A Self Divided
A Review of *Self and Consciousness: Multiple Perspectives*
Frank S. Kessel, Pamela M. Cole, and Dale L. Johnson (Eds.)

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1. Introduction

1.1. Though published in 1992, this book contains essays written and presented at a symposium at the University of Houston in 1983. Two points stand out in this book: (1) little has changed theoretically in the intervening decade, and (2) the contributors all agree that there is no such thing as a unified self. The former point is particularly interesting, since the impression that I have had at least regarding advancements in the cognitive sciences is that change is rapid and constant. The latter point is interesting theoretically, since the contributors come from radically different backgrounds with radically different points of view.

1.2. Because of the different theoretical takes, this book will probably seem a bit uneven. I can practically guarantee that it will seem that at least one of the essays will have missed the boat. (Which essay that is will depend upon your own idiosyncratic biases.)
Nevertheless, the book is worth checking out, for all of the essays present their visions clearly and all of the visions can be found in mainstream cognitive science today.

1.3. Notwithstanding the common theme of a divided self, each of the essays works independently of one another. Hence, in this review, I shall just run through the six essays individually, focusing on discussions of consciousness. Keep in mind though that I too have my biases and leanings. Indeed I have quite strong beliefs regarding how a science of the mind should be run. What these beliefs are will become apparent in the review, I am sure. For those who do not share my personal vision, I can only beg your indulgence.

2. Ulric Neisser's "The Development Of Consciousness And The Acquisition Of Skill"

2.1. As Neisser remarks in his retrospective preface, his chapter "presents an early version of a theory that has more recently undergone changes of both substance and emphasis" (p. 1). In many ways, I prefer this presentation of his ecological theory because it is simpler than later versions of his theory -- the basic structure of Neisser's theory is brought out in sharper relief. As a result, its power -- and its flaws -- are easier to discern.

2.2. Neisser divides the self into three developmental categories: the ecological self, the extended self, and the evaluated self. As infants become increasingly aware of their immediate environment and themselves as participants in that environment, they form an "ecological self." Later, as they are better able to anticipate future action, remember behaviors and events from the past, and imagine objects not currently present, they develop an "extended self." Finally, as they begin to perceive themselves as social agents, they develop an "evaluated self." Though aspects of consciousness are present in all three selves, I shall focus only on the consciousness of our ecological selves. (I can't help but interject here though that the article is mistitled. It is really about the three selves and consciousness in any guise only seems to appear as an afterthought.)

2.3. Neisser's ecological self owes much to Gibsonian psychology, which claims that we can receive information directly from the environment for our sensory organs are tuned to certain types of structural regularities. To perceive visually is to "[sample] from an array of optical information"(p. 3). These structural arrays are objective features of the world that exist regardless of whether anyone is "sampling" them and our perceptual systems have evolved over time to pick up information directly from the environment, and then use that information non-inferentially to orient oneself in space and to get feedback on our own actions.

2.4. Though surely there is something correct about the fit between our perceptual systems and various informationally rich structures in the environment, as well as our
abilities to use information non-cognitively to regulate our bodies physically, Gibsonian "affordances" have always struck me as being too extreme. Some processing has to go on to allow us to use environmental regularities as information. Indeed, given what we know about what happens just between the retina and the retinal ganglia, not the mention the lateral geniculate nucleus, I think I am safe ground in asserting that quite a lot of sophisticated processing goes on. What I take to be interesting about our ecological selves is that all of the processing happens non-cognitively, beyond our conceptual flow, as it were. In my opinion, much of this therefore happens nonconsciously.

2.5. Neisser though does not share my opinion. He postulates that we are conscious of all of our ecological selves (and postulates that with about as much argument as I have given for my contrary opinion). He calls this awareness "objective consciousness," and it is awareness, immediately given, of our bodies and their movements.

2.6. This, I think, just has things backwards. The beauty of our ecological selves, regardless of our quibble over whether anything can be "immediately" given, is that we aren't conscious of most of it at all. In the main, I am not aware of my body's position in space, unless it requires a major adjustment. I can chug along, making minute and delicate bodily adjustments in response to environmental impingements, and have my consciousness focused elsewhere (to speak metaphorically) on other matters -- writing this review, deciding what I am going to have for lunch, and so on. I don't have to worry about how my body is faring in all of this. I leave that business to my unconscious ecological self, for I can rest assured that it will let me (that is, conscious me) know if something is amiss and needs changing.

2.7. In sum, Neisser does not separate conscious processing from unconscious. As a result, he trivializes the notion of consciousness and ignores some well-established and well-respected divisions in psychology. Nevertheless, his concluding point is well taken. "Consciousness . . . is neither a fixed mechanism nor a single quality of mind" (p. 17). Unfortunately, he thinks that it is a compilation of everything, instead of being a bit more judicious in discerning when consciousness occurs.

3. Michael Lewis's "The Role Of The Self In Social Behaviour"

3.1. This essay concentrates on the emergence of the notion of self from a more traditional developmental approach. As Neisser did in the previous essay, Lewis fractured the self into component pieces: the existential self and the categorical self. The existential self captures our knowledge of ourselves as apart from others. It develops quite early and persists relatively unchanged throughout our lifetimes. The categorical self, on the other hand, develops later and changes are we continue to grow and mature. It refers to the ways in which we define ourselves in terms of categories found in the external world.

3.2. Lewis goes through various sorts of evidence for the development and differentiation
of the two types of self, dividing the maturational process into five phases from birth to three years as the infant moves from a reflex machine to an empathetic agent. As far as I can tell from the vantage point of 1995, there is little new or surprising presented here. Variations on the red-spot-on-the forehead-reflected-in-a-mirror were used, though some quite imaginatively (for example, red spots on videotaped selves).

3.3. Lewis then uses this developmental progression to argue that the developing self undergirds developing social behaviors and feelings; in particular, our relationships and interactions with one another, our emotions, and our ability to control our environment. Here some interesting facts emerge. For example, children who have not bonded well with their caretakers demonstrate self-referential behaviors earlier (i.e., their sense of existential self develops earlier) than more secure children. Lewis speculates that this occurs because the securely attached child has less need to differentiate itself from its mother. Insecure children have to become more self-sufficient earlier and hence need a strong sense of themselves in order to do so.

3.4. The development of our emotional behavior nicely follows the path of our development of self. The early primitive emotions of newborns (fear, joy, etc.) require no sense of self at all. The affective states that involve the self, such as embarrassment or shame, only are present after children can recognize themselves as themselves in a mirror (have an awareness of themselves as themselves).

3.5. Throughout Lewis argues that we need to understand the development of the self in order to understand our development socially. We are most successful in tasks when we can relate them in some way to ourselves. Presumably once we understand how our senses of self develop, then we will also know something about how self-consciousness -- or consciousness simpliciter -- develops. Unfortunately, Lewis does not discuss phenomenal awareness, so we are left only to speculate on the connection between our understanding of ourselves and how the world seems to us.

4. Ernest Keen's "Being Conscious Is Being-In-The-World"

4.1. As one of the early statements of a Heideggarian vision of cognitive science, I have to say that this essay disappoints. In fact, I found it to be the weakest in the collection (though perhaps this judgement merely reflects my biases). Keen argues that psychology is going to have to undergo a radical restructuring in order for conscious phenomena to be legitimate explananda. He believes this because he thinks the properties of consciousness are unlike any of those studied in any other science.

4.2. For example, Keen argues that our notion of temporality will have to change. Newtonian physics prescribes a unilinear flow of time -- the future does not influence the present or the past. However, our understanding of temporal relations is very different.
We anticipate the future and that anticipation affects our current behavior. As Keen explains, "I appropriate the future and the past, in anticipations and in memories, and through these appropriations I weave together a now that has a complexity and density vastly unlike that empty point on a Newtonian time line" (p. 47, italics his).

4.3. So much might be correct (given a sufficiently naive conception of the Newtonian universe). However, Keen takes his own metaphors too seriously. As a result, he claims things that are simply bizarre. To wit: "My future shapes my present... This violates our usual time frame" (p. 46). Of course, the future does no such thing. My beliefs about the future shape my beliefs and actions in the present. But that isn't strange or non-Newtonian. Or: "The future, then, is present; it is not merely a point yet to be traversed" (p. 47). Perhaps I am too steeped in conventional science, but that statement strikes me as just goofy.

4.4. Keen confuses belief statements -- that is, statements about people's opinion of the world -- with facts true about the world. And I remain unsure how our beliefs, imaginings, thoughts, and so on break with traditional science. My current beliefs occur now and my future ones occur later. They may refer to nonoccurrent states of affairs, but then so do the Sunday comics. And I don't need to rework science to understand them.

4.5. Keen does make the valuable point that our current conscious experiences are very complicated and that discussing a moment of consciousness might be wrongheaded. And how one should study something so complicated is a good question -- there are not any obvious joints to carve. However, his response to this point is simply untenable. As near as I can discern, Keen advocates some version of a dual-aspect theory; that is, we are composed of two fundamental and nonreducible aspects -- a mental and a physical -- but it is unclear what these things are, these "persons" that have these two aspects. Dual aspect theories went out of vogue in philosophy many years ago because hardheaded analytic-types couldn't make sense of them. I confess: I can't either, so perhaps I should leave well enough alone.

5. Catherine Lutz's "Culture And Consciousness: A Problem In The Anthropology Of Knowledge"

5.1. Lutz's paper provides a break from the more traditional approaches to understanding our selves and our consciousness, for she is interested in how our culture determines our perspective on ourselves in the first place, giving rise to the questions that the first three essays try to answer. She is interested in differences in "ethnopsychologies" (or, to philosophers, differences in "folk" psychologies) -- differences in cultural definitions of the self and awareness. She too divides the self, although along cultural, not psychological, lines.

5.2. Lutz argues that self-awareness is shared by all; however, how that awareness is
expressed varies across cultures. Our Western culture, with its "individualistic orientation" gives rise to a "sharply demarcated sense of self" (p. 68). Consequently, we view consciousness as primarily introspective. This contrasts with something like the Sufi Muslims of Java, who "conceptualize their insides as basically identical across all individuals and the soul as another entity altogether" (p. 82).

5.3. Similarly, a spatiotemporal orientation is another universal feature of consciousness. Again, though how that orientation is expressed can differ. Lutz describes the Ifaluk of Micronesia, who use a large number of directional terms frequently and are constantly aware of the compass direction they are facing. When a young Ifaluk took a trip to Hawaii, he lost that sense of direction, and as a result, became panicked. As he explained to Lutz, "I tried to keep track [of the taxi's directional changes], but soon I didn't know which way was east, which way was west" (p. 69). He is conscious of space in a way far different than I (who never know which direction I am facing, but am unperturbed by this).

5.4. Lutz turns her analysis inward, as it were, and examines the anthropological study of consciousness as a Western cultural endeavor. She notes that we think of ourselves as having a particular type of consciousness -- rational, linear, controlled, nonemotional trains of thought. This, of course, is just another cultural artifact. (We can contrast this view again with the Ifaluk. They are mainly interested in group coordination of goals and behavior. Thoughts per se are of little importance as long as the group acts as one. Indeed, they believe that it is dangerous to spend too much time simply thinking.) We think of ourselves as the objective scientists, merely observing and recording the phenomena of consciousness in the world. However, Lutz reminds us that our "academic disciplines do not so much release their practitioners from the cultural and historical assumptions in which they are immersed as provide a framework within which their cultural theories can be elaborated, refined, deepened, and very slowly altered" (p. 75).

5.5. I find little to disagree with in Lutz's conclusion that how we think about consciousness is determined in part by our cultural milieu (would anyone?). What I find most interesting and valuable though are her vignettes describing aspects of other cultures. I am struck by how steeped I am in my own culture and perspective, how foreign other cultures seem, and what an intellectual distance must be travelled to breach the gap. She too underscores (what I take to be) one of Keen's morals -- what to study when one intends to study consciousness is a nontrivial question.

6. Michael Gazzaniga's "Brain Modules And Belief Formation"

6.1. This is the best essay of the bunch, in my opinion, in part because it presents data that contradict what most take to be gospel today. As Gazzaniga remarks in his retrospective introduction, he "remains puzzled by [his] own findings" (p. 88) regarding
the generation of visual imagery in the brain. Current wisdom is that left hemisphere visual areas are involved crucially; Gazzaniga's data contra-indicate that. (Gazzaniga also uses his essay to argue that the brain is modularized [hence, no unified self], but I think that that point is well accepted today, so I shall leave it aside here.)

6.2. To summarize what should by now be fairly well known facts: split-brain patients are patients whose corpus callosum has been severed. As a result, the hemispheres of their brains can no longer communicate with one another. In coping with the unhappy result, these patients will confabulate wildly (via their language producing left hemisphere) to cover their ignorance of what the right hemisphere knows or is perceiving.

6.3. What Gazzaniga did discover using split-brain patients which is new are data that visual imagery processes are not contained in the visual areas, as one would think. Some callosal patients are tactically split but not visually split. These patients share visual information across hemispheres, but not information about what each hemisphere is touching. The left hemisphere cannot name what is placed in the left hand (out of sight). However, if would seem that if the patient were instructed to visualize what was in the left hand, then this information should be passed from one hemisphere to the other, and then perhaps, the patient could name what was being touched. But in case after case, Gazzaniga's laboratory was unable to demonstrate such a transfer, suggesting that "visual imagery, as it exists in humans, is not a property of the actual visual system, but is a computation taking place somewhere else, and remains disconnected from the processes of the other hemisphere" (p. 93).

6.4. Interesting! Not only is the brain modularized, but the boundaries for the modules aren't drawn where we think. It is difficult to imagine (or should I say "visualize"?) how these data should fit with more recent MRI evidence regarding the location of visual imagery. Perhaps what Gazzaniga's data point out is that language does not work as we think it does. Perhaps, if the MRI evidence is definitive and visual imagery is located in the visual areas, then the patients are visualizing as instructed. Instead, they are unable to vocalize what they see for some reason. Either way, this essay still points out some phenomena that want explaining and some inadequacies in the way we characterize the brain's modules as they pertain to conscious experiences.

7. Daniel Dennett's "The Self As A Center Of Narrative Gravity"

7.1. The final essay by Dennett is supposed to pull all the previous essays together. It doesn't. But it does give an easy-to-follow presentation of Dennett's analogy of the self as a center of gravity. For those unfamiliar with his idea, Dennett believes that the self is an artificial theoretical construction, just like our notion of the center of gravity. It aids in predicting one another's behavior, but it is an over-simplified fiction. There is no single self, just as there is no thing that is gravity's center for any object or set of objects.
7.2. I feel compelled to interject here that I don't see centers of gravity as any more fictionalized than any other scientific construct. Science is in the business of creating abstract pictures of the world and all of these pictures prune and distort and misrepresent to some degree or other -- hydrogen atoms, genes, selves, and centers of gravity included. But I suppose this is another story, and one that has already been told.

7.3. Dennett's larger point here strikes me as correct and fits well with the confabulation data in the previous essay -- we make up who we are and why we are doing what we are doing to a striking degree. Furthermore, if we haven't made something up explicitly in order to answer some query or other, then there usually isn't a fact to the matter. We are, as Dennett puts it, "autobiographical novelists" (p. 111).

7.4. Our brain modules are not well connected and the various modules paper over this disconnectedness by inventing information they need. Dennett sees a biological advantage in doing to, for it allows some cooperation among the disconnected units not possible before. (As long as we are spinning just-so stories though I would think that more connections among units would have been even better.) Regardless, Dennett argues that there is no self about which we can answer questions. Instead there are multiple self-lets about which we weave intriguing stories.

7.5. All in all, this book shows about as much unity as our selves do, but it is worth reading nonetheless. It discusses the self, and, to a lesser degree, consciousness, from many different perspectives. Though no common vision emerges, the set of articles do provide much food for thought, regardless of your prior orientation.