Donovan O. Schaefer. *Wild Experiment: Feeling Science and Secularism after Darwin.* Durham, NC: Duke University Press, 2022. ISBN 978-1-4780-1562-8. Paper $28.95.

The experience of reading *Wild Experiment* is like riding an academic rollercoaster. Donovan O. Schaefer deftly guides the reader through affect theory, Western philosophy, secularism studies, conspiracy theory, psychology, Darwin and Darwinism, New Atheism…and more! This may sound overly ambitious, but Schaefer is a competent guide. An overriding thesis supplies the common thread through each area: the thinking/feeling binary is false. This thesis is obviously of great interest to those interested in Michael Polanyi, and Schaefer even considers himself to be building on Polanyi's discussion of the 'intellectual passions' in *Personal Knowledge*. In this review, I will outline the book (as much as possible given its range), discuss the material of particular interest to this journal, and finally offer an overall evaluation.

The book is divided into two parts. The first part articulates Schaefer's overriding thesis by examining its philosophical roots and then its subsequent development in affect studies, secularism studies, and contemporary psychology. The second part uses the insights from these chapters to illuminate several case studies related to Darwinism. First, he details how emotions drove Darwin's pursuit of the theory of natural selection and how Darwinism was received and defended by characters like Thomas Huxley. Next, he examines the infamous 1925 Scopes Trial, dispelling myths about characters on both sides while contrasting the reception of Darwinism there with the tactics of Darwin and Huxley. He then turns to a more contemporary movement: how New Atheism shows the signs of "secular conspiracy theory," despite seeming like an innocuous ideology of rational humanism.

Throughout the book, Schaefer shows how both thinking and feeling are present in every kind of knowledge-production, from religion to science. But his thesis is even more radical. Not only are thinking and feeling always intertwined, but there is no thinking without feeling–they are two sides of the same coin (28). He highlights the experience of the "click," the pleasurable feeling when information coalesces, as the driver of learning: "Math, science, history, philosophy, and all other forms of formalized knowledge-making are scaled-up versions of this micro-level delight in the subtle click of things coming together" (3).

Cogency theory is the term Schaefer uses to refer to analysis taking this thesis as a starting point, as opposed to the hitherto (implicitly) accepted cogitation theory.

Cogency highlights the felt pull of information, the ways our confidence in beliefs is shaped by affective forces on a spectrum. In contrast, cogitation theory, the dominant (though often only tacitly held) theory of knowledge-production, sees beliefs as the binary (yes/no) result of mechanical reasoning.

In Schaefer's words, this is the "small argument" of the book (6). The big argument, and what the bulk of the book is dedicated to, is that cogency theory explains both truth and falsehood in knowledge-production. Unlike cogitation theory, where good reasoning is an explanation for truth and bad reasoning for falsehood, cogency theory admits that true and false beliefs have the same causes. What distinguishes good science from outlandish conspiracy theory, for instance, is not that the former has always reasoned coldly while the latter is possessed by emotion. To give a quick counterexample, many 9/11 conspiracy theories involve specialized, esoteric knowledge about jet-engine fuel and the heat capacity of steel beams, and defenders might plausibly know more true facts about the science involved than the average person. Rather, the difference lies in their styles of thinking: the different ways in which the emotional landscape has been set up to generate satisfying clicks. The 9/11 truther probably holds beliefs about the US government which make an inquiry into the structural engineering feel reasonable, confirming their preexisting beliefs in a way which feels objective.

In contrast, science is usually practiced in what William James calls a 'strenuous mood' (48-49), or a tension between the emotions of excitement with those of caution. Schaefer wants to understand the distinction between science and pseudoscience, or conspiracism, in these terms. The sense of science is a disposition scientists cultivate to maintain an agonism between the excitement of clicks and the social pressure to get things right (23-24). In conspiracy thinking, this tension tends to be absent, and so the chase of satisfying clicks is not tempered by any constraints. What merely feels true is placed on too high a pedestal. Nonetheless, both styles of thinking are driven by clicks: "Our bodies are truth-chasers only because of our capacity to feel it" (24).

One of the ways Schaefer applies cogency theory throughout the book is by looking at how conspiracism and racialized reason, both of which are understood as propelled by affect, pervade various academic and popular discourses. Like conspiracism, racialized reason refers to the process by which racist affects configure the operation of rationality, covering racist ideas in neutral, objective-sounding clothes. This is another recurring theme in the book: given that feeling is

so close to thinking, it is also always close to "our secretly savored prejudices" (29). Schaefer frequently cites the mere exposure effect, the idea in psychology that people tend to prefer the familiar, as one mechanism by which reason can be racialized (110). According to cogency theory, both conspiracism and racism artificially simplify the world by promoting theories which produce the most clicks with their own bodies' preexisting emotional inclinations. In a nutshell, this covers the main arguments of the book. But it leaves out the wealth of sources and examples Schaefer uses to argue his case. I cannot evaluate them all here, so I will focus instead on the more directly Polanyi-related content.

In Schaefer's introductory essay to the book, he makes interesting use of Polanyi to frame his project. He persuasively argues that the neglect of emotions in the philosophy of science is due to the overshadowing of Polanyi by Thomas Kuhn (17).[A] For all the similarities between Polanyi and Kuhn (emphasis on skill, the social dimension, frameworks and paradigms, the problem of incommensurability), Kuhn did not pick up on Polanyi's discussion of intellectual passions. This neglect has, in turn, made Polanyi's discussion of passions in science seem mystical or irrelevant to many readers. Schaefer puts the point nicely: "But Polanyi's theory of science is anything but mystical. It's just that it's organized around, in his words, the intellectual passions–and these have been so badly neglected in Western philosophy that they look, to some, like ethereal intuitions rather than extensions of our embodied life" (15). This is a hopeful starting point, and Schaefer promises that cogency theory will be "expanding Polanyi's inventory of intellectual passions" (18).

Yet Schaefer develops Polanyi's thought in a direction which would have likely been surprising to its author. While Polanyi acknowledged the fallibility of emotions in science, he focused on their intellectual, or epistemic, functions. Despite agreeing with Polanyi on this point, Schaefer spends more time examining how feelings harmfully motivate reasoning. In this regard, this book is a useful complement for Polanyi scholars, filling in some gaps in Polanyi's (arguably too-optimistic) analysis. On the other hand, Schaefer does not go into detail about the right use of emotions in science or elsewhere, settling for broad descriptions of the sense of science, that necessary agonism of hot and cold emotions.

In his chapter on Darwin for instance, there is little discussion of how specific emotions played an epistemic role in his discovery of the mechanism of natural

[A] Here he makes use of a couple articles from this journal (Jacobs [2006] and Moleski [2006]).

selection, and more focus on how his ideas were promulgated and received, and on the affective profile of Darwin himself (140). Schaefer also discusses how different configurations of feeling influence the reception of the same ideas by contrasting Darwin's more tempered approach with the frenzy surrounding the Scopes Trial (171-72). These are, however, relatively uncontroversial roles for emotion; they can still be conceptually divorced from the logical justification of Darwinism itself. In Polanyi's terms, it focuses on the persuasive function of intellectual passions without paying much attention to the selective and heuristic functions, which are involved in the discovery (not just promotion and reception) of scientific theories (*PK*, 142-58). I think Polanyi's approach, which focuses on the specific cases where emotions play an epistemic role in the nitty-gritty of scientific problem-solving, does more to break down the thinking/feeling binary. That said, Schaefer certainly expands on the persuasive function of intellectual passions in this book, and in doing so he counters oversimplistic analyses of the reception of Darwinism, illuminating the "cat's cradle between scientific secularism, emotion, and racialized reason" (171) involved.

As I read the book, another question kept gnawing at me: how much is Schaefer a victim of his own thesis? To say what I mean, I'll use an example of his that I really liked, about how the culture of critique in secular society, the 'hermeneutics of suspicion', is itself a kind of conspiracism (95-102). Primarily drawing on the work of critical theorist Eve Kosofsky Sedgwick, Schaefer argues that critique is often done in a mood which "always finds the most suspicious, most paranoid answer to be the most cogent" (99). It results in 'paranoid reading', which takes great pleasure in unmasking the hidden intentions behind a text. While critique is a powerful tool, it can become an addiction. Sedgwick proposes that this paranoid reading be counterbalanced with what she calls 'reparative reading': a passionate, open encounter with a text in the hope that it will teach us something (96-97). Both styles are mood-driven, and hence Schaefer (sounding like Polanyi) calls for the proper balance between the affects of suspicion and optimism: "Education, in all its formal and informal modes, is about training and cultivating these intellectual dispositions" (98).

But Schaefer's own application of cogency theory seems to involve much of this suspicious mood, the very paranoid style that he criticized. It risks being a kind of conspiracism itself, which finds our "secretly savored prejudices" behind most of contemporary culture. No doubt he is aware of this, given his above discussion of

critique. And to be clear, I think much of his analysis is plausible: the last chapter on the islamophobia motivating much of the New Atheist movement is an interesting case in point. However, assessing when and to what extent such motivated reasoning is present will always itself be a product of motivated reasoning. This is just a corollary of cogency theory. There is no neutral point of view from which to judge, only a more epistemically virtuous interplay of affect from which we think. Different actors will have different standards for the appropriate tensions between hot and cold affects, so appealing to the presence of emotional agonism alone is insufficient. In what proportions? When are the different moods appropriate? I wish Schaefer had said more about truth-conducive affects and how we could learn to recognize them.

I think the seeds of an answer are in his epilogue. In our age of skepticism and science denialism, Schaefer sees in cogency theory the potential to reignite a passion for truth. Striking a Polanyian chord, he claims “the urgent task in front of us is learning how to move with confidence through a world where certainty is impossible, but resolute action is vital” (236). To do so, “academics, for our part, can reaffirm a commitment to truth as central to scholarship” (ibid.). In this regard, Schaefer is clearly an heir to Polanyi’s project.

In summary, this is an exciting book which complements Polanyi’s work in both constructive and challenging ways. It hosts a wealth of resources for further examining the role of emotion in science and society and is particularly insightful in its examination of conspiracism. While Polanyi often focuses on the selective and heuristic function of passions in science, Schaefer focuses on the domain of persuasion in science and culture generally. Reading both authors together is sure to be fruitful in developing a nuanced view of the relationship between thinking and feeling.

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