Studies in History and Philosophy of Biological and Biomedical Sciences 48 (2014) 67–74

Contents lists available at ScienceDirect

Studies in History and Philosophy of Biological and Biomedical Sciences

journal homepage: www.elsevier.com/locate/shpsc

# Was Sir William Crookes epistemically virtuous?

Ian James Kidd

*Department of Philosophy, Durham University, 50 Old Elvet, Durham, County Durham DH1 3HN, United Kingdom*

ARTICLE INFO

*Article history:*
Available online 2 August 2014

*Keywords:*
Sir William Crookes
Epistemic virtues
Psychical research
Spiritualism
Virtue epistemology

ABSTRACT

The aim of this paper is to use Sir William Crookes' researches into psychical phenomena as a sustained case study of the role of epistemic virtues within scientific enquiry. Despite growing interest in virtues in science, there are few integrated historical and philosophical studies, and even fewer studies focussing on controversial or 'fringe' sciences where, one might suppose, certain epistemic virtues (like open-mindedness and tolerance) may be subjected to sterner tests. Using the virtue of epistemic courage as my focus, it emerges that Crookes' psychical researches were indeed epistemically courageous, but that this judgment must be grounded in sensitivity to the motivational complexity and context-sensitivity of the exercise of epistemic virtues. The paper then considers Crookes' remarks on the relationship between epistemic virtuousness and the intellectual integrity and public duties of scientists, thereby placing epistemic virtues in the context of wider debates about the authority of science in late modern societies. I conclude that Crookes' researches into psychical phenomena offer instructive lessons for historians of science and virtue epistemologists concerning the complexity and contextuality of epistemic virtues, and the profitable forms that future studies of virtues in science could take.





## 1. Introduction

The last twenty years has seen a growing interest in the role of epistemic virtues in scientific enquiry from two distinct constituencies. The first is the history of science, several of whose distinguished practitioners have begun to explore the ways in which foundational epistemic concepts, like objectivity, can be understood in terms of changing conceptions of 'the scientific self', images of the idealized enquirer grounded in distinctive sets of virtues.[1] Another good example is the efforts, by Steven Shapin, to identify the different 'personae' that natural philosophers—and, later, scientists—have operated with: the humble Godly Naturalist, say, or the diligent Civil Expert. Each reflects a different possible form that the 'scientific life' can take, hence Shapin's description of his project as a 'moral history'.[2] But though these historical and sociological studies have provided us with contextually rich accounts of these changing conceptions of the characters and contexts of scientific enquiry, they tend not to provide the carefully articulated accounts of the structure and psychology of the virtues in questions that one might rightly expect the philosophers to demand.

The second constituency interested in epistemic virtues in science is the flourishing community of virtue epistemologists.[3] It is their ambition to provide sophisticated accounts of the ontology and psychology of the epistemic virtues, and to describe their various roles in our epistemic activities. Since the sciences represent some of the most sophisticated and cognitively and culturally authoritative forms of epistemic activities in late modern societies, it is unsurprising that virtue epistemologists tend to turn to those sciences for illustration and inspiration, reflecting the conviction that a focus on 'ordinary practitioners of science' can teach us much about epistemic virtue and vice (Roberts & Wood, 2007, p. 8). But although these virtue epistemologists do provide the sophisticated accounts of the ontology and psychology of the epistemic virtues,

*E-mail address:* i.j.kidd@durham.ac.uk.

[1] See Daston & Galison (2007).

[2] See Shapin (2008a, 2008b).

[3] See, for instance, Roberts & Wood (2007) and Baehr (2011).

http://dx.doi.org/10.1016/j.shpsc.2014.06.004
1369-8486/

their case studies—which have included Jane Goodall's ethology and the discovery of the structure of DNA—might not satisfy the demands of historians for fine-grained contextual detail.[4]

It is clear that both historians of science and virtue epistemologists share a common interest in virtues in science, but that the results of their enquiries are, taken independently, incomplete in certain respects. The historians offer detailed accounts of the history and contexts of the virtues' development, whereas the epistemologists offer careful accounts of their ontology and psychology. That being so, the members of those two currently isolated constituencies ought to cooperate to provide 'integrated' historical and philosophical accounts of epistemic virtues in scientific enquiry. With that context in place, the aim of this paper is to address two related questions. The first is that of whether Sir William Crookes epistemically virtuous—in a sense to be outlined later in the paper—and the second is the broader question of what a case study of Crookes' virtues might teach us about studying epistemic virtues in science.

## 2. Why Crookes and why 'spooks'?

The focus on Crookes is justified on three grounds. The first is that Crookes is an eminent figure in the history of psychical research, in honour of his distinguished investigations into spiritualistic and psychical phenomena during the early 1870s.[5] The second is that there are certain features of Crookes' character and social and professional situation that (as I argue in later sections) are especially relevant to our understanding of the contextuality and complexity of epistemic virtues. The third is that Crookes makes explicit remarks on epistemic virtues—as we would dub them—in relation to the intellectual integrity and public duties of scientists. Although these three points are hardly unique to Crookes, they do mark him out as a very apt subject, and the question of how other psychical researchers might fare on a virtue-epistemic analysis can be left for another time.

The focus on psychical research is justified on two grounds. The first is that most virtue epistemological appeal to the history of science has focused on what one might call *conventional* rather than *controversial* science.[6] Most virtue epistemologists tend to turn to established and orthodox sciences—like physics and biology—rather than to those nascent, heterodox sciences like psychical research; although understandable, the neglect of controversial sciences arguably deprives us of important insights into the range and role of the epistemic virtues. The virtues of epistemic courage and epistemic humility, say, may be subjected to sterner tests when exercised in epistemic contexts marked by contestation and controversy, like mid-Victorian British psychical research. The second reason to consider 'psychics' is the more general point that the psychical researchers tended to talk a lot about epistemic virtue (though not, of course, in those terms). To offer just one example, W. F. Prince, author of *The Enchanted Boundary*—subtitled 'a survey of negative reactions to claims of psychic phenomena'—often discusses the 'qualities' that 'define an astute psychic researcher': these include a 'fair and open-minded spirit' and an 'impartial scientific curiosity', to be contrasted with the 'dogmatism and prejudice' of their reactionary critics (Prince, 1930, pp. 32 and 62). The general idea is that the demands placed upon epistemic virtues depend upon the contexts in which they are exercised, and that the contested and heterodox status of late Victorian psychical research provides illustrative cases of this phenomenon.

Crookes' researches into psychical phenomena therefore offer a promising candidate for an integrated study of the role of epistemic virtues in scientific enquiry. The first task is, therefore, to ask which virtues Crookes might have had.

## 3. Crookes' virtues

There are many epistemic virtues. Even a short list of typical examples would include curiosity, impartiality, open-mindedness, epistemic justice, epistemic humility, and epistemic courage, to name just a few.[7] That list is, of course, subject to vigorous debate, and a central task of contemporary virtue epistemology is to identify and individuate the virtues, and to provide a developed taxonomy of them.

Rather than treat of many virtues in brief detail, my focus will be on the virtue of *epistemic courage*. There are three reasons for choosing that virtue. First, Crookes was very often praised for his 'moral courage', for his having 'dared to occupy himself publicly' with a topic—that of spiritualistic and psychical phenomena—that 'only aroused contempt and derision' (Joire, 1916, p. 368). As one biographer puts it, Crookes was admirably indifferent to the question of whether he 'improved or injured his scientific position', since he was 'desirous only of contributing to our knowledge'—a splendid definition of epistemic courage (Rawson, 1912, p. 259). Second, Crookes testified to his own epistemic courage, in the context of identifying, from his own experience, the qualities or virtues that a scientist needs. 'To stop short in any research', he wrote, in the face of 'criticism or difficulty, or adverse criticism', is to 'bring reproach on science', implying that some degree of courage is definitive of the scientific enquirer (quoted in Rawson, 1912, p. 86). Or as Crookes declared in his presidential address to the British Association for the Advancement of Science, 'if you find something to be a fact, avow it fearlessly'—that is, courageously (Crookes, 1898, p. 438). The third reason for focussing on epistemic courage is that it is a virtue that psychical researchers often invoked as necessary—for obvious reasons—to their activities. In an obituary article, Crookes praised the neurologist George Miller Beard, a student of hypnosis, as belonging to that 'rare class of thinkers' who 'dared to utter their thoughts', while similarly the philosopher Henri Bergson reminded the members of the Society of Psychical Research, of which he was then president, of the 'courage' that they would need to confront the 'prejudices' that subject met with (quoted in Haworth, 1970, p. 3; Bergson, 1913).[8] And as the physiologist and Nobelist Charles Richet (1850–1935) observed, psychical research demands 'much courage' because its practitioners are compelled to provide a 'defence' of their discipline, as well as to work diligently in it (Richet, 1923, p. 30).

Although these scattered remarks offer useful sketches of epistemic courage, the following discussion will focus on the sophisticated account of that virtue offered by the contemporary virtue epistemologist Jason Baehr (2011, chap. 9). There are three components of that account: epistemic courage is (first) a

[4] Roberts & Wood (2007), for instance, offer case studies of Jane Goodall's ethological researches (pp. 145–148), Galileo's interaction with the Church (pp. 265–276), and the discovery of the structure of DNA (pp. 293–298).

[5] See, for instance, D'Albe (1923), Brock (2008), Medhurst & Goldney (1964), and Medhurst, Goldney, & Barrington (1972).

[6] There is a considerable philosophical literature on psychical and anomalous phenomena, and I am grateful to Andreas Sommer for showing me a detailed bibliography of relevant sources.

[7] See, for instance, Baehr (2011, chap. 2) and Roberts & Wood (2007, p. xx).

[8] More generally, Rhine (1947, p. 156) issued a dark warning about the 'social forces under which the explorer in parapsychology has had to work'. A classic—if neglected—study of the sociological factors that affect and constrain research into anomalous phenomena is Charles Fort's study of 'damned' phenomena (see Fort, 1919).