BOOKS: PSYCHOLOGY

We Don't Think the Way We Think We Think

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he cognitive revolution of the 1960s and 1970s brought psychology back from the dark ages of behaviorism to allow again the study of the mind.

Cognitive science, however, arising as it did in the hybridization of psychology and computer science, developed a paradigmatic set of assumptions and methods that emphasized certain aspects of mind and ignored others. Within this heritage, many of the most widely read books

about the mind have been written by physicists, engineers, mathematicians, and computer scientists.

Thus, it is a cheery surprise to see social psychologist Daniel Wegner step up with this new volume, bravely entitled The Illusion of Conscious Will. In bright, facile prose, Wegner walks us through an encyclopedia of research into intent, volition, agency, automatism, and the various dimensions and degrees of these concepts. From everyday events such as automatic behaviors and cognitive sharing among interdependent actors to unusual situations like hypnosis and séances, the will is shown to be obscure. As Wegner convinces us, in most cases its presence is inferred, and on shaky evidence. Many of Wegner's answers to questions about mind, self, and personal agency will surprise the reader. For some, it will be surprising to learn that there are answers to these kinds of questions.

A first (clearly intentional) provocation has to do with Wegner's use of the term "illusion" to describe conscious will. Our experience is that we really do will events to happen-does this Harvard researcher know something we don't? Well, yes, he does. For example, in an early chapter Wegner hunts for the location of will in the sequence of phenomena preceding and following an event that is perceived as volitional. Self-report studies, where the individual indicates his or her conscious intentions, converge with EEG studies that track the electrical potentials corresponding to volition and the start of the motor impulse. Neither approach consistently

shows will preceding the initiation of action in the expected way.

If we experience will after we have started the action, then conscious will might be

thought to comprise an explanation rather than a cause of the action. Attributing agency to ourselves and others helps fulfill expectations about what a human being does; it satisfies our theory of mind, and it contributes to our social and moral responsibility. But the attribution does not provide a satisfac-

tory scientific account of real cognitive processes. Wegner's examination of the research evidence provides an accounting that is more than satisfactory.

I do have two complaints about the book, though. The first concerns the validity of some of the concepts involved in Wegner's account. The author successfully shatters our confidence in will as a causal variable, by showing that the relation between thought and action is not what it seems. He makes the basic assertion that the illusion of conscious will occurs when a thought is ob-

served to precede an event in a particular way. Action itself is measurable, but what is a thought, exactly? Can you have just one of them? Can a thought be disentangled from its context? Can we observe our thoughts? Maybe not; here I am thinking of Wittgenstein's discussion that begins, "I can know what someone else is thinking, not what I am thinking." Having witnessed the demolition of conscious will, we wonder how thought would survive under the same kind of attack. Really, one only wishes for some secure, sound constructs upon which to build a nonillusory science of human agency.

There is also a need to place Wegner's conceptualization into the context of a larger theory. We might ask, for instance, why nature has evolved a highly

adaptive creature that walks around deluding itself all day. Has the illusion of will contributed to our survival as a species? Although we expect the answer to be affirmative, Wegner does not confront the question or others like it. His last chapter is devoted to theoretical musing, but his conclusions generally reflect on the usefulness of the illusion for the individual human being; we see will as an integrating mechanism for cognitive cohesiveness, for instance. Wegner notes the social aspect of conscious will but does not dwell extensively on it, even though it would appear the adaptiveness of conscious will derives from its function as a social medium. Because people experience will, they can be held socially accountable for their actions. Wegner points out that people do not control their lives in the way they think they do, but he never goes so far as to say what does control them. It seems only a short hop to another social-psychological hypothesis: that control lies in the perceived consensus of the social group—conscious will may be the fulcrum by which the social lever pries.

Will gives insights into Wegner's decades of diverse research: on thought suppression and its lapses; on transactive memory, where information is stored jointly among two or more people; on action projection, where we mistake the origin of a behavior; on ironic process, where we do the opposite of what we are trying to do; on the self as an action-identification system. All of it, we now understand, was a careful mapping of the wilderness of willful intent and agency. Wegner has long been investigating the zones where behavior may be intended and may be forced by the environment, where a memory may be in my head and may be in yours, or where the self contacts the world and it is impossible to say where one ends and the other begins. Hiding in all of them, he shows us, is the illusion of

For those who have followed his

career, The Illusion of Conscious

As psychologists grapple with new findings and new techniques and researchers seek to develop socially intelligent computational agents, it becomes ever more important for scientists to become disillusioned. Cognitive models should be informed by well-designed scientific research, not by common sense and introspection. The Illusion of Conscious Will is an excellent departure point for the development of understanding about how human cognition really works: We don't think the way we think we think.

conscious will.

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