

Bob Carpenter

Psychology 135M - the Mind-Body Problem

Dr. D. Hoffman

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Conscious Realism and Blackmore's Section Four:

Some Preliminary "Talking Points"

Abstract: Dr. Hoffman has introduced the notion of Conscious Realism, wherein consciousness is: 1) fundamental - that is, durationless (in the philosophical sense) but preexisting matter and fields, 2) the function by which Conscious Agents are able to construct mental "icons" representing objects in the world, 3) mathematically formulable. The purpose of this "talking point" paper is to assume the validity of Conscious Realism, and to offer a cohesive account of the three central questions implied by Section Four of Blackmore's text (Consciousness: An Introduction) that is compatible with the principles of Conscious Realism. The questions are: 1) Do animals have "consciousness"? 2) Is there a way in which "consciousness" could function with regard to qualia? 3) Why did "consciousness" evolve in the human species?

I. Do animals have consciousness?

The question implies, wrongly I think, that "consciousness" is a singular entity or thing. Further, it implies that something either does or does not have some ill-defined faculty named "consciousness." Given the principles of Conscious Realism, however, couldn't "consciousness" operate over a broader conceptual spectrum? Couldn't each "Conscious Agent" manifest consciousness relative to the level required for successful interaction with its environment? [Note: this is not panpsychism - the claim extends only to interactive conscious agents - though this can be interpreted to imply that some form of "consciousness" is available to all bioagents, including plants.] In turn this suggests an incremental hierarchy of "consciousness."

Thus, "consciousness" at its most elementary levels could be attributed to the simple tropistic responses of plants - roots seeking nutrients, leaves folding against the cold, plants turning toward a light source,

etc. One-celled animals would have a "consciousness" limited to stimulus-response interactions. Complex organisms would be characterized by increasingly complex levels of "consciousness," culminating (or at least reaching temporary evolutionary equilibrium) in the self-aware, I-am-thinking-that-I-am-thinking "consciousness" of H. sap. Such a scheme does not have to be discrete - rather, it would best be conceptualized as species-specific, but strongly overlapping as each conscious agent reflects its own schematicization (a.k.a. icon formation) of its environment.

Some "evidence" for this scheme could be abstracted from human infant development. In the sense of the old saw: "ontogeny begets phylogeny," the mental development of a human child seems to follow a path of increasing consciousness: i.e., the absence of object coherence followed by spatial identifications followed by "other" recognition, etc. The notion of Conscious Realism, it seems to me, would be strengthened by such a gradual learning paradigm - at least in regard to human conscious agents. Thus, as the human child develops it learns the techniques of creating the icons necessary for its successful future development. Boot-strapping at its most productive!

## II. How does Conscious Realism correlate with qualia?

Again, as with the assumptions about an "object" named "consciousness," perhaps the idea of qualia itself should be called into question. The traditional definition calls for a "quale" to be some ephemeral, mysterious, mental "thing-a-ma-jig" that is independent of physical experience, but associated as a property to a physical object (the redness of a fire engine), or as a reactive emotion to a physical experience (the "feeling" of euphoria). The object of the game (traditionally) is to try to define the "quale" in terms of its mental (dualist, interactionist) or physical (physicalist, functionalist) causation. Is the cart in front of the horse here? According to Conscious Realism, consciousness is not an "awareness" of such things as qualia - it is that which creates such things (or at least it constructs the icons with which such things are represented) - along with the (iconically represented) physical experiences with which such things as qualia are associated.

In this context, the so-called "qualia" can be re-interpreted as simple matters of language and convention. That is, our bodily processes (non-conscious and conscious alike) react to the real physical environment via an intricate electro-chemical system (as represented by our conscious iconization of those systems). Again, infant development tells us that this process begins at a very early age - e.g., human children less than two weeks old exhibit cortisol changes and body

behaviors that signal frustration and anger. Taking this as an assumption, we might suggest that as we develop we gradually learn (through ostension, modeling, feedback, etc.) that a certain "feeling" or quale is something called "sadness," or "joy" by other members of our species set - or that a specific visual response to a certain property of an object is called "red," etc. In this way, each conscious icon of a quale could be attributed to a specific combination of hormones, endocrine production, sensible input, and/or neural connectivity responding to some physical experience, perhaps at the non-conscious level - remembering all the while that our consciousness has created the icons with which those real-world events are represented.

In this scenario, "Qualia" qua qualia vanish - replaced by a more directly experienced, iconic contact with the environment. All of the above cognitive events are dependent upon the conscious agent's integration with a fundamental, pre-existing consciousness, experiencing (through the agent's iconic representation) a "feeling," which other human conscious agents operating within the same language framework have conventionally named "anger," or "redness," or "the way garlic tastes."

### III. Why did "consciousness" evolve?

1. For the Conscious Realist it didn't - at least not in the species-proprietary sense that proto-humans "had" some primitive form of "consciousness" that gradually developed through natural selection to the "self-aware" form we now possess.

2. Instead, the "fundamental" nature of the conscious-realist's "consciousness" asserts that capital-C Consciousness exists, period. What evolves, then, would be the conscious agent's ability to tap into (draw from, assimilate with) the pre-existing Consciousness. [This also implies, incidentally, that Consciousness is not delimited by human awareness of it - but that's another essay.]

So we can ask the question again: Why did "consciousness," "evolve" (in the second sense), in the human species? Put another way - what survival advantages accrued to the development of Consciousness (sense 2) in humans?

For argument's sake, let's accept without debate all the reasons for the evolution of consciousness mentioned in the text (Humphrey's social interaction theory, Dawkins's complete-model theory, Churchland's no-function theory, etc.). Frankly, none of the above, singly or taken

together, seem to be strong enough to account for the necessary pressures of selection. So let's travel back a few million years or so in virtual time. Traditionally, the picture is of a three- to four-foot tall creature scrabbling about in the trees trying to find enough berries to survive - while simultaneously avoiding all the various big-things that want to eat it. It has no fangs, no claws, no speed-over-the-ground, no wings - nothing that would enable efficient fight-or-flight responses.

So how does the creature survive?

Traditionally, where evolution in general is concerned, one highly regarded answer is that an increase in brain size enabled various survival strategies that emphasized stealth (sneaking out at night to eat what the big things left behind), tool-making (using a rock to crack open the larger bones of what the big thing killed to get at the marrow), bipedality (improved mobility and carrying ability) and so forth. The traditional picture, however, still begs the question of defensive strategies versus offensive strategies - where the latter seems to provide the most justifiable explanation for our present evolutionary status (probably temporary) as overlords of the food chain. Also, the conventional answers cited above might be satisfactory for basic survival skills, but they do not account for the specific evolution of consciousness, nor do they presage the emergence of Stephen Hawkings, the New York Stock Exchange, Cognitive Science classes, my ability to input this essay into a computer terminal, nor your ability to read and criticize it. There had to be something else.

For the Conscious Realist, again, we may be looking through the wrong end of the telescope. Here's anthropology's best guess. From the earliest evidence of a differentiation between pongid and hominid from a common ancestor (around c. 6.4 to 5 million years ago), up through the Australopithicines (c. 3.5 to 3.2 mya) nothing much is known other than the apparent emergence of bipedality. From this point forward endocasts indicate incremental but ongoing brain reorganization, though brain size differentials seem to have been primarily allometric - that is, growth in volume is related to body size. With the emergence of *H. habilus* (c. 1.8 mya), the ongoing reorganization was accelerated by a remarkably "sudden" increase in mean cranial capacity (from 440 cm<sup>3</sup> in *A. africanus* to 640 cm<sup>3</sup> in *H. habilus*), and significant development of frontal and parietal structures associated nowadays with Brocas' and Wernicke's areas. The assumption has traditionally focused on this physiological leap as the fulcrum that levered *habilus* into the spotlight as immediate precursor of modern *H. sapiens*.

If Conscious Realism is valid, however, the picture reverses significantly. If we hold that some form of "consciousness" is pervasive in the bio-environment, and if we interpret the evolution of

"consciousness" as an increasing ability (of a hominid) to interact with a pre-existing substratum of "consciousness," then we can interpret the continuum of brain "reorganization" in part to alterations in hominid Consciousness that were co-related to changes occasioned by environmental alterations. In other words, proto-Consciousness was a developmental motivator of selection, not some faculty-come-lately that simply rode up after the soon-to-be-human brain was already neuronally primed for world conquest.

Having gone that far, I'll go farther. Rather than envision self-awareness as a product of brain development - let's look at brain development (such as the size-and-structure leap associated with H. habilis) as a product of the emergence of a primitive but stoutly self-reflective "I"! That is, the human brain developed, at least in part, in order to accommodate the emergence of a conscious "self." If you think about it this way, several of the sequential problems anthropology has struggled with for the past century or two (language acquisition, tool making, social affiliations, population dispersion) fall into place as manifestations of a newly "conscious" agent learning to maximize the survival efficiency instantiated in the concept of icon representation.

It makes sense in terms of how we think about cognitive psychology too. Most texts (Blackmore's included) tap-dance around the topic, but it seems to me that once "I" start thinking about "me," my relationship with the environment changes dramatically. In a very general sense, we are all egoists. (Even the human with the poorest "self-image" imaginable, has a self to have an image of.) The more this idea of my "self" consolidates as a subjective reality, the more valuable it becomes. The more valuable my "self" becomes (to "me"), the more effort I will devote to nurturing, protecting, and advancing its interests. The more I direct my energies toward such self-promoting strategies as planning tomorrow's meal, social cooperation and negotiation, technological development (the rock becomes an axe), etc., the better I will be able to secure the safety and welfare of "me." Abruptly, we see the basic unit of selection - the gene - pulling the strings in the background. The better we are able to protect and advance the interests of the self-icon (and not coincidentally, the phenotype within which it is housed), the more likely we are to survive and prosper - the more we survive and prosper, the better our odds of successful reproduction, and the better the odds of the gene's success as a replicator. Presto! We have variance, selection, heredity - we have evolution!

Combining these principles with the concept of a Conscious Agent and the obvious advantages that accrue to those agents who are most adept at creating accurate representations of physical reality, and reacting appropriately within that represented reality - we arrive at a "self"-evident conclusion:

Consciousness (sense 2) "evolves" in the human species as a sheer matter of "self" preservation. I survive, therefore "I" am!

Putting it all together, we have Conscious Realism made pragmatic:

- 1) a unifying hierarchy of "consciousness" levels with which the earth's bio-agents interact with the physical environment,
- 2) an iconic, representational "construction" of the physical environment by human conscious agents, the physiological effects of which are experienced electro-chemically and assigned discrete "names" by cultural convention, and
- 3) pressures for consciousness selection powered by the development of self-referential icons that motivate the nurturing of the "self," thereby advancing the survival prospects of the human phenotype, as well as the gene replicators that drive the whole process.

No smoke, mirrors or magic necessary.

That's my story and I'm sticking with it - unless, of course, somebody points out all the places I've gone wrong. That's your job. I cheerfully and eagerly await your comments and criticisms. Bring it!