

BOOK REVIEWS

Trusting the Subject (Vols. 1 and 2) by Anthony Jack and Andreas Roepstorff. Exter, UK: Imprint Academic, 2003 (Vol. 1), 2004 (Vol. 2). xx + 186 pp. (Vol. 1), xxii + 198 pp. (Vol. 2). \$29.90 each volume (paper). ISBN 0-907845-568 (Vol. 1) and 0-907854-568 X (Vol. 2).¹

This two-volume set is the book version of two issues of the *Journal of Consciousness Studies* devoted to introspection; the title is a game of words, where "subject" refers both to the subjects used in research and to the subject of introspection. A detailed review of 24 different chapters and two introductions by the editors would be too long and tedious for most readers, so I will focus instead on some common themes across various papers. One strength of this anthology is its multidisciplinary approach, with works by eminent psychologists, philosophers, and neuroscientists. Besides its focus on introspection, *Trusting the Subject* can also serve as a good introduction to current research on consciousness, although predictably the quality and depth of the contributions vary.

The editors introduce the volume with a good overview of many of the debates on introspection, calling for multiple methods to supplement but not replace it (i.e., *triangulation*; Jack & Roepstorff, 2003). An important issue mentioned by almost every author is that introspection is a very complex concept, subsuming different processes and practices. The typical account that *introspectionism* was tried early in the history of psychology and failed as a method disregards a far more complicated situation in which different types of introspection were used, and it is by no means clear that introspection was an invalid or unreliable method, despite what psychology students are typically told (Goldman, 2004; Hurlburt & Heavey, 2004). Prinz's contribution (2004) elucidates how the term encompasses different types of awareness (e.g., non-verbal or verbal; primary or reflexive), and it might refer to many distinct mental processes, such as reports about perceptual experiences, subjective states, various forms of memory, and so on. Prinz cautions against assuming that these different types necessarily share "a common essence between them" (p. 55).

Another major topic is whether introspective reports should be obtained from "naïve" participants or from those who have had extensive training in introspecting and reporting on their mental occurrences. On the one hand, we educate people in all fields to provide "expert" observations instead of "untrained" ones; on the other, asking people to observe their mental events might affect them, a psychological analogue to Heisenberg's uncertainty principle, if you will. Schwitzgebel's paper (2004) shows how the attempts by Titchener to provide exhaustive introspective training in the early 20th century did not provide unambiguous results, although part of the blame could be placed on the structuralists' notion that conscious experience could be decomposed the same way as a chemical substance. In contrast, the ambitious and philosophically

sophisticated proposal of *neurophenomenology* (Lutz & Thompson, 2003) requires training in a phenomenological attitude towards attention and communication of mental occurrences, but framed within a model of research that includes behavioral and neural triangulation of data. Lutz and Thompson provide an exemplary study showing that trusting their participants' reports helped make sense of EEG data by differentiating their mental strategies. Gallagher (2003) makes the similar point that introspective reports can be used to design experiments. Other responses to such problems in introspection as reactivity, memory failures, and so on include the very important work of Ericsson (2003; Ericsson & Simon, 1980) on thinking out loud as people work on problems and Hurlburt and Heavys' (2004) use of experience sampling, where people are "beeped" at random times and asked to report the content of their consciousness just before the probe. This method has an ecological validity that is rarely seen in psychological research and has been used by Hurlburt to map the experience of "normal" and "schizophrenic" people (for its use on research with *Vipassana* meditators engaged in development of their metacognition, see Easterlin & Cardeña, 1998–99). Schooler and Schreiber (2004) discuss how the validity and reliability of introspective reports depend on the specific phenomenon studied and can be established by looking at how they covary with behavioral and physiological indices. They also provide fascinating data on how sometimes introspecting can be harmful to memory consolidation (e.g., when asking a subject to describe complex objects such as faces) and how participants' minds wander in the midst of various tasks. Rather than just providing arguments, they show in what circumstances introspection is and is not helpful in the description of mental occurrences, a proposal that is similar to that of Goldman (2004), who argues for "wary acceptance" of introspective reports, unless there are good reasons (empirical or theoretical) to question them. Piccinini (2003) builds a case for testing the validity of introspective reports, in a similar way to the common sense evaluation of reports but formalized for the purpose of science (and what is the scientific method in general but the formalization and systematization of common sense evaluation of biases and competing explanations?).

An important limitation of introspective reports is that individuals do not necessarily have access to the cognitive processes underlying their beliefs, decisions, and so on. A very influential paper by Nisbett and Wilson (1977) purported that "The accuracy of subjective reports is so poor ... (and) not sufficient to produce generally correct or reliable reports" (p. 233). This damning conclusion was questioned early on by Smith and Miller (1978), who indicated that the research question was not whether people have accurate access to their mental process, but under what conditions they have such access (see also Overgaard & Sørensen, 2004). Wilson (2003) now considerably softens his original conclusion and also discusses how many uncontroversial areas in psychology, such as the study of perception or attitude, are founded on introspective reports. He also makes a strong case for a dual system of human cognition involving both conscious and non-conscious processes.

Baars (2003), a long-time champion of consciousness studies, provides

fascinating examples of how conscious reports and cognitive and neurophysiological measures can provide clear answers to many issues, such as the nature of imagery, whereas Marcel (2003) elegantly discusses conscious and non-conscious processes, integrating both experimental and clinical phenomena, such as Anton's syndrome, in which blind individuals confabulate that they can still see. Cytowic (2003), an expert in synaesthesia, emphasizes his area and other clinical phenomena and concludes that sometimes a clinician must trust a patient's report, but not literally. Besides the works mentioned, a number of chapters focus conceptually and empirically on different explanations for autism (Hill, Sally, & Frith, 2004; Robbins, 2004; Zahavi & Parnas, 2003); the experience of control and agency (Haggard & Johnson, 2003; Hohwy & Frith, 2004; Nahmias et al., 2004); and visual (Leopold, Maier, & Logothetis, 2003) or taste (Snyder, Fast, & Bartoshuk, 2004) perception.

Despite the many fascinating contributions in these two volumes, there are also some problems. Some contributors seem to share the same historic amnesia as the field of consciousness in general and assume that the "science of consciousness" is a very recent endeavor, thus disregarding decades of important theoretical and empirical work on, among other topics, introspection (e.g., Natsoulas, 1981), states of consciousness (e.g., Tart, 1975), and the reliability of trained introspective reports (e.g., Siegel & West, 1975). There is also almost no mention of introspective research on states of consciousness, despite considerable work in this area and the fact that without introspective reports the theme would be incoherent (Pekala & Cardeña, 2000). I also missed the perspective of someone like Allan Wallace (e.g., Wallace & Shapiro, 2006), an expert meditator who can comfortably present this perspective from both an experiential and an academic perspective.

In my opinion, too many pages were dedicated to a refutation of Dennett's heterophenomenology, his "phenomenology of another not oneself" (Dennett, 2003: 19), to which the dictum that "what is new is not good, and what is good is not new" may apply. What may be considered new is Dennett's notion that the contents of consciousness should be considered as just beliefs, which clashes against the actual data that our conscious experiences are not just beliefs (the "indisputable fact," according to Schooler and Schreiber, 2004). And what is good of Dennett's stance is that any phenomenological report could be misleading and thus may require additional forms of corroborative evidence. However, besides the fact that all forms of evidence, introspective or not, may be misleading and are subject to corroboration, this insight about introspective reports is not at all new and is "nothing other than good scientific practice," as Gallagher points out (2003: 90). Goldman (2004: 11) also shows how Dennett misrepresents actual research (in this case the work on mental rotation), and Schooler and Schreiber (2004) even quote Dennett warning others not to use specific quotes of his own work!

On the editorial side, these volumes show their provenance as journal issues. There is no index, the papers are not integrated by obvious topics (e.g., work on autism), and it is bizarre to have a summary of the contributions for the first volume at the beginning of the second one (Roepstorff & Jack, 2004). Also, some

contributions are regular research reports rather than comprehensive surveys of an area, and there are more typos (including authors' names in the table of contents!) than should be acceptable in a work of this caliber. I hope that in future reprints the editors will really make this more of a book rather than two related journal issues. Despite all of that, the volumes are chock-full of interesting and important discussions and data on current work on conscious and unconscious processes, and they affirm that one can trust introspection as much (or as little) as other sources of scientific knowledge, behaviorists and Dennett notwithstanding . . .

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