The majority of the views that Ryle defended in *The Concept of Mind* have long been discarded by most philosophers, but the claim that knowledge how consists in a disposition or an ability survived into the 21st century almost without serious question. Since the turn of the century, this orthodoxy has been under sustained attack. Led, especially, by Jason Stanley and Tim Williamson (and latterly by Stanley alone), philosophers have increasingly come to think that knowledge how ought to be treated as a member of the broader family of knowledge-wh (knowledge where, knowledge when, knowledge why, and so on) ascriptions, which all ought to be given propositional analyses. On this rival view, an agent possesses the knowledge how to do something (ride a bicycle, return a serve, perform the Bach cello suites) in virtue of possessing some propositional knowledge, some knowledge that (perhaps under an appropriate mode of presentation).

This volume of uniformly high quality papers is focused on the debate between defenders of the orthodoxy and proponents of the new propositionalism. It begins with an extraordinarily useful overview of the debate by the editors. The overview is not merely an excellent introduction to the debate, covering the main arguments for and against a dispositional account of knowledge how, it also does a great deal to motivate the volume. Bengson and Moffett argue convincingly that this debate does not merely concern one interesting issue at the intersection of philosophy of mind and epistemology. Rather, it is relevant to central issues in a range of important philosophical debates. For instance, it is of direct relevance to broader currents in epistemology, which have in recent years made virtue – understood as a competence or skill – central to justification. For parallel reasons, it is of direct relevance to debates in normative ethics, to the extent to which they require inquiry into tacit competencies, and to debates in the philosophy of action. But there is a broader relevance, as they bring out: the debate concerns, at its heart, our conception of what it means to be a rational agent, and pits two different pictures of the mind against one another.

Following Bengson and Moffett’s overview, the book is divided into sections responding to Ryle’s original argument, on the central debate between propositionalists and dispositionalists, on how we ought to construe sentences attributing knowledge-wh and their relevance for the debate, and finally on how the central issue matters for some specific debates. Since I don’t have space to comment on more than a very few of these rich and illuminating essays, I will mention only those that from my perspective seemed especially noteworthy.

Two of the essays are, in a way, too strong for the volume because they challenge assumptions other contributors take for granted in developing their arguments. One is Bengson and Moffett’s own chapter in the volume (separate from their overview) defending what they call nonpropositional intellectualism. Intellectualism is the broader family into which propositionalism fits; intellectualists hold that all states and processes that count as belonging to the class of things that might be described as intelligent involve engaging with internal states with propositional content and that actions count as exercises of intelligence if they are appropriately explanatorily related to such a state or process. Bengson and Moffett’s own proposal is intellectualist because according to it one has knowledge how in virtue of having propositional attitudes, but the knowledge how itself is an objectual attitude,
rather than a propositional attitude. By expanding the logical space of intellectualist positions, they thereby disarm some of the arguments advanced in other essays.

The second essay which also disarms (rather than answering) arguments found elsewhere in the volume is Berit Brogaard’s. On her proposal, knowledge how may be either cognitively or practically grounded. Cognitive grounds are the kinds of grounds that are central to mainstream epistemological debates; the kinds of grounds that make the difference between knowledge and mere true beliefs. Practical grounds are whatever makes the difference between truly believing that \( w \) is a way for one to \( \phi \) and knowing that \( w \) is a way for one to \( \psi \). Knowledge how that is practically grounded is an epistemic achievement in virtue of the fact that abilities carry information: an ability state is a state that carries information about how to perform an action. As Brogaard notes, moreover, practically grounded knowledge shares with cognitively grounded knowledge a number of central features that seem to make it appropriate to think of it as genuine knowledge: it is factive, safe, sensitive and reliable. Brogaard’s view combines many of the major attractions of propositionalism and its rivals, and threatens to render redundant major criticisms of both.

It is a shame that there is not more interplay between the contributions, in the light of the power of these central essays. It would have been fascinating to see how other contributors might have modified their positions once the logical space of the debate had been reconfigured for them by these papers. Still, there remains a great deal of interest, not to say importance, in most of the other essays. I shall briefly mention a few. Yuri Cath’s attempt to connect the knowledge how debate to issues in mainstream epistemology to do with justification is particularly interesting. Cath shows that the kind of factors that undermine knowledge that – luck, or absence of justification – do not seem to undermine knowledge how. Nevertheless, though he takes this fact to undermine intellectualism as it has been developed hitherto, his own (tentative) proposal is itself intellectualist: rather than an agent possessing knowledge how in virtue of knowing that \( w \) is a way for her to \( \phi \), she possesses knowledge in virtue of it seeming to her that \( w \) is a way for her to \( \phi \).

Katherine Hawley’s focus is on the extent to which epistemic injustice may occur with regard to knowing how (rather than knowledge that, on which Miranda Fricker’s well-known work has focused). In developing this theme, she illuminates the feature of knowledge how to which Cath had pointed: its seeming resistance to being undermined by the kinds of factors that undermine knowledge that. Hawley calls these kinds of factors, on which both mainstream epistemologists and those concerned with testimonial reliability (like Fricker) have focused, \textit{upstream} indicators of reliability. These indicators are available only to third persons who occupy a privileged position with regard to the agent and to those who assess her testimony: was she lucky in acquiring it? Is she justified in believing it? By contrast \textit{downstream} indicators of reliability are the kinds most relevant to knowledge how, and are often accessible to agents who seek to learn from or to take advantage of the expertise of those who putatively possess knowledge how. These indicators show up in performance guided by knowledge how, which even novices are often able to distinguish from action that is not so guided.

Hawley argues that the role of downstream indicators assures that there is less scope for epistemic injustice by way of deception with regard to knowing how than knowing that, because it is generally easier to tell whether the know how one agent purports to impart to another is genuine. While this may be correct, I think there is an important kind of know how which is susceptible to this kind of deception: the kind of know how which can be described as developing a feel for a practice or an area of enquiry. It seems possible to impart knowledge how in a piecemeal fashion,
which would make it difficult for the apprentice to develop the feel which is the mark of expertise, and this might be a kind of epistemic injustice (perhaps there are actual cases of such epistemic injustice, for instance in how colonizers organized the education of their subjects).

David Braun defends propositionalism by pointing out that we can always imagine contexts in which an ordinary propositional claim counts as a good answer to the question ‘how does one \( \varphi \)?’. For instance, there are contexts in which ‘one plays the piano by pressing the keys’ counts as an answer to the question ‘do you know how to play the piano’? He argues that this shows that propositionalism is true, and alleges that opposition to it stems from changing the context to one in which only an answer available to an expert is correct. But that seems false: it seems that everyone in the debate keeps a relatively demanding context fixed throughout.

The essays I have not had space to mention are also full of interest; my neglect reflects my own preoccupations and not their value. I will close with a mild criticism: it is disappointing that there is little attempt made to connect the central issues with the rich literature in cognitive science on skills and memory. The only genuine engagement with this literature is by Michael Devitt, and while Devitt’s contribution is very interesting, his examination of the literature seems too caught up in his own concerns to allow this work to speak to the debate more generally. One may worry that much of the work represented in this volume illuminates a folk psychology of knowledge how: a systematization of our naïve conception of how things seem to us, rather than how they are (whether we approach this systematization by consulting our intuitions in response to thought experiments or by focusing on the syntax and semantics of natural language ascriptions of knowledge how). It may be that our intuitions and the way we talk do not accurately reflect the nature of the states and processes at issue.

To illustrate, consider Paul Snowdon’s brief aside, in his contribution to this volume, that our intuition that we cannot expect a novice to acquire knowledge how by testimony from others cannot rest on our knowing what set of propositions the expert might impart to the novice, since we don’t have any grip on what would be included in the complete set of claims that might describe (say) chess expertise. Snowdon thinks the intuition is well-grounded anyhow, but as Dennett has noted in response to knowledge argument style thought experiments aimed at physicalism, if you don’t know what set of propositions someone knows, your intuitions about what abilities she would have in virtue of this propositional knowledge should not be relied upon. Whether (or perhaps when) it is appropriate to marshal evidence from semantics and thought experiments in advancing arguments in this debate is itself in need of examination.

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