

NEUROSCIENCE

Embodying consciousness

Bodies and feelings are foundational to conscious experience, argues a neuroscientist

By Alex Gomez-Marin



Most neuroscientists conceive of consciousness as a phenomenon that emerges somewhere in the brain. In *Feeling and Knowing: Making Minds Conscious*, neuroscientist Antonio Damasio presents a different view, one that centers on the body and feeling. The conscious mind, he argues, is not only in the head but also in the heart, the gut, and indeed the rest of the body. The brain may be necessary for consciousness, he concedes, but it is not sufficient.

Noting that the entirety of one's nervous system is situated within one's body, Damasio argues that "feelings are not conventional perceptions of the body but rather *hybrids*, at home in both body and brain." In the intimate exchange between neurons and flesh, he seeks to bridge Descartes's split.

To elucidate human consciousness, Damasio advances piecemeal, following the steps of evolution to unfurl the natural history of the mind. His narration gives primacy to a third-person chronological account rather than a first-person phenomenological one—a framework that is not new but is powerful. Sensing comes first, he proposes, followed by mind and then feeling, which in turn opens the way to consciousness.

The reviewer is at the Instituto de Neurociencias, Consejo Superior de Investigaciones Científicas—Universidad Miguel Hernández de Elche, Alicante, Spain. Email: agomezmarin@gmail.com

All living organisms, from bacteria to Bach, are capable of basic sensing, allowing them to survive and thrive in Earth's ever-changing environments. The simplest of life-forms can perform wonders. They solve basic problems with "intelligent but unminded competences," Damasio claims, never holding their own homeostatic processes as "images" in mind. This latter ability requires feelings, he argues, by which we "*experience in mind* a process that clearly takes place in the *physical realm of the body*."

Feelings let a mind know, by direct contact, about the state of the body in which it is situated. In the encounter, the object perceived and the perceiving subject literally meet. Feelings and emotions are related but different. Whereas emotions are physical reactions of the body (dry mouth, goose bumps), feelings involve the mental awareness that accompanies such changes (fear, joy). Emotions are public, feelings private.

Damasio is not particularly interested in neural correlates of thoughts or feelings. Nor does he spend much time on brain structures and their putative role as the neural basis of consciousness. What makes us conscious of the images that brain regions fabricate, he insists, is "the *addition of knowledge certifying the ownership of those images*" as provided by "homeostatic feelings."

The thesis of the book is this: Only by establishing a scientific understanding of feeling can we begin to understand what it



Feeling and Knowing: Making Minds Conscious
Antonio Damasio
Pantheon, 2021. 256 pp.

The brain and body are inextricably linked in the manifestation of consciousness, maintains Antonio Damasio.

means to be conscious. The chief corollary: The brain alone does not experience make.

One might feel overwhelmed by such an apparently modest exposition, especially when compared with the expectations raised by the so-called "hard problem" of consciousness (why and how do physical processes in the brain give rise to conscious experience?). Damasio disagrees with the "in the brain" part of the formulation. And yet, even when spread to the body, the question still looks rather insoluble, if not ill-posed.

For Damasio, there is no mystery. There is only the problem that consciousness has been deemed a separate, special phenomenon. Consciousness, in his estimation, is biological business as usual. As he puts it, consciousness "calls for a rearrangement of the furniture of mind" but not for a rehabilitation of the house of science or its philosophical foundations.

In a section titled "The Problem of Consciousness," Damasio loses his measured temper and balanced erudition. He rushes to ridicule panpsychism, the position that consciousness pervades the cosmos. "Why stop at living things," he asks, referring to the work of two prominent consciousness researchers who, he says, believe that "the universe and all the stones in it" might be conscious as well. Indeed, the recent revival of the idea that mind is already in matter, rather than a tardy emanation from it, has opened a Pandora's box among consciousness researchers, angering some die-hard materialists while leading others out of conceptual dead ends (1).

While he rejects human exceptionalism and brain centrism, Damasio remains neuron-centric on the question of consciousness: Brains need bodies, but feelings need neurons. Thus, life-forms without nervous systems cannot be conscious. Such a veto is not only conservative but also confusing, as he postulates that plants cannot have feelings, while flirting with the idea that machines may.

Altogether, Damasio's concise, precise, and lucid prose effectively conveys the core insight he has distilled over decades (2): that affect—encompassing emotions, feelings, motivations, and moods—is central to understanding what we do, how we think, and who we are. ■

REFERENCES AND NOTES

1. P. Goff, *Galileo's Error: Foundations for a New Science of Consciousness* (Pantheon, 2019).
2. A. Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (Putnam, 1994).

10.1126/science.abm6378

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Science, 374 (6568), • DOI: 10.1126/science.abm6378

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