

Sutherland and others who view consciousness as too mysterious, too enigmatic, and too perplexing to be tamed by scientific inquiry. Well, says Humphrey, that is its job! In Humphrey's view, conscious self-awareness creates an illusion of transcendence. This is not a disingenuous confidence trick on the part of nature. Rather, it is a genuine sense that our existence is constituted by something other than physical objects and events, an innocent illusion that bestows on us a nearly unavoidable feeling of otherliness, a sense that we are more than the sum of our physical parts, and a belief that we exist beyond the confines of our bodies. So this is the point of consciousness. "The more mysterious and unworldly the qualities of consciousness, the more seriously significant the Self. . . . That is the point" (p. 132).

He ends his book with a note to a musician, Joe King, who had written him with questions about consciousness and immortality. In his reply Humphrey tells Joe King that, based on the evidence, there is essentially no chance of conscious experience beyond this corporal life. He quotes Camus's notion of the "absurd man," who is both heroic and wise and recognizes that "when we cannot travel the wide sea of eternity, the more significant is the island that we stand on now" (p. 133).

There is wisdom in this and, no doubt, some comfort, even if it is all an illusion—although, to be sure, an innocent one.

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Editor's Commentary on *Seeing Red* and "The Innocent Illusion"

Humphrey is fortunate to have Rowe's insights and support for his view. I would like to play devil's advocate by not disagreeing with his major premises about the role of qualia for consciousness but by denying that two things (sensation and perception) are necessary for his overall thesis when one may be sufficient (embodied perception). In fact, Humphrey himself might buy into this alternative because he assigns many attributes to sensation that are normally considered perception. For example, Rowe quotes Humphrey: "What sensation does is to track the subject's personal interaction with the external world—creating the sense each person has of being present and engaged, lending a here-ness, a now-ness, a me-ness to the experience of the present moment" (p. 70). I think that this description captures perceptual experience as much as if not more than simply sensation. For Humphrey, I expect that sensation is multimodal or influenced by several senses in parallel, influenced by top-down variables such as "changes in

mood or by mind-altering drugs" (Humphrey, 2006, p. 103), and although they are not specifically described by Humphrey, we can expect that sensation would be modulated by higher-order contextual constraints such as lexical, syntactic, and semantic context in speech perception (see Massaro, 1998, pp. 337–338). For example, we perceive the words in a sentence but also hear the "silences" between successive words, even though none are there.

Consider the common experience that written captioning of spoken language or singing actually improves how clearly the speech and lyrics are heard, not simply how well they are understood (Massaro, 1998, pp. 23–29). This top-down effect is analogous to the McGurk effect, in which watching a speaker's face influences the speech that is heard. In addition to these properties, sensation is graded rather than categorical (a hallmark of perception or pattern recognition, as prescribed by the Fuzzy Logical Model of Perception; Massaro, 1998). To my mind, Humphrey attributes so much to sensation, we might as well pigeonhole it as perception. "Sensation is by no means a simple copy of the retinal image" (Humphrey, 2006, p. 19). Thus, sensation cannot result from solely the proximal stimulus but appears to be representing the distal stimulus.

Dissociating sensation and perception, for Humphrey, means that sensing the world is somehow qualitatively different from knowing the world. In an earlier book, he claims, "The sensory channel makes use of 'analog' processing and ends up with a pictorial representation (somewhat like a picture in the brain), while the perceptual channel makes use of 'digital' processing and ends up with a propositional representation (more like a description in words)" (Humphrey, 1992, p. 102). His distinction between sensation and perception is something like a relabeling of the classic distinction between perception and conception. Traditionally, perception has been assumed to be embodied, whereas conception was assumed to be abstract and amodal. However, percepts and concepts are not two radically different kinds of things but "two aspects of a continuous flow of feeling–thinking" (Johnson, 2007, p. 87). Assuming that sensation is about me-ness and perception is outthere-ness might be seen as continuing the dualism of mind and body formally initiated by Descartes almost 400 years ago. Embodied perception accomplishes the qualia we thrive on and at the same time allows us to make our way in the world without stumbling too much.

My biggest bone of contention is Humphrey's assumption of a threshold view of sensation and therefore consciousness: You either sense something or not, and if you sense it you are conscious of it. If this is the assumption, then it flies in the face of decades of sensory psychophysics and signal detection theory. The person always has some sensory input, there is no threshold to be exceeded, and the system is continuously making decisions about whether they should act or how they should react.

There is a fuzzy boundary between Humphrey's view of sensation and perception. If we equate sensation with experience and perception with knowledge about the world, then these processes and their time course can be shown to share similar rules. As illustrated by backward recognition masking experiments, for example, sensation and perception both take time to develop once a stimulus is presented (Massaro & Cowan, 1993).

Humphrey makes a distinction between sensation and perception, but it is

difficult to maintain this distinction in practice. A very old finding in perception research is Emmert's Law, which states that the apparent (sensed, perceived) size of a fixed retinal image will become larger as its apparent distance increases. This observation fits with size constancy: We tend to experience the size of an object as constant even though its distance from us changes. To experience the dependency between size and distance, find a screen with a fairly large mesh, although the size of the mesh is not critical. Look through the screen with your eyes diverged or fixated at a much farther distance than the screen. With this biased view of distance, you might see the screen becoming much larger in size and correspondingly the mesh much larger. According to size constancy, this outcome is influenced by seeing the screen farther away than it actually is so that you see it larger. Clearly, this is a sensory experience that is simultaneously perceptual.

Rowe and I wondered whether Humphrey's view was falsifiable. Now we must puzzle about whether a single mechanism of embodied perception is sufficient or whether two processes, sensation and perception, are necessary.

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Information Technology: No Longer the Sole Province of Computers

Computers, Phones, and the Internet: Domesticating Information Technology

Edited by Robert Kraut, Malcolm Brynin, and Sara Kiesler. Series in Human-Technology Interaction. New York: Oxford University Press, 2006. 326 pp. Paper, \$49.95.

When I was sent this book to review, my eyes lit up at the inclusion of *phones* in the title. I had recently been embarrassed while lecturing on cell phones by students' casual observations about their own use. I had relied on recent reviews of the literature, which stated that text messaging was not as widely used in North America as in Europe and Japan. Much to my chagrin, my students pointed out that I was wrong. As is often the case with communication studies research, the evidence lags behind the realities of use of new technologies. A year later, I understand that the cell phone is the new information technology device for immediate use and especially for the dissemination of information. CNN has a new show called *News to Me* based largely on instant videos uploaded to their site or to YouTube, and