

An End to Qualia? Dennett's Defense of Heterophenomenology

Sweet Dreams: Philosophical Obstacles to a Science of Consciousness

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Forgoing recent excursions into the philosophical implications of neo-Darwinism and free will, Dennett returns to his roots, defending both his theory of consciousness (the multiple-drafts model) and his methodological approach (heterophenomenology) from recent critics. For those unfamiliar with Dennett's philosophy of mind, be prepared to incrementally agree with a persuasive, clear, and creative writer until reaching perhaps the most nonintuitive conclusion possible: There is no conscious entity that requires explanation. In *Sweet Dreams*, Dennett goes on the offensive against the "new mysterians," those who argue that the problem of consciousness is fundamentally unsolvable or requires an explanatory framework outside that used by observational science. Along the way, we encounter a gallery of philosophical troublemakers, circus performers who would make even Barnum hesitant, including a plethora of possible zombies, Martian scientists, cunning magicians, replicant impostors, emotionally inverted color perceivers, and a trio of imprisoned color scientists: the original Mary, the struck-by-lightning brain-reorganized Swamp-Mary, and the color-challenged Robotic Mark-19 Mary. Although Dennett is unmatched (save perhaps Dawkins in biology) in communicating complex ideas in ways that resonate with readers, the current work is less unified than most recent efforts, consisting of a series of reworked papers and addresses given over the past 7 years, focused on specific criticisms and elaborations of his approach. Each of the first five chapters is autonomous, and comments are presented sequentially. The remaining three chapters are re-presentations of this initial material, adding new slants to the discussion but little new content.

Chapter 1: The Zombic hunch

Dennett begins his assault on the new mysterians (e.g., Chomsky, Chalmers, Searle) by addressing one of the oldest: Leibniz. In *Monadology*, Leibniz (1714/1898) states that perception is inexplicable on mechanical grounds, claiming that if one built a machine that was able to perceive, an inspection of its gears would never lend an explanation of unitary perception. Dennett believes that an essential misconception present in this argument underlies similar arguments today.

Leibniz never argues that perception is nondecomposable; he simply asserts the fact, and Dennett claims that the new mysterians perform the same move with regard to consciousness. Assertion is not argument, and so "surely it must be

the case that” thought experiments use what Dennett calls an “intuition pump,” often containing concealed premises and biases. Ultimately, intuitions are a thin basis for theory: Our intuitions may differ from each other or simply be wrong. Also, our conceptual tools for addressing complex questions may develop over time, altering what an explanation might look like and changing our intuitions of what is possible. For example, computers and the advent of the algorithm allow us to understand evolution in a new way (e.g., see Dennett, 1995); why should we simply give up once and for all on an empirically based theory of consciousness? A properly developed computational approach, with levels of processing interacting on many levels, may ultimately do the trick. Among the new mysterians who walk this intuitionist road, Dennett cites Nagel, Chomsky, Strawson, Penrose, and most notably Chalmers (a self-avowed dualist who simply believes that consciousness is a nonreducible fundamental property of the universe, much like quarks or electrons; Chalmers, 1996).

In addition, Dennett faults many new mysterians for believing that discoveries in nondeterministic physics will eventually win the day by somehow introducing some mental causation wiggle room into the equation. In *Freedom Evolves* (2003) Dennett points out that true randomness buys one nothing with regard to mental causation, and Dennett makes a similar argument here. Assume that quantum effects allow for qualia, the what-it-is-like-to-be-something phenomenon. We are still stuck with the problem of why organized collections of neurons, like our own brains (unlike a collection of neurons in a petri dish), are capable of complex computational states, such as representation. Because quantum effects exist in both cases, an explanation must occur at a higher level: the communication and relationship between cells. Because one needs a computational account of complex information processing to account for this distinction, it is unclear what quantum-level interventions contribute to overall explanations.

Dennett argues that such radical interventions are necessary only if one buys into the Zombic hunch: the belief that a perfect computational duplicate of a person lacking qualia (a zombie) is fundamentally different from a normal person possessing qualia. According to the doctrine of “Zombism,” because computational explanations fail to account for this difference, they are explanatorily insufficient. Dennett responds that a theory need make such a distinction only if one believes in a dichotomy between the things that possess consciousness and those that do not. If one denies this difference, no such demarcation criterion is necessary or even makes sense. The burden of proof is on the mysterians, and Dennett claims that the “Zombic hunch” is an intuition that will fade in time, alongside other seemingly erroneous beliefs.

Chapter 2: A third-person approach to consciousness

In chapter 2, Dennett turns to a defense of his explanatory framework: heterophenomenology (HP), a project more extensively introduced in *Consciousness Explained* (1991). He begins by suggesting that we use standard third-person observational techniques in examining consciousness and see how far such an investigation takes us. To prevent us from sneaking shared introspection into our account, we are joined in this endeavor by alien anthropologists, capable of data collection and inference but unable (at least before collecting data) to know what

it is like to be us. For the new mysterians, the situation is a nonstarter. But for HP, the fact that people report having a qualitative experience is simply another piece of behavior that needs to be explained, alongside other pieces of evidence (e.g., movie voiceovers, philosophical treatises on consciousness) that indicate people believe they possess a unique subjective point of view. (This view is what separates Dennett from epiphenomenalism: If qualia were truly noncausal, we would not be able to speak of it. The fact that we can means something is going on that needs to be explained.)

Dennett argues that all third-person investigations are limited; whatever we study, there will always be some residual uncertainty (e.g., the next significant digit, probabilistic assumptions of prior locations or environmental conditions). The same applies to consciousness. There will always be some knowledge that remains incomplete or uncertain, but this is true in every third-person inquiry. A failure to arrive at complete knowledge of consciousness via a standard scientific approach is philosophically problematic only if one believes one has complete and infallible knowledge of consciousness from a first-person approach. However, Dennett shows that this is not the case: Our intuitions about our own experience are fallible (e.g., with regard to the capacity of nonfoveal visual perception), and many third-person descriptions actually are richer than a first-person account (e.g., with regard to masked priming or blindsight, where we have no conscious experience that we have been affected by stimuli).

In most areas of inquiry, counterintuitive findings often are seen as great advances, but with regard to consciousness, such conclusions inexplicably indicate that one's theory must be wrong. This is particularly strange because our intuitions regarding the nature of our experience often have been shown to be misguided. Returning to the example of our visual perception, simple psychophysical tests reveal visual acuity and color perception only in central vision, a fact contrary to our experience. Do we then ask,

"Why, since people's visual fields *are* detailed and colored all the way out (that's what they tell us), can't they identify things they see moving in the parafoveal parts of their visual fields?" (p. 41)

or, more properly,

"Why do people *think* that their visual fields are detailed all the way out?" (p. 41)

The HP approach involves gathering a corpus of material that is then subject to analysis. This consists of all of a person's physically observable behavior (e.g., global actions of the individual, neural and biochemical states), and includes speech behaviors referring to the belief that we have qualia, and zombies do not have qualia, that we have experiences that are uniquely our own, and so on. Communicative actions are then interpreted in the context of brain states, environmental conditions, and so on, to determine anthropologically our belief systems about consciousness, and these beliefs become part of what needs to be explained.

Whenever belief ascription occurs, Dennett claims we are simply adopting an explanatory framework: the intentional stance. For Dennett, teleological belief-desire talk is neutral with regard to whether entities metaphysically possess these

propositional attitudes and is applicable to thermostats as easily as humans (Dennett, 1978). Because the intentional stance is neutral regarding qualia, a zombie will have exactly the same ascriptions assigned to it as a nonzombie (including the assertion that it has qualia, too). Therefore, whether a zombie actually has qualia (or, more to the point, whether we actually have qualia) makes absolutely no difference to the analysis and becomes moot. In the end, there is nothing to be explained: A complete explanation of the zombie is identical to a complete explanation of a nonzombie. One is reminded of James's famous verificationist motto, "A difference that makes no difference, is no difference."

Chapter 3: Explaining the "magic" of consciousness

In the brief chapter 3, Dennett presents two incompatible views of what an explanation of consciousness is should look like. For Dennett, an exorcism of the homunculus in the explanans (e.g., as just performed in the previous discussion) is a necessary component for a noncircular account. However, the new mysterians argue that any such approach cannot really be an explanation because qualia are nowhere to be seen. Conversely, Dennett argues that any explanation that leaves the homunculus in has not really explained anything at all. The conflict seems intractable, but Dennett suggests that perhaps the issue would go away with a proper understanding of "the hard problem" (a term coined by Chalmers referring to the qualia-related puzzles that seem resistant to computational explanation). To this end, Dennett discusses a famous trick by magician Ralph Hull: the tuned deck. Upon performing a standard find-the-card trick, Hull challenged anyone to figure out how he performed it. He then performed the same trick with a second technique different from the first, and subsequently a third technique, and so on. Any hypothesis was pursuing a moving target, and the trick was simply in the title: "*the* tuned deck." Dennett hypothesizes that *the* hard problem represents a similar situation, a collection of problems that seem unified but may be amenable to divide-and-conquer strategies of computational analysis.

Chapter 4: Are qualia what make life worth living?

Back on the offensive, Dennett puts the burden of proof on the opposition and challenges the new mysterians to define their key term: What exactly is a quale? A negative definition will not do (it is what zombies do not have), nor will defining it as the phenomenal aspects of our mental lives. Dennett asks, "Which aspects of our experience are phenomenal and which are not?" (p. 79). Consider change blindness: Before one notices the change, are there differences in qualia when one views the two visual scenes? Certainly there were physiologic differences (e.g., in the retina). If one claims there are differences in qualia without one perceiving them, one begins to question the basis of the whole enterprise (i.e., that one is an absolute authority about one's own qualia). If one does not have access to one's own qualia, who does? On the other hand, if one denies there are differences in qualia before and after detection, now qualia occur only when you claim they do. Because zombies insist they have qualia too, this should be sufficient to give it to them! Dennett finishes the chapter by proposing a version of the classic color inversion situation, in which one wakes up one morning with one's emotional reaction to colors inverted (e.g., my favorite color used to be blue, now it is yel-

low). Are qualia inverted in this case? The answer is unclear, and Dennett argues that qualia are simply ill-conceived constructs.

Chapter 5: What RoboMary knows

In chapter 5, we encounter permutations of Frank Jackson's classic "Mary the color scientist" scenario. In the original, Mary is imprisoned in a monochromatic environment and asked to research color vision. She ultimately learns *all* there is to know about color from a third-person perspective. The new mysterians argue that there is still something she does not know about color: qualia, what it is like to experientially see that color. Show her a blue banana, and she will say, "Oh, that's what yellow looks like." Dennett begins by challenging that Mary really would be surprised: What would knowing *all* about color vision really entail? Might it not result in her recognizing the blue banana? He argues that our intuitions about knowing *everything* there is to know about color are somewhat murky and point toward a thought experiment with hidden biases.

More directly, if the argument made by the new mysterians is that qualia are ineffable and thus noninferential from third-person data (Lycan), what evidence is there for such ineffability? Might not someone who knew *everything* about color be able to "eff" it? Again, the mysterians simply assert, not argue. Closing the chapter, Dennett introduces RoboMary, the mechanical version of Mary, who has black-and-white movie cameras mounted on a visual system otherwise enabled for color vision. Dennett argues that because colorization can be accomplished computationally, there is nothing RoboMary would gain from the introduction of actual color cameras (I suspect this latter argument is preaching to the converted, sitting nicely with those who agree with Dennett but having no effect on those denying strong artificial intelligence).

Chapters 6, 7, and 8

The final three chapters represent autonomous presentations of much of the material discussed thus far (one wonders why they were not presented as initial discussions rather than as the closing chapters). Discussed are distributed processing, consciousness as the "winner" in global communication, whether an explanation of consciousness needs to leave the subject out, and the coherence of the qualia concept. The final chapter provides a hypothetical informal discussion that illustrates the problems with the coherence of qualia discussed previously. Many of Dennett's arguments in these sections reiterate who has the burden of proof: I have argument, he claims, and the mysterians have only intuition.

Comments

Those familiar with Dennett's writings are in for the usual treat; his talent for producing enjoyable, thought-provoking expositions again is in full force. However, for those unfamiliar with his work, I recommend reading a more complete treatment of the subject in *Consciousness Explained* before tackling many of the ad hoc arguments he presents in the current work. The layout of the chapters is somewhat awkward, and I recommend reading the last three chapters first (which give a more coherent structure), followed by the first five chapters, which go into more detail on the various issues.

Dennett central complaint in *Sweet Dreams* is that criticisms of his position rest on unanalyzed intuition: "Surely that cannot be right." It is hard to find fault with this claim. In fact, if one can get over one's initial incredulity, one just may find one's intuitions changing over time. Reflections of one's own unity of consciousness, possession of qualia, and so on, can change based on one's philosophical perspective. Dennett argues that our intuitions of whether an explanation of consciousness is possible may change with the development of new conceptual tools. Over the years, Dennett's work has changed my own intuitions regarding the nature of my personal consciousness and has served as precisely the kind of conceptual bootstrapping necessary to rethink what consciousness is. Though not his most unified work, *Sweet Dreams* is pure Dennett and worthwhile reading for anyone in the cognitive science community.

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References

- Chalmers, D. (1996). *The conscious mind*. New York: Oxford University Press.
- Dennett, D. C. (1978). *Brainstorms*. Montgomery, VT: Bradford.
- Dennett, D. C. (1991). *Consciousness explained*. Boston: Little, Brown.
- Dennett, D. C. (1995). *Darwin's dangerous idea*. New York: Simon & Schuster.
- Dennett, D. C. (2003). *Freedom evolves*. New York: Viking.
- Leibniz, G. W. (1898). *Monadology* (R. Latta, Trans.). Oxford: Oxford University Press. (Original work published 1714)