## The FEELING of WHAT HAPPENS:

## BODY AND EMOTION IN THE MAKING OF CONSCIOUSNESS

Antonio Damasio. Heinemann: London 1999.

Reviewed by Amanda Sati

Antonio Damasio is a Portuguese-born American behavioral neurologist and neuroscientist. For a person without any knowledge of neuroscience, biology, or psychology, *The Feeling of What Happens* would presumably be a fascinating read. How often does one typically contemplate their own contemplation? The concepts presented by Damasio are abstract and uncommon, and undoubtedly are a new phenomenon for the average reader.

Damasio brings the confusing experience of emotional feeling into a clearer light by explaining it in everyday layman's terms, often relating emotion to other more well-understood brain functions, such as the visual pathway. When anatomical terms are introduced, an easy to understand explanation usually follows, which helps the reader feel competent and up to speed on the neurological lingo. The literature is supplemented with a variety of stories about real patients Damasio worked with first-hand, and this helps sprinkle the dry explanations with a little bit of life.

Having a strong background in the sciences, I found myself wishing Damasio would hurry through the introductory material necessary for one to understand the more advanced topics; however, I felt that that point in the book never came. The following are some of the ideas central to Damasio's depiction of the bodily and emotional roles in the creation of consciousness.

The Brain Knows More Than the Conscious Mind Reveals This is perhaps the most interesting point in the whole book. This far from blasé description of the brain's "secret" powers left me pondering for a long time. Damasio proposes that the term 'feeling' should be reserved for the private, mental experience of emotion, while the term emotion should be used to designate the collection of responses, many of while are openly observable. He further explains that the basic mechanisms underlying emotion do not require consciousness. This is relatable for anyone that has ever been happy for no apparent reason, or simply had a bad day. The cascade of processes that leads to an emotional display can be initiated without our being aware of the inducer, let alone the process that leads to the emotional experience.

Interestingly enough, an evolutionary perspective is thrown into the mix and according to Damasio, at this point in our adult lives, via the process of evolution, emotions DO occur in a setting of consciousness: we can feel our emotions constantly and simultaneously know that we feel them. Emotion is perhaps poised at the very threshold that separates a privileged connection to consciousness instead of simple biological underpinnings.

Damasio lends credibility to his ideas by describing an actual patient that he worked with, David, who could not form any new memories whatsoever. David consistently chose preferences for people who are kind to him, although he does not remember any encounters with them, their faces, or their voice (this was explained in the context of regularly ordering coffee from a coffee shop). An experiment was conducted with a "good" guy, "neutral" guy, and "bad" guy. David had five encounters with each over a period of three days while the good guy praised David every time, the neutral guy did nothing positive nor negative, and the bad guy was rude every time. David was then shown four pictures and asked to choose the one that he thought was his friend. 80% of the time, he chose the designated good guy while never choosing the bad guy.

The kicker is when Damasio describes the bad guy. Apparently, "he" was young, pleasant, and beautiful woman neuropsychologist. Apparently, David encoded his emotions at the time of the encounters, but due to his brain damage, could not recall the episodes when put on the spot although he still performed accurately. Doesn't this make you wonder about all the emotional encounters stored in your brain's abyss that play a part in shaping your daily experiences?

One Body, One Person: Singularity of Self Damasio lays the groundwork for understanding the autobiographical self by explaining that perspective and individuality both are fundamental for consciousness. He also explains that emotional experience is unique and variable, combining input from numerous sources in the brain and body to create an existence that is completely one-of-a-kind. He laboriously drives the point home that a body is necessary for conscious perception; I think the point he is trying to emphasize is that consciousness, or perception, requires both specialized sensory signals and signals from the adjustment of the body. Both signals must occur for one to perceive. This means there is no pure perception (i.e. interpretation alone, without any bodily experiences). This idea that no pure perception exists holds true even when one isn't moving, and when one is simply thinking about the object versus seeing the object visually. This is true because the events or objects we once perceived in the past (the representation of the object formed from previous exposure) actually includes the motor adjustments we made to obtain the perception in the first place and also the emotional memories in our mine. This is all stored in our "memory" of an event, or any memory, really. To sum things up, Damasio states that "You simply cannot escape the affection of your body, motor and emotional most of all, that is part and parcel of having a mind" (173). This core concept—that bodily responses are intangible from emotional and autobiographical perception—is one worth understanding to fully grasp the rest of the book.

After understanding this, I found myself wondering whether we experience emotion (fear, for example) because of our interpretation of our bodily reactions, or first feel afraid and then become aware of our bodily reaction to a certain environment. We know that both are required for conscious interpretation of what's going on, but it's sort of a chicken or the egg scenario. This question lingered in the back of my mind throughout the remainder of the book. I concluded that perhaps, since they are both required, it may be different each time we experience something because sometimes our physical reactions are more prominent than others.

The Organism and The Object Damasio distinguishes between the proto-self and the rich sense of self on which our current knowing is centered this very moment. The proto-self is a biological precursor to consciousness, we are not conscious of this proto-self, but instead it is "...a coherent collection of neural patterns which map, moment by moment, the state of the physical structure of the organism in its many dimensions" (154). In other words, the proto-self has no powers of perception and holds no knowledge but is, in a sense, live signals. Knowledge, or "something to be known", is required for one to pass into the sort of consciousness we know, or the autobiographical self. It is the distinction between actual, real-life objects and memorized objects (including the reactions we had to them initially) that allows us to be conscious of what we remember as well as conscious of what we actually hear, see, and touch right now. Were it not for this arrangement, we could never develop an autobiographical self. Essentially, our autobiographical self is a collection of neural patterns that our brain puts together to represent objects and events for us to consciously experience.

If you're looking for an interesting read with ideas to spice up your dinnertime conversation, read this book. If you're an academic, prepare to be slightly bored. Damasio really does take something so commonplace for everyone and transforms it into a novelty. A more

current spinoff of Damasio's ideas can be found in Malcolm Gladwell's *Blink*. Both authors share similar ideas that consciousness envelops much more than what we're simply aware of, and both are excellent reads. I would recommend this novel to anyone interested in emotional regulation and emotional memory as it relates to present consciousness.