environment. If Locke sometimes sounds Cartesian, we don’t need to find in Descartes the precise propositions in Locke we regard as Cartesian; we give Locke credit for being able to work out consequences, draw parallels, introduce new instances, and do all the other things we ourselves normally do while reading texts (‘influence’ is not a helpful word just because it turns an active into a passive process). Nevertheless *something*, some text or intermediary, must link Locke to Cartesian philosophers; otherwise we have a mere parallel, a convergence, a common source.

My response: Yes, I completely agree as to necessity of a link, but not as to the level on which the link was made. The link seems to be immersion in the anti-government (and violence as solution to government problem) milieu of Tucson. But I think it’s a mistake to look for ideological motivation, as in a match between message intake and output, i.e., looking for a repeated key phrase or even key idea, as would be evidence for influence in the history of philosophy example. Loughner didn't have a coherent ideology. Nonetheless, he, like many others in the last two year, chose a Democratic politician targeted by right wing rhetoric, and intensely so targeted by Giffords's opponent in the last election.

So I think we have to look not to a smoking gun ideological match but to the way the target provided a promise to at least make a mark, to show he was serious, etc. Any big target would do (why not the Republican Governor, Jan Brewer, who became nationally notorious in the “show us your papers” law scandal?) but this one had more energy attached to her. So the ideology doesn't belong to Loughner, but he picked up on the energy that a particular ideology aimed at Giffords.

So it's not the ideology that counted to Loughner, but the social energy that became attached to Giffords. And that energy was not generalized "anti-government" sentiment, but specifically targeted by those who do have an ideological grudge at Democrats.
Why is billiard-ball causality so problematic in this case?

There are two issues here, concerning philosophical psychology and political philosophy.

1) The philosophical psychology issue

A critical question put it like this:

In fairness to Sides, and in keeping with your example: an extreme environment can “expose” variation only if members of the population are actually affected by it (by its extremes, moreover). So it's not out of place to ask whether the assassin ever actually saw or heard violent messages. I don't see any physics envy in that.

I replied:

Yes, that's fair to ask. Note Sides’s key claim: “We need to be able to demonstrate that vitriolic messages were actually heard and believed by the perpetrators of violence.”

The exposure part is easy, given what we know even now. The shooter was described as "obsessed" with Giffords, he attended one of her rallies in 2007, she won her election by 3500 votes against a candidate whose campaign had all sorts of violent images. It's a vanishingly small probability that he wasn't exposed at some point to these sorts of things.

Now as to Sides' second requirement, "belief," we're a lot closer to unilinear causality than I'm comfortable with. We have to prove that he had a representation with the content "Giffords must be eliminated" and that we can trace that representation to an event at time T1, the exposure to a particular message or set of messages? So that this representation with that content (plus some other representations) are then the necessary and sufficient conditions for his action? That's not physics envy?

OK, maybe he has a more sophisticated psychology than that, though it's hard to tell from his post. And it's certainly no good on my part to just chant "nonlinear dynamics" as a mantra so that anything goes in linking environment and shooter.

But there has to be something along the lines of developed dispositions and thresholds that's better for thinking this case than the sort of linear belief-desire-action scheme he seems to be proposing (what Susan Hurley memorably mocked as part of the "classical sandwich" view: sensory input -- computation on representations -- motor output [Hurley 1998]).

In any case, this is NOT an isolated incident. There has been a sharp spike in right-wing violence in the US since Obama’s election. What view of causality can we have that's able to handle this pattern? (If it is a pattern, of course: we'd have to review the methodology of the compilers of various lists, etc.) That's what I'm after by complaining about Sides' binary of "proof" vs "hand-waving."
2) The political philosophy issue

The billiard-ball-causality view has a lot in common with the isolated libertarian subject. Libertarians, I think, have to deny corporate advertising effects on the formation of choices, since that’s their bedrock, the individual and a consistent preference set. So they will deny any cultural influences and the porous subject that goes along with that. So there’s the isolated hard-shell individual (the billiard ball), and the only thing that will influence it, short of literally banging into it with a real billiard ball, is direct gun-to-the-head government coercion. Hence their refrain in pushing the “taxation is theft” line: "men with guns will come to your house and make you pay taxes!" This impoverished view of causality seems to be what’s behind many demands for “proof” in the Giffords case.

The key is the unwillingness to examine the production of desire. The bedrock is the static, time-slice, snap shot, serially self-contained subject and its desires, and how the desires came about is not to be examined. It's always free choice for that subject, and the choice is sane, insane, or criminal.

1. With sane people it's infringement on their liberty to ask how their desires came about or better, it's insulting to their dignity to see them as having been manipulated (libertarians don't acknowledge “influence” and think the only other category is "brainwashing," which is how they explain their great bogey, “collectivism.” Hence their suspicion and rage at critical social theory.
2. With the insane you have to show the exact nature of the manipulation (this is the psychological analogue to billiard ball causality: message intake -- belief -- action).
3. And with criminals, any attempt to examine the production of their desire is "blaming society."

"Blame" is the key concept here: "liberals are trying to play the blame game" where blame can only be appropriate in explicit manipulation scenarios. There would be plenty that Nietzsche could say here about the genealogy of the responsible subject, and about ressentiment. And as if on cue, we have Sarah Palin’s reply to criticism of her rhetoric after the Giffords assassination attempt, which begins with the atomic subject – "crimes begin and end with the criminals who commit them” – and ends with ressentiment: the already and rightfully notorious “blood libel” line. The exact quote is: "But, especially within hours of a tragedy unfolding, journalists and pundits should not manufacture a blood libel that serves only to incite the very hatred and violence they purport to condemn. That is reprehensible."

What are we to do?

Another commenter writes:

An analogy: it is standardly agreed that climate change is not *the* cause of any particular storm. Instead, it is part of a hugely complex equation - one that raises
the probability (frequency) of "violent" weather. It may be argued that the "heated atmosphere" of political discourse has an analogous relation to particular acts of political violence. But it is still true nevertheless that climate change is not the cause of any particular storm. Ridiculing "billiard ball causality" doesn't change this. Of course, this doesn't mean that climate change is a non-issue, or that we shouldn't take steps to try to correct it. It just means that greenhouse gas emissions are not "morally responsible" for the blizzard in New York City.

Arguing from phenotypic plasticity, Protevi holds that the rhetorical environment can bring out underlying genetic differences & predispositions to violence that otherwise might not be expressed (at least not in this way, but that is a further question)…. The difficulty lies in knowing what to make of it, since it applies to all expressions and actions of any kind. Should discourse in general be limited to those expressions that cannot possibly find a violently predisposed audience? What principle will you use to decide between cultural expressions that are dangerous in this way from those that are not? For example, will you agree with the state of Arizona that teaching Mexican-American studies in high school must be banned because there is some possibility that a revolutionary message will be received and acted on?

The point to take from Protevi's discussion is not that there is a sophisticated theory of causality according to which Palin et al are the cause of this event after all. On the contrary, what the appeal to underlying-but-masked genetic predispositions shows is exactly what Protevi seems to deny: that the explanation of the behavior lies (primarily) in the genetic differences, not in the media rhetoric. Consider that we are all subject to the violent rhetoric. If the rhetoric explains the violent behavior, then you have a new explanatory burden - why don't we all react violently? What makes the difference between this violent individual and the rest of the population?

MY REPLY: yes, I completely agree. The poisonous rhetoric here is analogous to global warming. It's a factor in a complex system. What I'm objecting to is the exclusive binary by which, unless one can show a strict linear causality then one can say nothing. I'd be happy if people would say there are sometimes linear causation systems (with some ceteris paribus conditions) but they are a minority even in physics; they general case is complex nonlinearity. But we have then to expand our notions of causality rather than restrict them to linear causality vs. mere correlationist "hand waving."

Now with regard to the biology analogy: I don't think the unexpressed genetic variation gets all the credit / blame here. In brief, it's the interchange between the environment and the genetic variation that’s responsible, over development, for psychological variation with regard to violence thresholds. That’s a long way from just “genetic variation,” and besides, there’s a way the environment constructs the expression which, ex post facto, reveals what had been unexpressed. That’s paradoxical on a linear model, but I argue that's what we have to say in Protevi 2010.
Now I’m not calling, necessarily, for restrictions on political discourse and images. But I am saying we need to think about it, as Susan Hurley did when we called for thinking about the legal status of first-person shooter games (Hurley 2006). So finally I’d say there is no sophisticated causality in which Palin is THE cause, because that's not a sophisticated causality. She and others are arguable A causal contributing factor.

**The socially invaded mind**

Continuing to bang away at this critique of the binary between having to show a direct link between specific pieces of rhetoric and Loughner's act versus having to content ourselves with general correlations, I thought I could adapt Susan Bordo’s phrase, “psychopathology as crystallization of culture,” which she used to resist medicalization of anorexia (Bordo 1986; 1993). We would never be able to identify one image and the onset of anorexia in a particular anorectic, but I wouldn’t want to say there was no connection at all between cultural images of desirable thinness (plus those of thinness as sign of willpower, etc.) and that particular anorectic.

So the idea is that Loughner was not outside culture in being insane. On the contrary, he was too close to it; he had no filters, or not strong enough filters. He didn’t have a socially extended mind, he had a socially invaded mind; the outside just came pouring in.

But having laid out this model, my thoughts on Bordo were considerably sharpened by this Facebook comment by Hasana Sharp (reprinted with permission):

> My worry about the Bordo-model is that it could imply that the problem with [people as] social mirrors is that they aren't Cartesian enough -- that the solution is better filters, better abilities to affirm or deny the validity of our sensuous representations. It doesn't have to imply that: it could mean we need better buffers. His social constellation did not provide any alternatives and exacerbated these cultural tendencies, whereas we are inserted in other constellations that make tea party rhetoric sound either (a) like rhetoric/ posturing/ playing a game and/ or (b) insane…. We need to resist the Cartesian conclusion that we need individually cultivated critical faculties that are permanently set on skepticism, or else we are profoundly vulnerable to the deceptions of opinion and sensation (=culture). I don't think Bordo is wrong, only that there is still some Descartes lurking there, despite her magisterial critique of him as a pathological symptom.

So I thought I have to stress not just Loughner’s low filters that enabled him to be “socially invaded,” but also Tucson as the invading element. The object of analysis is “Loughner-as-he-develops-in-Tucson.” But even that might not be enough: as Sharp argues, the “socially invaded mind” idea is still too individualistic. It’s not just that he had a socially invaded mind, but that the society that invaded him, Tucson, provided him no filters; it was all "guns are the solution to government" all the time. Having no filters in Ann Arbor, Michigan might keep have kept him in a basement making YouTube videos, but having no filters in Tucson put him in that supermarket parking lot.
But then, having questioned the reversal of polarities and recognized that we’re all socially extended AND socially invaded, we have to look again at the “we” from our population variation perspective, so that when it’s a sick culture invading a population, it’s still only the case that only a few will crack under the stress. But with this population perspective, especially when it comes to embodied violence thresholds, is “mind” the right term, rather than “bio-social subject”? How much dynamically affective enaction can we build into our models before “mind” becomes an untenable term for what we’re after? It’s partially for that reason that I tend toward the formulation of “body politic” in *Political Affect*. 
LIST OF WORKS CITED

NOTES

1 Although Gallagher doesn’t put it like this, we could say that he sees in classical EM a view of the mind as a series of static states that successively measure the adequation between internal beliefs and perceived states-of-affairs, then calculate the difference.

2 As with note 1 above, there’s room for further discussion. There’s an ongoing “transversal” emergence here. Synchronic emergence is part/whole emergence: at any one time, our judgments are “enabled and shaped” (Gallagher 2011: 6) by the systems we find ourselves in: the legal system in Gallagher’s example. There’s also diachronic emergence as the system grows over time, as novelties emerge. And there’s transverse emergence as what links the two; in Gallagher’s words, “a dynamic process involved in … dialectical, transformative relations with the environment” (6). The environment here being the legal system, and the transformations being the establishment of a new judgment that will serve as a precedent for a series of “normal judgments.” “New judgment” here is a “singularity” in Deleuze’s terms, as explicated in Lefebvre 2008.

3 Pierre Bourdieu’s notion of *habitus* would be an alternate vocabulary to that of “bio-social subjects” or what I call in Protevi 2009 “bodies politic.” See also Schusterman 2008 for recent work on "body consciousness" that refers to Bourdieu.