

Embodied Knowing, Judgment, and the Limits of Neurobiology

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My response to John Hibbing raises questions about the nature of judgment implied in the biology and politics agenda that he would have us adopt. Although rightly critical of overly rationalist and cognitivist models, the neurobiological turn casts action and judgment as the mere effects of already primed dispositions, for which the giving of reasons is little more than window-dressing on what was going to happen in any case. Furthermore, the reductively biological picture of human beings that emerges in Hibbing's account is hard to square with democratic conceptions of politics that emphasize the capacity for freedom and association with others. Finally, I worry that Hibbing's unapologetic embrace of scientism remains entangled in the fraught history of deterministic explanatory models and American social science.

Although John R. Hibbing's "Ten Misconceptions Concerning Neurobiology and Politics" addresses issues other than genetic determinism, determinism is the primary worry that animates critics of the neurobiology and politics movement that he would defend. "In actuality, biologically-based research is not a synonym for genetics-based research," declares Hibbing. I agree that neurobiology is not reducible to genetics and that genes, when taken in spectacular isolation from environmental contexts, do not amount to anything. But that is a position within neurobiology that must be argued for and defended against the historically more entrenched view that genes are the "static, concrete building blocks" or "elemental particles" that limit in advance the influence that the "environment" can have on human cognitive development.¹ The problem of determinism amounts to more than what Hibbing calls "a misconception regarding the nature of genetics" on the part of "non-geneticists, including reporters and many practicing political scientists" (p. 477). If the worry about determinism were based on sheer scientific ignorance, then why would renowned developmental and evolutionary biologists such as Richard Lewontin, Evan Balaban, Anne Fausto-Sterling, and Eve-

lyn Fox Keller, to name but a handful of "insider" critics, express it at all?²

But express it they do—and in a wide-ranging array of books and essays, all of which attempt to move biologists away from this static view of genes and towards an understanding of genes as dynamic and responsive to experience-dependent components and to random events. I take it that this is the relationship between genes and environment that Hibbing wants to defend. Had he been less cavalier in his dismissal of the problem of determinism that continues to influence neurobiological explanations of cognitive development and that, historically speaking, has had a pernicious influence on the social sciences,³ Hibbing might have better made the case for why we should attend to biology at all. To claim that those of us who continue to "deny the existence of any behaviorally-relevant biological difference are fast becoming this era's equivalent of the flat earth society" (p. 482) is but an expression of derision towards readers like myself who are, on this point in his view, infuriatingly dense.

So let us take Hibbing at his word and leave the specter of determinism behind (for the moment at least). Why should a political scientist attend to biology? "Perhaps the primary reason for incorporating biological measures into research on politics is that many of the forces shaping orientations, political and otherwise, do not reach the level of conscious awareness," answers Hibbing. "Survey self-reports," on which many social scientists base their studies, take for granted the authenticity and reliability of people's self-descriptions of their reasoning and reactions. This method, he comments, misses a very basic fact—call it the *raison d'être* of the biology and politics agenda—namely, "that people simply are not aware of a significant portion of their general emotional states or of their full

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responses to stimuli” (p. 479). We might admit our vulnerability to manipulation when buying new toothpaste, but “when higher-order decisions such as morality and politics are involved,” we humans, hubristic creatures that we are, hold fast to the idea that we are guided by “conscious, rational reflection” (p. 479).

As Hibbing sees it, the scientific evidence indicates that moral judgments are made otherwise:

People sitting in a messy, malodorous room tend to make harsher moral judgments than those who are in neutral rooms, and disgusting ambient odors increase expressed dislike of gays. Sitting on a hard, uncomfortable chair leads people to be less flexible in their opinions than if they are seated on a soft, comfortable chair. People reminded of physical cleansing, perhaps by being placed near a hand sanitizer, are more likely to render harsher moral judgments than those who were not given such a reminder (p. 479).

The same applies to political judgments, where we find “that political stimuli often produce extremely quick emotional reactions that then affect more deliberate cognitive processes such as memory recall, attention, and information processing. In other words, rapid, pre-conscious responses color the manner in which people reflect and ultimately act on political matters” (p. 480). So unknowingly receptive are people to such stimuli that outcomes can presumably be manufactured just by creating the right conditions (e.g., if a church is the polling place, the ballot results will favor more conservative candidates). Indeed, the possibilities for the manipulation of preconscious human affect are so strong and the bypassing of what we normally consider to be the rational basis of human judgment so certain, declares Hibbing, that “in certain situations it is possible to know people’s voting behavior before they do” (p. 480).

To protest such claims as smacking of the worst kind of reductionism whose conception of human judgment evacuates the very capacity for freedom is for Hibbing merely further evidence of how deeply entangled humans are in a fantasy of themselves as rational subjects and masters of the universe. To hold fast to the “belief that human life is so intricate, wonderful, emergent, and rich that efforts to break it down into biological components are hopeless and trivialize the human condition,” he writes, reflects a refusal to “accept that who we are is contained in a couple of pounds of carbon-based neurons, support cells, and organs resting on top of our necks, and that free-will, self-awareness, consciousness, and metaphysics are biological at root.” With eyes wide open to “gritty biological realities,” the biology and politics agenda can “inject much needed humility into the self-perceptions of homo sapiens” (p. 479).

Humility, then, comes through an awareness of ourselves as biological beings, subject to “sub-threshold forces” which drive our judgments but of which we can hardly be conscious (p. 485). Leaving aside the grandiosity of the

biology and politics claim to tame human hubris by *its* humble method—a performative contradiction if there ever was one—what is definitive of Hibbing’s essay is his wholehearted embrace of a certain kind of reductionism, namely the kind afforded by the scientific method itself. Those sub-threshold forces, it is assumed, will yield their mysterious workings to the “scientific process” (p. 478), which probes beyond mere appearances and seeks ever more “distal explanations” (p. 478) for events. The critical charge of reductionism made by members of the flat earth society like myself is answered with the counter-charge of enmity towards science (p. 478). And so we find ourselves in the familiar recrimination game of scientism, where the inductive methods of the natural sciences are heralded as the only reliable source of factual knowledge and anyone who says otherwise doesn’t know what she is talking about (i.e., she has no knowledge).

We should pause and ask what we are doing when we look to neurobiology to answer fundamental political questions—what Hibbing calls the “bedrock dilemmas of politics” (p. 480). A classic feature of the scientism Hibbing exhibits is the assumption that the theories and methods of one scientific discipline can be applied to those of another discipline, as if the frame of reference within which any discipline has its life were irrelevant to what constitutes it as a discipline. The point is not to defend the borders of political science, but to insist that the biology and politics agenda is not just a method; it is a method that puts forward a certain view of human beings (who we are, recall, is “contained in a couple of pounds of carbon-based neurons, support cells, and organs resting on top of our necks”). The question is whether this view can be accommodated by political science without destroying the subject matter of political science. If political behavior is just a reflex of biological sub-threshold processes, why study politics as a distinctive practice at all? Is not politics merely one form that such processes can take?

Even more worrisome, perhaps, is how Hibbing’s argument maps onto a larger trend in critical social and political theory, especially certain strands of posthumanism and the turn toward an ontology of affect and neuroscience, that has arisen in the last decade or so within the humanities generally and, more specifically, in political theory.⁴ The parallel is worrisome because nothing could be further from Hibbing’s unapologetic scientism than the work of a political theorist such as William Connolly, who probes the implications of affect and neuroscience for understanding power and the tenacity of unjust social forms. In the work of Brian Masumi and Antonio Damasio, for example, both of whom are crucial figures for Connolly, there is a gap between the subject’s affect and its cognition or appraisal of the affective situation, such that cognition or thinking arrives too late for reasons, intentions, beliefs, and meanings to exert any influence on action.⁵ This is what makes affect so potent politically. It

is in that small space of time that the media, corporations, government officials, and other malicious figures experiment with background conditions of bare life.⁶

The problem with the turn to neurobiology is not the principled critique of excessively cognitivist models of action and judgment. The problem, as Clive Barnett clarifies, is the elision “of embodied knowing that involves the capacity to take part in [‘language] games of giving and asking for reasons’.”⁷ The neurobiological turn in recent political thought tends to cast action and judgment as the mere effects of already-primed dispositions, for which the giving of reasons is little more than window-dressing on what was going to happen in any case. One can see this in Hibbing’s essay in terms of the survey self-reports that merely distract the investigator’s attention from what has really occurred at “sub-threshold level.” Accordingly, the reasons I may give for the harsh moral judgment rendered while sitting in a malodorous room can be little more than justifications for a decision whose preconscious origin lies elsewhere.

We need to think about the stakes for democratic politics in the idea that much of perception and judgment takes place prior to consciousness. It is not as if no discourse prior to neuroscience ever asserted such a thing—psychoanalysis comes to mind—but the manner in which this idea of what is sub-threshold has radically changed. That is partly because the idea of something working behind our backs, as it were, structuring or even determining our judgments before we so much as know that we are making them, was not previously conceptualized in such radically nonconceptual terms.⁸ Freud, for example, may well have thought that he was doing science, but his ability to provide “distal explanations” which “push away from the event of interest” (e.g., the hysterical symptom) to use Hibbing’s formulation of the scientific task, was facilitated by a “figure of the newly thinkable” (e.g., the unconscious), to borrow Cornelius Castoriadis phrase.

The question for political scientists is how to refigure the place of the body in political life and in this way contest the excessively cognitivist models that have indeed tended to dominate the discipline. This project of an imaginative re-figuration, as Samantha Frost argues, is radically different from the kind of “epistemological re-grounding” that drives Hibbing. Committed as he is to establishing new criteria of validity for political science, Hibbing cannot help us in this otherwise valuable project.⁹

Finally, we need to think about the *way* in which biology is invoked to make sense of political life. Today biologists—especially geneticists—are proposing answers to questions that have long been asked by philosophy or faith or the social sciences. If biology now has such a hold on us, if science as biology has come to dominate science as physics once did, as Richard Lewontin has argued, that is because the fundamental question of scientific investigation is not what constitutes matter but what it is to be

human.¹⁰ The problem with seeking answers in biology arises when we fail to distinguish the genetic or biological state of an organism with its total physiological or psychological nature as a human being. The non-cognitive sources of politics raise a series of philosophical and political problems about human beings as judging subjects that cannot be settled by reference to better or worse accounts of the human brain.

Notes

- 1 Jordan-Young 2010, 271; Keller 2000, 18.
- 2 Jordan-Young 2010; Keller 2000; Keller 2010; Lewontin 2000; Lewontin 2001; Fausto-Sterling 2012; Balaban 2001.
- 3 For an excellent critique of the misuses of science by social science, see Gould 1981.
- 4 Examples of recent work in political theory that turn to neuroscience or affect theory include Connolly 2002; Bennett 2010; Panagia, 2009; Thiele 2006; Nedelsky 2011; Protevi 2009. For an excellent critique of the turn to cognitive neuroscience and affect in political theory, see John G. Gunnell 2012 and Gunnell 2007. For a critique of affect theory, see Leys 2011.
- 5 Masumi 2002; Damasio 2005.
- 6 See Connolly 2005. The problem in my view is not that we consider affect’s availability for manipulation when accounting for the tenacity of oppressive social and political forms; it is rather that the theory of affects as radically outside meaning and signification and free of their triggering source leave us with no way to link an affect to an object and, consequently, no way to subject such manipulation to critical judgment. Affect is presented as a distinct layer of experience that is both prior to and beneath intentional consciousness; it gets figured as a stratum of practical attunement that is autonomous of propositional intentionality. It is treated as a level of experience that is already there, *independently* of language and symbolization.
- 7 Barnett 2008, 187.
- 8 Affect is not a synonym for feeling, emotion, or sentiment, expressions of which are semiotically mediated and at once public and personal. As Eric Shouse explains, “affect is not a personal feeling. Feelings are personal and biographical, emotions are social, . . . and affects are pre-personal. . . . An affect is a non-conscious experience of intensity; it is a moment of unformed and unstructured potential . . . Affect cannot be fully realized in language . . . because affect is always prior to and/or outside consciousness. . . . The body has a grammar of its own that cannot be fully captured in language”; Shouse 2005, 2, 3. See also Masumi 2002, 27.

- 9 In his view, proper knowledge of biology would enable political scientists to play a more influential role in public policy. This integration of “biology into a means-ends form of political rationality,” as Frost writes, raises the specter of the very technocratic politics that critics like Gould rightly identify as entangled with racist and sexist practices Frost 2012, 23; Gould 1981.
- 10 Lewontin 2001.

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