



The Prudence of Neuroscience

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René Descartes opens his Discourse on Method with the ironic joke that "good sense is the best distributed thing in the world." To call it well distributed is not to say that anyone is particularly well endowed in it, and indeed Descartes' effort to discover rules for methodical cogitation is aimed precisely at relieving man from the vagaries of his own meager powers of discernment. His science seeks to

inoculate us against our own rational infirmity by the dispassionate objectivity of algorithmic rules—the messiness of philosophical

and moral judgment is traded for the neatness of mathematical formula, and the path from doubt to certitude is paved by universal reason whose demand for computational precision excludes the inexactitude of old-fashioned prudence and judgment.

In his new book, *The Heart of Judgment*, University of Florida professor Leslie Paul Thiele describes the general current of modernity as insalubrious for the esteem of judgment: the "old-fashioned character [of] prudence" causes us to denigrate it in comparison with the

youthfulness of creative expression and revolutionary change. As a "pragmatic virtue," it reeks of expediency in contradistinction to the romance of risk and the modern elevation of the virtue of courage. Moreover, he argues (borrowing from F. H. Low-Beer), "to label an issue a question of judgment is a cognitive put-down" since this implies it is epistemologically indeterminate, or even finally unimportant. Such concerns are "out-

casts from knowledge" compared to the indubitableness of genuinely rational thought. The complex, variegated nature of prudence

nature of prudence makes it seem arbitrary when compared to the impartiality of law, and our easygoing moral relativism reduces the categories of judgment to matters of aesthetic sensibility.

According to Thiele, however, what truly undermines the cultivation of prudence today is the valorization of universal reason incapable of fully capturing the deep complexity that surrounds its operation. Practical judgment, he writes, is a "hybrid faculty" of which reason is no more than a "co-participant"; unlike the "sterile logic" of analysis, it is "attentive to

The Heart of Judgment: Practical Wisdom, Neuroscience, and Narrative

By Leslie Paul Thiele Cambridge ~ 2006 ~ 321 pp. \$88 (cloth) context and contingency," responsive to a world in flux, and sensitive to the "multidimensionality" of life as truly lived. In fact, not only is judgment generally "beyond the jurisdiction of reason," he argues, but it is more intuitive than reflective, more reliably stewarded by unconscious instinct than conscious decision, and far too elastic to receive much guidance from a "theory or principle that is valid across space and time." In addition to the failure of abstract rationality to provide an adequate description of the activity of judgment, an overemphasis on its role can actually stymie our ability to call on simple prudence and enervate us in the face of calls to action.

For Thiele, the original culprit in the modern weakening of judgment—especially in our moral life is Immanuel Kant, who insisted that the principles of judgment are, in Thiele's paraphrase, "derived from pure, practical reason, unsullied by the conditional or the particular." By "severing morality from the empirical world," Thiele writes, Kant provided "little room for practical wisdom to maneuver," substituting "axiomatic morality and the rigidity of legal principle" in its place. Kant's antipathy towards prudence, according to Thiele, is the end result of a long chain of historical reevaluations. Aristotle originally drew a distinction between judgment informed by principle and clever, unprincipled calculation. Machiavelli's austere realism

sundered the connection between politics and morality, leaving nothing but calculation freed from any moral tethers. Finally, Kant's relentless preoccupation with a priori rules at the expense of context and variability culminates in the identification of judgment with calculation—after all, if the activity of moral discernment is exhausted by the deduction of particulars from theoretical principle, then practical judgment is little more than craven strategizing. Kant preserves the theoretical purity of moral principle but only at the price of sacrificing any meaningful connection between moral theory and lived moral experience.

Thiele's ambitious project is an attempt to rehabilitate a conception of prudence that recaptures its indispensability to moral life, to properly depict its malleability in the face of unpredictable human affairs by unfettering it from what he terms the "tyranny of reason," and to reconnect it with empirical reality by grounding its description in recent neuroscientific discoveries. Thiele believes the incapacity of neuroscientific categories to "invest our lives with meaning," or to properly account for the moral dimension of judgment, justifies our turning to the nature of narrative for humanistic understanding. Neuroscience supports "understanding the development of the brain in terms of narrative structures" and "(self-)consciousness as a narrative process," he argues, making the complicated nature of judgment some amalgam of neuroscience and narrative.

Thiele defines practical judgment There defines practices, as "an aptitude for assessing, in the evaluating, and choosing in the absence of certainties or principles that dictate or generate right answers." This succinct definition is instructive since it emphasizes Thiele's guiding preoccupations: the fundamentally practical versus theoretical character of judgment, the contingency of every opportunity for the exercise of judgment, and the demotion of the role of abstract or general principles. In place of the primacy of abstract reason Thiele substitutes experience, unconscious assessment and motivation, the emotional foundations of cognition or affect, and finally the distinctively human capacity for conjuring stories or narrative. While he employs each of these concepts as a counterpoint to the hypertrophic rationalism of Kant, he also relies heavily on what he takes to be the confirmation of their significance in the evidence provided by contemporary neuroscience. Thus, Thiele initially opposes one form of rationality to another: scientific reasoning is distinct from and superior to pure reason, at least insofar as the latter proves far more attentive to the fluid, multifarious nature of prudence. So although both scientific and moral principle turn out to be inadequate if not pernicious guides in matters that

require practical judgment, neurophysiologic interpretations of human thought and behavior are still instructive and useful in the description and cultivation of prudence.

However, it is often unclear precisely what role Thiele assigns to neuroscience in his multidisciplinary investigation. Sometimes, he presents it as a kind of evidentiary instrument for measuring the plausibility of non-scientific theory, so that neurophysiologic data provide an "empirical vindication of some of the most insightful theoretical accounts of judgment, from Aristotle through contemporary pragmatism." In fact, Thiele argues that the "brain science" he painstakingly lays out was almost all "foreshadowed by Aristotle's habit theory of virtue." At the same time, though, he is quick to concede considerable limits on the explanatory breadth of neuroscientific research given our enduring ignorance of the elusive machinations of the mind and the fact that scientific efforts to render the mind transparent "still shine only a dim beam into a very dark and convoluted process." Although he never articulates this, neuroscience seems to function for Thiele less as a mode of original discovery or as the primary paradigm of interpretation than as a bridge across the chasm Kant opened up between a philosophical account of moral theory and a practical account of moral action.

In place of the ostensibly calcified categories of abstract reason, Thiele

aims to substitute a "thick" description of moral events that properly situates them in their circumstantial particularity; he rejects what he considers to be the clumsy and often Procrustean imposition of moral precepts in favor of a contextualized account that prioritizes our essential "embeddedness" in the world. However, despite his announced intention to avoid "mechanistic models of science" and to follow explanatory avenues that "do not lead in the direction of biological determinism or crass reductionism," Thiele consistently translates the language of ordinary moral life into an often remarkably counterintuitive neurophysiologic vernacular. For example, in making the reasonable argument that experience is a prerequisite for the development of prudence, he adopts a "neural Darwinism" that counts experience as the sum result of the "ongoing development of the brain's synaptic pathways over the life of the individual." The "synaptic constitution" of our brains is characterized by a susceptibility to change given different kinds of exposure to different stimuli, and this "neuroplasticity" allows our brains to more effectively encode the lessons of experience than purely conscious learning. What ultimately gets produced over time, he writes, are "extensive neural relays" that "chart the history of the individual, from its prenatal experiences, to its various encounters with the world, including the internal reactions and mental (re)processings that these

environmental encounters generate." So, when Thiele extols the "indispensability of experience," he means "brain maps" that "constitute a neural inventory of an individual's life." While this conception of experience does include conscious memory and a reflection upon our past, it assigns greater significance to unconscious neurophysiologic process, prenatal synaptic formation, and species evolution. Even when Thiele discusses the "permanent ink" of our "ancestral experience," he intends this not as the influence of our family history in the ordinary sense but the "genetic inheritance" that "has congealed in the form of inherited brain circuits or strong propensities for their formation."

Contrary to his own stated purposes, then, Thiele exchanges one counterintuitive mode of explanation for another; a description of the synaptic structure of the brain is even more remote from a phenomenologically sound depiction of human experience than the simple adumbration of moral rules. At the very least, even the most abstruse moral principles implicitly refer to particular moral predicaments, however inarticulately; the content of moral principle is not completely disconnected from the context of moral circumstance. If neurophysiology did, in fact, provide the key to understanding the role of experience in good judgment then the surest means to assessing whether a person possesses judgment would be an inspection of that person's brain; completing his

departure from common sense, Thiele suggests precisely this.

In fact, he goes even further, denying the connection between experience and conscious rationality. Thiele contends that, generally speaking, "ethico-political life... is highly dependent on tacit knowledge," and likewise that "practical wisdom is intrinsically grounded in unconscious capacities." In fact, the activity of prudence is so far removed from a "deliberative, cognitive exercise in analytical assessment" that the judgment it renders is a "product of intuitions" only "occasionally refined by propositional discussions." Fortunately, this should not cause concern: "Words and the conscious thoughts behind them get in the way of acute perception," he writes. If thinking aloud precludes access to the "often more fecund capacities of the unconscious mind," then practical judgment is best served by avoiding the introduction of explicit analysis; apparently, we judge best when we rely upon "implicit memories and intuitive apprehension."

Thiele presents this thesis as a kind of updated Aristotelianism: intuition is more efficient and effective than its conscious counterparts and is understood as the result of cultivating certain habits and skills. But Thiele's account of our development of prudence only bears a shadowy resemblance to Aristotle's intention; habits and skills are reinterpreted as the "behavioral expressions of neural remappings." Thiele

de-intellectualizes Aristotle's view by reducing habit to biologically-conditioned instinct. In place of the moral education Aristotle prescribes, Thiele recommends we figure out how to "educate" the amygdala, find more effective means to stimulate the motor cortex, or maybe facilitate the arousal of the right hemisphere of the brain. Somehow he never acknowledges the contradiction between this view and his advice to social scientists to "move beyond the antiseptic massaging of data and get one's hands dirty grappling with the real world."

The examples Thiele marshals in defense of the primacy of unconscious reflex over conscious deliberation—he repeatedly cites athletic and musical virtuosity—prove to be less than satisfying; in obvious and decisive respects, these activities are clearly not analogous to the domain of moral decision. Thiele seems aware of this, since despite his contention that moral judgment is not essentially different from other varieties of judgment, it does distinguish itself with respect to the peculiar version of "deep complexity" that characterizes moral predicaments: "moral and political judgments are never uncontestably right or wrong." However, the indeterminacy of moral principle is only one part of the story—Thiele's protracted attack on it has less to do with its unspectacular contribution to the activity of prudence than with deeper suspicions regarding its philosophical defensibleness. He describes moral

principles as the "internalization of social values" that are constituted and policed in ways not categorically distinct from the "norms of reciprocity" employed by primates to "grease the wheels of social interaction." He caricatures a sincere reliance upon general moral principle as an appeal to hackneyed cliché; general moral rules, he says, rarely amount to more than "nuggets of folk wisdom" like "opposites attract" or "birds of a feather flock together."

If moral principles are basically platitudes emptied of substantive content and "conscious judgments are mostly afterthoughts," Thiele unmoors moral judgment not just from abstract reason but from any moral reason. He situates his own work within the postmodern project that aims to "reject axiomatic moral theory" but still "valorize ethicopolitical judgment"; in effect, practical judgment has to be rescued from the collapse of its previous rational and metaphysical foundations. Cognitive neuroscience is the "protagonist of the tale told here"; its role reaches fruition in validating "narrative as the source of the self and a chief resource for the cultivation of practical judgment." One subtle subtext of Thiele's ambitious exposition of judgment is a reconciliation of narrative and science tantamount to an attempt at a postmodern rapprochement between science and poetry. Narrative construction allows us to represent the "neural inventory of life created by

brain maps" as a kind of "existential tale"—"neural mapping" can be depicted as "synaptic storylines" that "capture the organism's march through space and time."

Thiele's marriage of science and **** narrative is from the start a terribly uneasy one, since it requires a heavy dose of salutary myth in the form of what he calls the "user illusion," or the healthy self-deception that we are transcendent authors of our own selves and that there is an "enduring teller behind the neurological tale." However, the truth, according to Thiele, is that we are "fabricated characters" who are "retrospectively abstracted from synaptic stories." The self is a "narrative artifact," a fiction that has "no transcendental nature, no essence." Thiele seems to agree with Dewey that "judgment secures nothing less than human freedom," but freedom turns out to be illusory if not only our behavior but our personhood is constituted through the development of neural relays in the brain. In this vein, Thiele offers up approving quotes from neuroscientist Michael Gazzaniga regarding our "concocted stories"; each one, he says, "liberates us from the sense of being tied to the demands of the environment and produces the wonderful sensation that our self is in charge of our destiny." Now the crux of the partnership between neuroscience and narrative becomes clear: neuroscience repairs the damage done by

a discredited moral theory premised upon discarded metaphysical foundations by reconnecting it with the particulars of empirical reality. In turn, narrative knowledge allows us to contrive an "autonomous, inventive individual" who makes moral decisions out of the deterministic particulars of neurophysiology through a "reflective mythologizing." Oddly enough, Thiele's book seems designed to awaken us to the dream of our selves—one has to wonder if Thiele's meta-narrative undermines the assurances we unknowingly gain from our neurophysiologic slumber.

The explanatory power of narrative, in Thiele's account, can't stop with the construction of the self; in the absence of metaphysical foundations grounding moral principle, narrative also must account for the creation of moral preference. Thus, Thiele proclaims there are "no trans-historical, culturally universal, non-contingent principles of right." Rather, we are left with "more or less persuasive stories." Following the philosopher Richard Rorty, he argues there is "nothing but stories all the way down, all the way up, and all the way out in every direction." Indeed, practical judgment turns out to be a kind of reader's instinct: it can be defined "as the faculty that allows one to apprehend stories in progress—to predict with some assurance what events will occur based on the characters involved and the circumstances at hand, and to state with

some authority what events should occur to achieve the best practicable results." This understanding of judgment requires a new definition of the role of moral imagination as "the capacity to situate oneself in competing and complementary narratives," which turns out to be more productive than passively intellectual since "envisioning alternative points of view really amounts to constructing alternative narratives." The successful practical judge is akin to Adam Smith's "impartial spectator"—he has the empathy to imagine himself in someone else's shoes. Impartiality is not the same as objectivity—it carries with it none of the pretence regarding dispassionate inquiry into the nature of things. Rather, it is a "form of intersubjectivity" that Thiele describes as an "enlarged mentality"; stripped down to its basic character, impartiality is very close to the liberal virtue of tolerance. In a world devoid of any rationally defensible moral precept, open-mindedness reigns supreme; the "good judge is not judgmental."

What is it that makes one story superior to another if all appeals to rational criteria for selection are ultimately baseless? The short answer, for Thiele, is that the better story proves to be more persuasive or benefits from a more compelling "redescription." However, this response seems evasive—what is it that makes a story more persuasive than other competing candidates?

Thiele assuages our anxiety in the face of this discomfiting question by asserting that the "absence of philosophically compelling arguments does not signal defeat." Substantively speaking, Thiele is not free of political commitments—he borrows from Rorty an attachment to solidarity, inclusiveness, tolerance, social justice, and the whole panoply of progressive rights. Formally speaking, he favors those narratives that are the most attentive to subtlety and nuance that paint portraits of contingency and context. For Thiele, of course, this means a rejection of all "metanarratives" that present themselves as conclusive or synoptic or don't recognize the "inherent provincialism of our moralities."

Any narrative that denies that it is ultimately "nestable" within other narratives by staking a claim to "authoritative status" is a metanarrative; these include "the priority of first virtues, the Golden Rule, the word of God, or the categorical imperative," and other familiar favorites. In each of these instances, the narrative became a meta-narrative when it achieved hegemonic status through particularly compelling description and re-description—in the course of many tellings the story gained momentum but lost awareness of its narrative origins. Thiele borrows from Rorty in his formulation: "the 'universality' of a moral claim only ever gains motivational force when it finds a home in the 'provinciality' of narrative." For example, "sincere, rational Nazis" could never be persuaded by Jürgen Habermas's "liberal arguments" precisely because the principles they cling to are so firmly embedded within the "particular narratives of Aryan supremacy"; the principles themselves have no attraction independent from the irreducibly particular circumstances out of which they were born. The narrative of hate that produces a Nazi only gets subsequently rationalized by a theory of racial superiority.

Frustratingly, Thiele refuses to acknowledge the real possibility that some stories have proven more attractive because they are more true; he replaces the modern dogmatic acceptance of universal reason with the postmodern dogmatic rejection of any and all metaphysical ground for moral discourse. In place of the lack of self-awareness that constitutes moral absolutism at its core, Thiele proposes a more sophisticated selfignorance that flatters the self with fictional tales of freedom, autonomy, and open-mindedness. In the end, one is left with a deformed version of Socratic wisdom—one knows that one knows nothing but spins gossamer tales of one's own progressive moral and philosophical growth nonetheless. Thiele is certainly aware that there are limits to the stories we can accept but provides no serious reflection on the possibility that, deprived of any philosophical reasons to accept one narrative over another, they will be bereft of the capacity to inspire and incapable of defending themselves against those who quite like *their own* meta-narratives and don't worship at the altar of inclusiveness. In other words, Thiele fails to consider that a manly and spirited defense of our own requires more than the literary richness of a well-hewn plot.

Thiele is certainly correct in his prognosis—the terrain of modernity is less than arable ground for the seeds of practical judgment. Much of the difficulty seems begotten from confusion at the heart of the Enlightenment regarding the status of prudence. On the one hand, the Cartesian panegyrizing of universal reason, or the transformation of reason into scientific method, reduces practical judgment to amoral cleverness or purely subjective preference. On the other hand, the modern rejection of the political utopianism of antiquity presupposes the embracing of prudence as the arbiter of means to considerably more modest ends. Even the modern choice to substitute political science for political philosophy was understood as driven by partially prudential reasons; the choice for science can't be made on solely scientific grounds. Modern political science can be understood as the attempt to broker a compromise between both of these currents—the Kantian-Cartesian and the Machiavellian—by more narrowly circumscribing the range for the exercise of discretion.

Universal reason provides the certain ends of political life while the emerging constitutionalism of classical liberalism doesn't eliminate but severely restricts the provenance of non-methodical judgment. In Locke's Second Treatise of Government, for example, promulgated law and the mechanisms of representation only takes him so far—he eventually has to introduce some opportunity, however rare and extraordinary, for executive prerogative and the discretion it entails. Similarly, even in the midst of articulating his moral rules in the Discourse on Method, Descartes recognizes that he "saw nothing in the world that remains in the same state always" and that laws were often designed to "remedy the inconstancy of weak minds."

The source of the crisis of prudence in modernity, as well as the most daunting problem for Thiele's impressive study, is that the relentless monopoly that science imposes upon the market of reason creates an intractable bifurcation between philosophy and science; prudence becomes deprived of its claims to reason by this historic divorce. The rational sovereignty of science is catastrophic for practical judgment since it understands itself as the perfection of pre-scientific consciousness and therefore dismisses the indispensability of common sense as the proper starting point for the investigation of things political. The once deep waters of practical judgment run dry once judgment is defined as mere unscientific bias.

In one sense, Thiele's laudable defense of prudence is unmistakably Aristotelian: he attempts to return to an understanding of moral and political life that privileges a starting point at the level of moral and political experience. However, his treatment takes a decisively un-Aristotelian turn in uncritically accepting the postmodern collapse of metaphysical foundations; Thiele acquiesces to the division between science and philosophy and to the chasm between facts and values precisely because he bows to the Enlightenment's impoverishment of reason. Thiele hammers home time and again that there is more to judgment than analytic deduction but never considers that there is more to reason as well. Given this view of reason, he has little choice but to follow in Rorty's footsteps and attempt to "celebrate Enlightenment liberalism while shedding its rationalistic core as a remnant of metaphysical thought." Thus, he feels compelled to provide a neurophysiologic vindication of non-scientific theory that is incapable of respecting or capturing political experience unvarnished by gratuitous abstraction; Thiele memorably describes good judgment as that which "occurs when the frontal lobes marshal other brain regions into service, utilizing diverse capacities and

orchestrating their integrated effort."

For Aristotle, prudence may not be based on theoretical knowledge, but the objectives at which prudence aims are decisively shaped by a theoretical understanding of the ends toward which man naturally strives. Prudence itself might not require a philosophical demonstration to account for its partiality within the whole of human experience rightly understood, but some awareness of man's natural ends is a prerequisite for the exercise of practical wisdom. For Thiele, however, there are no natural ends but rather an endless diversity of scripts that accommodate the "multidimensionality" of life. There isn't even a self exactly, only an unconscious weaving of fictional tales that we don't even get to claim credit for writing. Thiele courageously defends practical judgment from its dismissal by universal reason, but simultaneously robs it of the ends that confer dignity upon it. His book would have been greatly improved if he reflected more seriously on his introductory claim that prudence requires "knowledge of the human soul." There must be more to such knowledge than an orchestrated dance of frontal lobes.

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