Modern Science Meets the Canon

Post by “Godfrey” of June 2, 2019 at 8:44 PM

Due to the shortage of verifiably authentic writing from Epicurus dealing with the Prolepseis/ Anticipations/ Preconceptions, and the conflicting interpretations of same (DeWitt/Cassius/common sense v everybody else/academics), I’ve been on the lookout for present day information which may apply, and I’m just beginning to read up on it. In my field of design, there currently is critical interest in “embodied cognition”. Here are some quotes from the book Welcome To Your World, by Sarah Williams Goldhagen, a proponent of this idea. In terms of the science involved, these quotations are quite generalized. As far as I know she has no interest in Epicurus. Words in [] are my comments.

"*The new paradigm of human cognition begins by reframing the relationship of our thoughts to our bodies. Cognitions do not emerge in tension with a corporeal self, as was thought for centuries, nor from a disembodied mind— a paradigm encapsulated in the dualistic “mind-body problem.” Instead, cognition is the product of a three- way collaboration of mind, body, and environment. Inherent in the very fact of human embodiment— life lived in a body— rests the notion that the physical environments that a body inhabits greatly influence human cognitions. The body is not merely some passive receptacle for sensations from the environment, which the mind then interprets in a somewhat orderly fashion. Instead, our minds and bodies - actively, constantly and at many levels - engage in active and interactive, conscious and nonconscious processing of our internal and external environments.*"

"*The common western understanding of human thought and experience relies on the idea, first formulated by René Descartes in the seventeenth century* [really?]*, that our conscious mind operates at least on some level independent of its corporeal home. The basic structure of this Cartesian dualism is as follows. First, through our senses— sight, touch, taste and so on— we receive information from the environment. After we sense a stimulus, we perceive it. After perceiving, we begin to process, forming a preliminary judgment about that information by running it through our internal data bank of familiar, recognizable patterns and by reacting to it emotionally. Thus we conjure a preliminary interpretation of the initial stimulus. Only then comes the highest step of cognitive processing, whereby we consciously use logic, reason, and abstraction to evaluate the importance of the given stimulus to our life and make decisions about whether and how to act.*"

"*The emerging mind- body- environment paradigm starts differently: with the somewhat obvious fact that the human brain inhabits a body, and that this brain- mind- body lives on the earth, in space, and in the social world. The brain and the body together facilitate the operations of the human mind, which depends on their architecture for its very existence and*

for its modes of functioning. Human cognition takes place in a corporeal body that lives on the earth and in space. Not only that: our cognitions are shaped by the fact of our embodiment, sometimes in surprising ways— such as thinking more creatively when we sit outside (instead of inside) a box [this is from a study mentioned in the book, it's not referring to "thinking outside the box"]*. In this new paradigm, a cognition can be linguistic or it can be prelinguistic; it can occur anywhere on the spectrum from the non- conscious to the conscious. Learning to understand cognition's complex, multilayered, often subterranean quality involves attending to our own fleeting thoughts and perceptions— precisely the ones that we are more or less predisposed to ignore.*"

"*Those cognitions that are more audible, more distinct, usually come in the form of the words we hear inside our heads. Language is the enabler and medium we use to express our internal thoughts to ourselves as well as the enabler of social communication. Because words have such a hold on us, many philosophers of language and thought have for generations mistaken our interior monologues or the spoken language that forms them for the entirety of cognition.*"

"*That people experience emotions first as physical states— as feelings, in other words, as things that we feel in our bodies— and only then as cognitions has been hypothesized ever since one of the founders of modern psychology, William James, proposed it. We now know, for example, that the cerebellum, which coordinates sensory input with muscular responses, is also involved in processing emotions. Fear manifests itself as a jolt of energy, and muscles tense.... Today, psychological research confirms that what we call "feelings" are cognitive responses to what our bodies literally feel, and not just in the case of the familiar fight- or- flight response activated by the feeling of fear. Our emotions are enmeshed in and intermeshed with our bodies; in other words, they are "in the body," or embodied.*"

"*People acquire a vast body of knowledge simply by living embodied in the world, as an object among objects, and as matter in space.*"

A couple of more specific practical examples:

"*Recognizing and identifying patterns produces in us the sensation of pleasure. Whether it's when we listen to a piece of music or look at a painting or walk through a building or landscape that slowly reveals the nature of its order, recognizing patterned organization rewards us with a little jolt of the opioids in the area of our brain associated with our "liking" system. Presumably, the functional origin of this reward system lies in our evolutionary need to rapidly situate ourselves and the members of our group within an environment and a social group.*"

"*The appeal of bilateral symmetry does appear to be innate: even very young infants gaze at such objects longer than they do at asymmetrical ones, and this is true across cultures. "Good symmetry," neuroscientist Eric Kandel writes, "indicates good genes"— and, he might have added, robust health. Even without our conscious awareness, our evolutionary heritage has taught us that almost every healthy animate being exhibits symmetry either globally, in its overall composition (the form of a butterfly) or locally (the pattern on its wings) or both. Symmetry in a perceptual object, then, heralds (in the words of V. S. Ramachandran) a*

“biological object: prey, predator, member of the same species, or mate.” Although the objects in the built environment, including its buildings, are inanimate, symmetry may also appeal to us because it intimates a human presence."

My observations:

1) To me, this indicates that biological sciences are validating and updating Epicurus’s thinking, in a similar fashion to the previous validation/updating of the physical sciences, at least as far as I am familiar with them. This seems to be a description of the prolepseis and their integration into the Canon.

2) This seems to me to confirm and elaborate on the DeWitt/Cassius/common sense interpretation. If I understand it correctly: correct understanding is the whole point of this exercise.