

Cool Custom Big Rig Trucks: A Coloring Book of Trucking Delights

As I sit here pondering what to write, what is it, exactly, that is doing the pondering? Where do the thoughts come from? How does the three-pound mass of grey matter that is my brain give rise to the felt experience of sensations and thoughts? It sometimes seems essentially inconceivable that the water of material processes could give rise to the wine of consciousness. Indeed, it is so famous a conundrum that it has a name ... the (in)famous mind-brain (or mind-body) problem. Failure to have consensual resolution to the mind-body (MB) problem remains at the heart of psychology and its difficulties as a fragmented discipline. My goal here is to briefly explain how the unified theory of psychology (UT) resolves the MB problem.

We need to first get clear about what most folks mean when they use the term "mind." What, exactly, are they referring to? In common parlance, the mind most often refers to the seat of human consciousness, the thinking-feeling 'I' that seems to be an agentic causal force that is somehow related, but is also seemingly separable from the body. The idea of life after death is intuitively plausible to so many, because our mental life seems so different from our bodies that we could imagine our souls existing long after our bodies decompose. This leads to a common sense dualism that is part and parcel to many religious worldviews.

The UT suggests there are some semantic problems referring to the human self-consciousness system as "the mind." One reason why has to do with what Freud "discovered" over a century ago and is now well-known by modern-day psychologists (see, e.g., Tim Wilson's *Strangers to Ourselves*)—"consciousness is only a small portion of mental processes. Consciousness and mind are thus not synonymous. We need to realize, then, that the MB problem needs to either be the consciousness-brain-body problem or the consciousness-mind-brain-body problem.

Recognizing the need to separate the mind from consciousness is one of the keys to resolving the issues. What, then, is the relationship between mind and consciousness? The UT tells us we can turn to the cognitive revolution in psychology to ground our answer. The cognitive revolution was birthed as a mixture of work on information theory, artificial intelligence, and cybernetics. It gave rise to the computational theory of the mind, which does indeed offer a solution to a big piece of the puzzle. The computational theory of mind posits that the nervous system is an information processing system. It works by translating changes in the body and the environment into a language of neural impulses that represent the animal-environment relationship.

The computational theory of the mind was a huge breakthrough, because it allows us, for the first time, to conceptually separate the mind from the brain-body. How? Because we can now conceive of "the mind" as the flow of information through the nervous system, and this flow of information can be conceptually separated from the biophysical matter that makes up the nervous system. To see how we can consider the separation of the information from the actual nervous system itself, think of a book. The book's mass, its temperature, and other physical dimensions can now be considered as roughly akin to the brain. Then think about the information content (i.e., the story the book tells or claims it

makes). In the computational theory, that is akin to the mind. The mind, then, is the information instantiated in and processed by the nervous system.

Although the cognitive revolution was a great move forward, problems emerged. This was in part due to the fact that now that mind could be conceptually separated from brain with relative ease, researchers became fascinated with models of disembodied or artificial algorithmic processors that had little connection with the other elements of mental phenomena, such as conscious experience, culture, overt behavior, or the brain. The problem was that these models were very far removed from the human mind-brain system. With its macro-level view and its capacity to assimilate and integrate key perspectives, the UT allows us to build off of the central insight of the cognitive revolution and simultaneously connect it back to the brain, evolution, human action/behavioral science, and culture.

But what is the relationship between neuro-linguistic information processing and consciousness? Consciousness is "experienced" information flow. I will return to why experienced is in quotes. But for now, let me note how congruent the dual-processing models of cognition (one fast, automatic, associative, reflexive, perceptual, emotional, and the other slower, verbal, analytic) are with our conscious experience. Consider that although our conscious experience feels unitary, there nonetheless is an easy dichotomy to make. One aspect of our consciousness is our experience of first order awareness. Seeing red, being hungry, feeling scared. These nonverbal, perceptual, motivational, emotionally experienced gestalts are the sentient elements of consciousness that some call qualia. They are different in kind than the other seat of conscious awareness found only in humans, which is the second level of conscious awareness. This is the position of a reflective narrator, the human self that justifies one's actions via language.

Behavioral Investment Theory provides the conceptual frame for neuro-information processing and the sentient level of consciousness. BIT tells us the nervous system is a computational control system that guides actions on an investment value, cost-benefit ratio. Pleasure and pain are nature's functional solution to network perceptions, motives, and action procedures together to foster behavioral guidance toward or away from benefits and costs. The Justification Hypothesis tells us that linguistic information processing is functionally organized into systems of justification.

Finally, the famous physicist Richard Feynman once said if you really want to show you understand how something works, build it. And it is here that we can clearly identify the limits of our knowledge regarding consciousness. I put experienced in quotes earlier, because no one knows how to engineer the flow of information into emergent states of first-person experience (i.e., sentience). The engineering problem of consciousness remains a great mystery.

210.0015555556

Facebook image: Y Photo Studio/Shutterstock

LinkedIn image: Ranta Images/Shutterstock

Reference

[The Ethics of Invention: Technology and the Human Future](#)

[RF and Microwave Engineering: Fundamentals of Wireless Communications](#)