Review of Francesca Bordogna, *William James at the Boundaries: Philosophy, Science, and the Geography of Knowledge.* University of Chicago Press. 2008. 392 pages. Cloth \$39.00 ISBN: 9780226066523

For: British Journal for the History of Science

Jacob Stegenga Aug 21, 2009

After giving a talk in Harvard's Emerson Hall, I was asked how my interdisciplinary paper was a proper project for philosophy. The question struck me as ironic – after all, Emerson Hall was the home of both the philosophy department and psychology laboratories in the final years of Williams James's eclectic, discipline-crossing career. Chapter One of Francesca Bordogna's *William James at the Boundaries* argues that Emerson Hall, located in a "quiet central spot of the Harvard yard", is the metaphorical site of the book's main argument: that James purposefully trespassed the boundaries between amateur and professional science, between mainstream psychology and parapsychology, and between empirical psychology and introspective philosophy.

Though Chapter Two is titled "Philosophy versus the Naturalistic Science of Man", it argues that for James, the two approaches to knowledge – introspection and experimentation – are not opposed to each other. Philosophy and psychology need each other; in James's words: "no mode of thinking is *against* any other" (69; all italics in original). James was at pains to show that experimental psychology depended on philosophy. Bordogna gives as an example James's review of a book by the neurophysiologist David Ferrier, who was stimulating and destroying certain

parts of animal brains and observing associated changes in muscular activity. In monkeys, "electric stimulation of certain areas of the brain cortex *induced* muscular contractions in certain parts of the body" (Bordogna 72), while destruction of those areas inhibited the associated motions. The stimulation effects were observed in dogs, but the inhibition effects were not; sometimes the destruction of the particular cortical areas in dogs even led to better control of the associated muscle. Ferrier's explanation of this was that muscular activity in monkeys "could only be performed under the direct control of the will" but in dogs "the same movements could also occur in an automatic way" (73). In James's review, he noted that Ferrier's explanation relied on "an appeal to introspective *philosophy*" (73).

Psychical research is the detailed illustration of the superb third chapter, which aims to "explore the interconnection between the epistemological, the moral, and the social in James's scientific research" (93). Bordogna argues that James had a dual interest in such work: to study the complications of the mind, and to challenge the rigid boundary between mainstream science and amateur research of the abnormal. One objection to reports of psychic phenomena was that the probability that witnesses of the phenomena were dishonest was higher than the probability that the phenomena really occurred. The "faggot" argument, due to James's friend Edmund Gurney, was meant to counter this objection. A faggot is a bundle of woven sticks – the eponymous argument is that as more independent witnesses observe a phenomena, the probability that they all cheated decreases to below the probability that the phenomena were real. (Readers might recognize this as a robustness

argument.) This chapter describes disputants' attitudes towards such an argument. James thought it "carried heavy weight" (121): the "various fragments of evidence" regarding a psychic phenomenon "resembled the recording of a multivocal performance"; he agreed that "weak sticks make strong faggots" (133). In response, a critic argued that "when we have an enormous number of cases, and cannot find among them all a single one that is quite conclusive, the very number of cases may be interpreted as an index of the weakness of the evidence" (121). However, even when diverse evidence is discordant, "James famously concluded that ... it was permissible to accept a belief in the absence of sufficient evidence" (117). In his 1988 paper on psychical research of the same period, Ian Hacking argued that the experimental innovation of randomization raised the quality of psychical research, which led to the debunking of psychical claims. Bordogna does not cite this, but the tension between the evidential force of all available evidence versus the evidential force of only the *best* available evidence would make for an interesting discussion: when faggots of evidence and gold-standard evidence contradict each other, which should we believe?

The tension between descriptive and normative approaches to philosophy is one of the boundaries that James negotiated throughout his career. Chapter Four and Five describe the controversy about the emerging American pragmatism "as a clash between two different visions of the future of philosophy as a discipline" (139). Competing theories of truth – logical and psychological; normative and descriptive – illustrate the two visions of philosophy. The descriptive approach emphasized the

physiological and psychological aspects of human cognition. For example, psychologists were interested in the feelings that agreement or disagreement between ideas produced: "in harmony or discord itself there is something immediately satisfying or painful" (150). Philosophical critics claimed that psychological processes are distinct from the logic of truth; the former was merely 'psychologism', and philosophers should only be concerned with analysis of what truth is, and how truth can be reliably obtained. But what Bordogna calls "embodied truth" and the "psychology of truth" were important avenues of research for James's pragmatism.

The porous boundaries of the self, rather than of disciplines, is the subject of Chapter Six. Bordogna argues that James's view of the fragmented self "was instrumental to rooting the self in community and to promoting new kinds of human relationships" (208). A fascinating discussion of 'trees of knowledge' – diagrams of the relations between disciplines – comprises Chapter Seven. Such visual classifications of knowledge, which go back at least to Bacon (and probably Aristotle), are meant to help unify disparate disciplines, but are also used as power plays in disciplinary politics. Some of James's colleagues placed philosophy at the top of their trees (or centres of the circles). James would have none of that. In Bordogna's words, philosophy for James was "a form of mediation between diverse modes of inquiry" (245).

Bordogna masterfully meets a self-reflexive challenge: she writes about an important figure in the history of philosophy and psychology who purposefully blurred boundaries, from the perspectives of a historian of philosophy, a historian of science, and a philosopher of science. Bordogna herself bridges disciplinary boundaries. However, she commits occasional disciplinary vices. For example, she has the philosopher's habit of not indicating publication dates of quoted passages; you might think that at least the footnotes would tell you these dates, but no: one must first flip to the footnotes, and then to the bibliography, of which there are three: for James, for other primary sources, and for secondary literature. Trifles aside, this is an excellent book. I recommend it to historians of psychology and parapsychology, historians of fin de siècle philosophy, and those interested in the history of philosophy of science. The chapters which I recommend to philosophers – on evidence (Ch. 3), on psychologism (Ch. 5), and on the self (Ch. 6) – are excellent, but are available as previously published articles.