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think through their own position. Even if holding an uncomfortable relationship with an approach, the point is to be more aware of one's own convictions and their impact on practice integrity. Such spiritual and existential thinking is a critical form of awareness training for anyone in a counseling role in ministry or in mental health, especially in a multi-religious and post-Christian society. Overall, I found this book fresh, enjoyable, and relevant to anyone in pastoral care, counseling, or psychology.

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THE CONSCIOUSNESS REVOLUTIONS: From Amoeba Awareness to Human Emancipation by Shimon Edelman. New York: Springer, 2023 (1st ed.). 226 pages. Hardcover; \$44.99. ISBN: 9783031240119.

In The Consciousness Revolutions: From Amoeba Awareness to Human Emancipation, Shimon Edelman takes on the onerous task of defining consciousness at multiple levels of complexity, from the most basic of life forms such as amoebas and microbes, to some of the most complex interactions between individual humans and their communities and political systems. In the Prelude, Edelman's characterization of essential consciousness in single-celled organisms is at first surprising and appears to stand in direct opposition to the prevailing view that consciousness is what separates humankind from other living organisms. However, in chapter 1, he quickly qualifies this by turning the reader's attention toward "the experience, of being a fully conscious, alert, and focused human" (p. 7), thereby setting the stage for ascent to complexity of consciousness through seven revolutions, concluding with a discussion on the inevitable emergence of capitalism with proponents protected by armed forces and the formation of social class structure which limits accessibility of privileged consciousness to those with the right status (e.g., via skin tone, financial means, and educational opportunities).

The book is organized into Edelman's introduction, two sections, an interlude, and an epilogue. Section I, "The Human Condition," comprises the first five chapters. Chapter 1 defines essential consciousness as the ability to differentiate self from other and move away from potentially threatening objects in order to survive, an operational definition met by even simple organisms. The foundation is then laid for the rest of the text to describe how the mind is necessarily, indirectly, supported by the brain whose processes are calculated by algorithms, like comparing the risk of getting spiked by thorny berry bushes against the need to eat. Chapter 2

details a slightly higher level of consciousness where cause and effect become understood, both in the present and when analyzing the past, leading to learning and blame. In chapter 3, self-monitoring, agency, and free will are tied to one's ability to make accurate predictions and to the emotional response of the system (of self) when errors are made. Chapter 4 characterizes the development of language as a tool for consciousness that works almost like "magic"—extending influence and power over (even distant) others. Chapter 5 covers the self in relation to society, formation of morals, and how privilege allows for consciousness.

Section II, "The Roads to Freedom," moves us into higher levels of consciousness where social constructs are now an integral part of the conscious experience. Chapter 6 describes the balance of self and others and some options on getting help. Finally, chapter 7 is a rather depressing narrative on the inevitable ascent of capitalism, a societal system marred by oppression and injustice, concluding with a message of cautious hope.

Most chapters are densely written and probably best understood by those with expertise from microbiology, neuroscience, and cognitive psychology in the early chapters and philosophy, political science, and economics in the later chapters. Lack of knowledge in one or more areas may leave a reader confused (especially in chap. 3) and disrupt one's climb to the Epilogue. However, aids to the reader include quotes from Buddhist monks, Catholic saints, current philosophers, and storytellers, with additional notes in the columns to define or summarize content. Moreover, each chapter is followed by extensive endnotes with references.

Edelman's writing reminds one of a mix between Vonnegut and a science fiction novel with a strong dash of political perspective/economic theory and a spoonful of cognitive psychology and neuroscience. His writing is entertaining and interesting. He uses numerous cognitive constructs woven together to describe the building blocks of consciousness, from essential consciousness in an amoeba up to the privileged consciousness of capitalist societies. If one reads with this in mind, they might appreciate the novel take on consciousness, the comprehensive tie-in of relevant (and tangential) literature, and witty humor.

Two overarching themes bear mentioning. One involves an organism being a system that makes predictions where the feedback should hold no surprises if it is "inherently good." The organism's dilemma is in trying to plan its actions based upon how the world will respond to it, a logical impasse, dealt with by feeling that the self is in control.

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Unfortunately, this also makes the self automatically the bearer of all responsibility for everything that comes out of its host's actions—a side effect of being self-aware that really helps learning, at the cost of condemning a conscious being to anxiety and suffering. (p. 4)

This comment is made in the book's introduction and carried through to the end as the inevitable demise of society — a system run by the richest and most privileged who are seemingly imperious to the plight of those with less privilege.

A second theme is one of consciousness revolutions in an ascent toward the complexity and perils of being human in community. Each revolution has its own chapter. This is evident in the description of book sections and chapters (above), beginning with the amoeba's essential consciousness and ending in the highly complex consciousness of humans in community.

One main point of the book is that true consciousness is defined by being at a level where one does not have to worry about freedom, politics, or the economy. Thus, a person needs to have enough resources (e.g., financial means) to just focus on self, family, and science. "Being, or at least being well-off, does after all determine consciousness" (p. 128). This indicates, then, that one must be of privilege to experience consciousness, in its current iteration. Thus, the inevitable evolution of societies into a capitalist structure, with overlooked and underprivileged classes of individuals, means an unequal ability for multitudes of people to experience "consciousness" – at least, until another consciousness revolution occurs. Edelman declines to elaborate on the next revolution but implies, with careful optimism, a transformation of the freedom that arises from privilege into true freedom for all humans, with a decline in materialism/capitalism.

Edelman's proposal for evidence of consciousness detours away from how it is defined in the cognitive domain by being both too simplistic and broad. In the cognitive literature, processes linked to consciousness must reveal knowledge of a person, place, and time specific to an event. It would certainly be difficult to find evidence of this in the behavior of amoebas, but humans are generally able to show it, regardless of social class (with the latter point contradicting Edelman's later revolutions). Language is another defining feature of conscious cognitive process, a requirement met in chapter 4, but not met in earlier chapters and not enough to meet the requirement for consciousness in later chapters. Since Edelman defines consciousness in many different layers of complexity, it ends up feeling like a moving

target and many definitions. This complicates empirical evaluation and comparison with existing cognitive theories of consciousness.

In relating Edelman's ideas to those of Christian theology, some Christian theologians assume that conscious cognitive processes are what set us apart from animals and are part of being made "in His image." For some theorists this includes not being so reactive to emotions. Arguably, though, the incorporation of those emotions into the decision-making processes may lead to poor decision making. Yet, the current focus on mindfulness encourages us to dig into our emotions and become aware of them. Moving into a state of flow, a state considered to be quite positive and an optimal experience, requires unhooking from the planning and coordinating and relying on our bodies to do what they know how to do; this would seem to be a more animalistic, unconscious state.

Edelman describes the inevitable fall of society into a money-prioritized capitalistic structure where only the elite are able to experience consciousness. This implies a lack of choice in this fate, and certainly a lack of a loving God providing oversight. It contradicts that reliance upon God might be easier for those of less means as their needs prevent them from falling into the fallacy that they do not need a God. In fact, it could be argued that it is harder for the elite to rely on God, just as it is hard for a camel to travel through the eye of a needle, as they may assume a false sense of control and, therefore, fail to recognize that they need God. If the marginalized classes have an easier time relying upon God and, therefore, experiencing him more fully, aren't they the ones more likely to experience heightened consciousness?

The book is reasonably priced and enjoyable. I often found myself smiling while I read, highlighting insightful passages for later reference, including those in the interlude. Thus, I recommend this book. Just make sure you have had your coffee first.

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Social Studies of Science

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EQUITY FOR WOMEN IN SCIENCE: Dismantling Systemic Barriers to Advancement by Cassidy R. Sugimoto and Vincent Larivière. Cambridge, MA: Harvard University Press, 2023. 256 pages. Hardcover; \$35.00. ISBN: 9780674919297.