



Often overlooked, direct human experience is a central factor at play in understanding reality.



## PHILOSOPHY OF SCIENCE

# Experiencing science

Embracing our role as active participants in the Universe should be a vital part of science, contend a trio of authors

By **Alex Gomez-Marin**

**W**estern science was founded on the premise of divorcing objective and subjective aspects of nature—an approach to understanding the world that has proven very successful indeed. And yet, such a strategy has major shortcomings. In *The Blind Spot*, astronomer Adam Frank, theoretical physicist Marcelo Gleiser, and philosopher Evan Thompson set out to reclaim the central place of human experience in the scientific enterprise by invoking the image of a “Blind Spot.” “At the heart of science lies something we do not see that makes science possible, just as the blind spot lies at the heart of our visual field and makes seeing possible,” they declare. “In the visual blind spot sits the optic nerve; in the scientific blind spot sits direct experience.”

Seeking to identify and correct what the Austrian German philosopher Edmund Husserl called “the surreptitious substitution,” the authors have taken on a formidable challenge because the *Blind Spot* is a conceptual Frankenstein, an amalgam of views that includes materialism, reductionism, objectivism, instrumentalism, and epiphenomenalism. All these

isms betray what the British philosopher Alfred North Whitehead referred to as “the bifurcation of nature.”

Frank, Gleiser, and Thompson explicate the nature and origin of this deficiency at the core of science. They then navigate across disciplines that deal with the greatest scientific mysteries. Time, matter, and cosmology are covered in the second section of the book; life, cognition, and consciousness in the third. *The Blind Spot*, readers learn, is hidden in plain sight everywhere.



**The Blind Spot:  
Why Science Cannot  
Ignore Human Experience**

Adam Frank, Marcelo Gleiser,  
and Evan Thompson  
MIT Press, 2024. 328 pp.

When it comes to time and Einstein's relativity, the authors cite the French philosopher Henri Bergson's intuition that the experience of the passage of time is alien to clocks. They argue, however, that “nothing illustrates the Blind Spot as dramatically as the emergence of quantum physics.” The weirdness of superposition, entanglement, and the measurement problem results, in part, from insisting on a God's-eye view of reality, they propound.

The French philosopher Georges Canguilhem's insightful realization that “there is no distinction between normal and pathological in physics” and the German philosopher Hans Jonas's remark that “only life can know life” preface the return of the primacy of the organism currently underway in biology, where agency, purpose, and freedom are being entertained again after a long hiatus. In cognitive science, the computational Blind Spot is epitomized in the imminent perils of artificially intelli-

gent systems devoid of human wisdom. But beyond quanta, chaos, and complexity, the greatest opportunity to spot science's foundational scotoma is consciousness.

“The phenomenologist brackets the everyday positing of the world as existing outside consciousness in order to examine the world strictly as it is disclosed to consciousness,” write the authors. The primacy of consciousness is then brought to the fore. We cannot step outside consciousness, and it is not simply another object of knowledge “but also, and more fundamental[ly], that by which any object is knowable.” Their conclusion is unflinching: “the hard problem [of consciousness] is an artifact of the Blind Spot.”

To ask “how” the brain gives rise to experience begs the question of “whether” it actually does so. Here, the authors reject not only physicalism and illusionism but also panpsychism and idealism. They contend instead that the real problem of consciousness is “how the brain as a perceptual object within consciousness relates to the brain as part of the embodied conditions for consciousness.”

The *Blind Spot* is not just endemic in science, the authors maintain, it has also percolated to education, journalism, culture, and society writ large. Touching on political economics, the final chapter reimagines our relationship with planet Earth.

This is a very important book that has the potential to become a classic text. I wish to note, however, three qualms. First, its diagnosis is much stronger than its prognosis. Having claimed at the start that “we need nothing less than a new kind of scientific worldview,” the authors ultimately leave readers with suggestions for “best practices.” Second, there is a whiff of disdain for speculation, particularly in mathematics and metaphysics. Phenomenology can feel a bit like being in an elevator that is stuck between two floors (science and philosophy): One can see what is wrong in both and yet is unable to contribute much to either. And finally, the book is simultaneously daring and yet mellowly heterodox—the authors could have been bolder in entertaining anomalous experiences at the edges of consciousness.

Science is indeed a strange loop: “a highly refined form of experience” whose bounty lies, in part, in its ability to distill “objects of public knowledge” from experience, in ever-ascending “cycles of abstraction.” But, like a kite, it cannot properly fly if it loses its grounding. Being aware of the Blind Spot is a necessary step toward reinscribing human experience back into science's core. ■

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