Boundaries of the Mind: The Individual in the Fragile Sciences—Cognition

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It was a punchy paper by Andy Clark and David Chalmers (1998) that brought a cognitive scientific notion of externalism to the attention of philosophers. Prima facie, Clark and Chalmers posed a somewhat banal question: “Where does the mind stop and the rest of the world begin?” (p. 10). It was no surprise that their answer was deemed provocative by the journal’s philosophical audience. Six years on, Robert Wilson, in an allusion to the now classic status of the Clark and Chalmers paper, takes up the baton by asking: “Where does the mind begin and end?” (p. 3). It is clear from the subtitle of Wilson’s book that the scope of his question is extraordinarily more ambitious and forms the first installment of a trilogy (Wilson, 2004, 2006).

Wilson is the latest in a line of recent theorists, Clark probably being the best known, who can be loosely characterized as belonging to the extended cognition “movement.” Broadly speaking, the extended cognition view argues that cognitive performances—and to that extent, our minds—are distributed over shifting assemblies or “scaffolds” that include not only our bodies but also aspects of our physical and social contexts. On this view, the mark of advanced cognition depends upon our abilities to distribute reasoning: to diffuse achieved knowledge and practical wisdom through complex structures, reducing the load on individual brains by locating those brains in complex webs of linguistic, social, political and institutional constraints. The extended cognition view contrasts with the Cartesianism that informs traditional epistemology, which is highly individualistic, focusing on mental operations of cognitive agents in isolation or abstraction from other persons. Orthodox (monist) materialist-computationalism is also Cartesian inspired: there is a dualism implicit in the methodological supposition that cognition can be studied independently of any consideration of the brain, the body, and
the physical or social environment. And just as Chalmers urged science to take phenomenal consciousness seriously, so too Wilson urges that a science of the mind should be taking culture seriously: this might well require “thinking beyond the boundary of the individual not only in how we think of culture itself, but also in how we think of the mind” (p. 21). This then is Wilson’s expansive project.

The book is divided into four parts comprising twelve chapters. Part 1 considers the way the individual and the mind have been conceptualized in the philosophy of social science, psychology and the philosophy of mind. Parts 2–3, forming the core of the book, focuses on the debate between individualists and externalists within the philosophy of mind and computational cognitive science. Part 4 examines historical and current debates on the “group mind hypothesis.”

Part 1 deals primarily with the two key methodological notions in the title—fragility and individuality. Though Wilson is critical of the bipolar and perhaps parti pris distinctions of the “hard” versus “soft” sciences, the “physical” versus “social” sciences, he is not merely restating the Diltheyean distinction between Naturwissenschaft and Geisteswissenschaften. Neither is he subscribing to a vulgar scientism. The “fragility” of these so-called “human” sciences is not to be construed as being a pejorative appellation: they can be “easily broken, are often delicate and admirable in their own right . . . [T]hey are both strong and weak . . . their fragility lies both in their underlying physical bases and in how it is that we treat them” (p. 9). In considering the conceptualization of the individual across disciplines, Wilson takes inspiration from Foucault’s genealogical method—the idea being that the category of the individual is a contingent fact, a social construct, not a metaphysical necessity. The positing of individualism in psychology and in nativist (innateness) accounts of mind and cognition (Chomsky, Fodor, Pinker), has in Wilson’s view, incoherently abstracted the individual from a cultural milieu. This critique sets the scene for Wilson’s externalism.

Wilson’s discussion of the individualism–externalism debate (ch. 4–7) is the most technical part of the book. Alert to this, Wilson does make an effort to keep the uninitiated reader with him. It is worth pointing out that discussion of externalism has been central to recent epistemology—the idea is that an epistemologically normative state is partly determined by external factors and not knowable solely through introspection. Externalism in the philosophy of mind is, broadly speaking, the view that the content of a mental state is in part determined by elements of the external world, captured by Putnam’s famous slogan “Meaning just ain’t in the head.” By contrast, internalism or individualism, is the view that the content of mental states is determined by features of the conscious subject without recourse to environmental conditions. This somewhat broad characterization is in need of qualification: externalists do not claim that “Mental states are somewhere other than in the head, and individualists don’t think that what is outside the head has nothing to do with what ends up in the head” (p. 79). Wilson takes his cue from the Putnam-Burge arguments and Marr’s computational theory of vision, all grist for the mill of emphasizing the social aspect to mind. Putnam’s theory posits a causal-historical connection between thinker and world; Burge emphasizes the socio-linguistic
community practices; Marr’s importance, at least on Burge’s contested interpretation (an extended discussion takes place on pp. 150–197), turns on Marr’s references to the “real world,” the implication being that Marr’s theory is a species of extended cognition. A distinctive feature of Wilson’s externalism rests on his notion of realization. Typically, realization involves the theses of physicalism (all properties are realized by physical properties) and multiple realizability (disparate sets of physical properties can realize the same mental properties). Wilson is of the view that, “At least some states and properties, including mental states and properties, have realizers that extend beyond the individual instantiating them” (p. 107). How else can one explain social actions such as the writing of a check? Surely, the realization of the action, the holding of the pen and writing on paper, are inextricably linked to background conditions “for there to be a functioning system that realizes an individual’s properties” (p. 132). Hence Wilson’s “context sensitive” alternative formulation:

\[ A \text{ possesses psychological property (state, process, disposition) } P \text{ just if } A \text{ either physically contains an entity-bounded system or systems, or is part of a wide system or systems, that realize the processes that generate or physically constitute } P. \] (p. 289)

It is clear that this formulation is still very much a physicalist formulation but might require “either giving up or revising several strands to physicalist thought” (pp. 118, 120).

Despite Wilson falling squarely within the extended cognition movement, in Part 3 he does not encourage the wholesale dismissal of representational theories of mind. He suggests that they need to be reconceptualized: the symbolic nature of cognition cannot be dispensed with but, “Far from being purely internal, are either enactive bodily capacities, or world-involving capacities” (p. 188). Wilson goes on to say that “these capacities are not realized by some internal arrangement of the brain . . . but by embodied states of the whole person, or by the wide system that includes (parts of) the brain as a proper part” (p. 188). The moral I take from these excerpts and Wilson’s slogan (“not to examine what’s in the brain but what the brain is in,” pp. 212, 220) is that there is a reciprocal relation between our conceptual creativity and the environment, allowing nature and the ambient social soup to intimate, regulate and inform concepts.

In Part 4, Wilson reflects upon what he terms the “group mind hypothesis.” Wilson seeks to mediate radical Cartesian individualism and some notion of an implausible Hegelian hypostasized supra-individual social consciousness. For Wilson much of the group-mind hypothesis can be expressed within an externalist theory of mind: “group consciousness talk” can for the most part be recast as “an aspect of the consciousness of individuals” (p. 290). Wilson’s introduces his social manifestation thesis, which allows that individuals have a disposition to reflect some psychological states only when they form part of a social group (p. 299). If for Wilson “The minds that individuals have are already the minds of individuals in groups” (pp. 142, 265, 307), then I can’t see this as being incompatible with the methodological individualist
arguing that to ascribe judgments, intentions, and the like to social groups is just a shorthand ascription to the individuals that comprise the relevant groups. But unlike individualists, Wilson does not entertain the idea that only singular entities can constitute intentional subjects. It is Wilson’s view that if individuals can possess minimal minds, then so too can groups (p. 293). Yet, rather than being taken as a literalist Wilson proffers the group hypothesis as being a “cognitive metaphor” (p. 266). There seems to be a tension here. Rupert (2005, pp. 185–186, note 4) suggests that because there is a profound disanalogy between group systems and conscious minds, Wilson’s attribution of ersatz mentality or cognition to plural subjects cannot meet current standards of ontological inference.

The idea that cognitive phenomena have some group aspect has had a long multidisciplinary history—Solomon (in press) offers a seven-part categorization that gives a very useful organizing principle to the diverse literature. Wilson observes that much of the literature concerning group psychology is best understood as making claims about the role of groups in regulating, developing or inhibiting individual minds. There is also a body of sociopolitical literature that has invoked cognitive notions. These theorists tend to be interested in beliefs of agents or groups of agents, irrespective of their epistemic properties: “social factors” refer to interests or predilections linked to class, politics, societal movements or institutional structures. Sociology of scientific knowledge (SSK) theorists are, e.g., of the view that there is no intrinsic epistemic relation to the scientific matter at hand. Wilson cites with approval both Kuhn, and his progenitor Ludwig Fleck—heroes to the SSK community. Wilson in his endorsement of the SSK movement, together with his earlier Foucaultian constructionist sympathies, is surely out of tune with the brand of methodological naturalism I took him to be recommending in the first section of his book. If cognition is by definition social, then a robust theory of cognition would need to supply an epistemological component, examining the transmission and distribution of knowledge (or error) across the larger social cluster. Granted that the traditional epistemological formulation, justified true belief, requires an added social dimension, I don’t see why Wilson would choose an SSK-like theory over an externalist epistemology that has the individual as the locus of cognition. After all, Wilson repeatedly says that the individual as the locus of cognition is a methodological virtue, consonant with his brand of externalism. Like Clark and Chalmers, Wilson has deferred the pressing implications of the extended cognition hypothesis on the very nature of personhood—implications of metaphysical and moral import.

Few, if any, are better placed than Wilson to so deftly and reliably assimilate a voluminous and technical literature across the diverse disciplines of cognitive science, the philosophy of science and biology, the philosophy of mind and the philosophy of psychology, and if he turns his mind to it, normative social epistemology (Wilson, 1999; Wilson & Keil, 1999). No philosopher of social science can afford to ignore this book: this well informed, detailed and up-to-date discussion is virtually a self-contained course in the philosophy of social science and is more finessed and textured than other recent attempts to take account of the confluence between social
science and cognitive science. Readers—be they novice or seasoned—will find Wilson’s style engaging, his excitement palpable. Unfortunately, the critical literature, particularly of the extended mind hypothesis, has on the whole, been rather uneven. Only now is a sustained critical evaluation beginning to emerge (Rupert, 2004, 2005; Schantz, 2004). If anyone were able to offer a robust theory of the relationship between the individual and the ambient socio-cultural scaffolding in all its dimensionality, it is Wilson. Thus, this writer for one eagerly anticipates the final installment to this trilogy.

References


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Anti-Individualism and Knowledge

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Anti-Individualism and Knowledge is an exceptionally good book. Jessica Brown defends a precise and interesting account of how our thoughts relate to the world by exploring the logical implications of anti-individualism. In the course of her