This book has been an investigation of what it is to know how to do something. I have argued that the concept of know-how is the concept of an intelligent ability – of a reliable ability to do well in an activity in virtue of intellectual guidance. Know-how requires the reliable ability to engage in an activity, it requires the understanding of what it takes to do well in this activity, and it requires the propositional knowledge of the quality of what one does and of the options available in a situation. But pace both intellectualism and anti-intellectualism, know-how is not identical with any of these elements. It is the complex capacity of their interacting in such a way that competent agents responsibly control their performances in the light of their knowledge and understanding. By seeing how these features are connected with each other, we can fully understand intelligent practice.

In Part One, I have developed this line of thought on the basis of Gilbert Ryle's seminal work on know-how, spelling out the idea of intelligent ability and normative practice in chapter 1 and discussing the crucial role of the intellect for this notion of intelligence in chapter 2. This line of thought has continued with a number of independently motivated considerations about the role of automaticity and intentionality in the exercise of know-how in chapter 3 and culminated in chapter 4 in what I called Rylean responsibilism, an account of what it is to be guided by an understanding of what it takes to do well in an activity.

This line of thought began on the common ground between Rylean responsibilism and anti-intellectualism, with the notion of a reliable ability. But it went on to show why the anti-intellectualist equation of know-how and ability fails to capture the explanatory point of the concept of know-how, the idea of intelligence in the sense of normative guidance. As Ryle already saw, intelligence requires the intellect.

The second larger line of thought pursued in this book was concerned with the intellectualist view that the intellectual elements just shown to be

crucial for know-how are all there is to this concept. In chapters 7 and 8, I have argued that my Rylean use of the expressions 'knows how to' and 'know-how' is not undermined by the facts and theories about the English language which intellectualists have cited in support of their view. My final assessment of intellectualism in chapter 9 has brought together these considerations with the positive line of thought developed in Part One. As with anti-intellectualism, there is common ground between Rylean responsibilism and intellectualism. But I have proposed a number of arguments for the conclusion that intellectualism also fails to give a satisfactory explanation of what the concept of know-how aims to explain, intelligent practice.

In the Introduction, I have already proposed to conceive of these conclusions as a rapprochement between intellectualist and anti-intellectualist views. As I have argued over the course of this book, neither of these positions can be maintained without incorporating some of the materials originally reserved for the opposing view. The anti-intellectualist identification of know-how with ability fails to account for the crucial distinction between *mere* ability and genuine know-how, where the latter also requires intellectual elements like knowledge and understanding. Conversely, intellectualism tries to account for know-how simply as such an intellectual state. But such knowledge or understanding can only be genuine knowledge how to do something, as opposed to a *mere* understanding of this activity or mere knowledge *about* it, if abilities are also incorporated into the account.

It seems, then, that the debate about know-how confirms a conjecture which Albert Einstein expressed in 1918 in a letter to Eduard Study – that any two '-isms' become alike when they are cleared of all clutter: "Wenn man zwei beliebige ,ismusse' von allem Unrat säubert, dann werden sie einander gleich." (cf. Schulmann et al. 1998, 890)

At the beginning of Part Two, on page 145, I have quoted Wittgenstein's remark that some terms of ordinary language require philosophical scrutiny before we can continue to use them without causing confusion. Given the conclusions of this book, I contend that the recent debate about know-how, in the wake of the influential work of Stanley & Williamson (2001), has often been conducted with too much emphasis on language and with too little emphasis on the crucial explanatory point of the concept of know-how – its role in understanding intelligent practice and normative guidance.

Conversely, however, one may also ask why it should even be important, if *that* is the project, to somehow tie it to the expressions 'knows how to' and 'know-how' in the first place. Would it not be easier to just give away this terminology and straightforwardly talk about skill and competence? This

conceptual policy would certainly be welcomed by intellectualists – indeed it is endorsed in the latest paper by Stanley & Williamson (2016) (cf. $\S 8.6$). On this view, an actor's know-how would not be her competence, but only part of her competence, and we would lead the discussion in terms of the question how such know-how figures in the intellectual guidance which is involved in the exercise of competences.

If this is indeed merely a question of terminology, while all the substantive explanatory issues remain as they are, then I am perfectly happy to endorse this option. This book could then simply be rewritten such that Rylean responsibilism is developed from the intellectualist end, by starting with understanding and propositional knowledge, rather than from the anti-intellectualist end, by starting with ability. Still, the journey would end in the same place, and for the same reasons.

But terminology is seldom *mere* terminology. In fact, I contend that there are positive reasons to maintain the equation of know-how with competence and skill. Competences are epistemic achievements, after all. Just like states of propositional knowledge are instances of getting things right with respect to the facts, competences are instances of getting things right with respect to normative practice. This idea is beautifully captured in the expression 'to know how to do something'. The parallels between competence and propositional knowledge suggest that both are species of the common genus of knowledge. And a natural way to mark this fact is to use 'know-how' to refer to competence.

This perspective can be further substantiated when these parallels between know-how and propositional knowledge are explained in more detail. I contend that they exhibit an analogous structure which is arguably definitive of their nature as epistemic achievements. Ryle expresses this common element in the genus of knowledge as follows:

'Know' is a capacity verb, and a capacity verb of that special sort that the person described can bring things off, or get things right. (Ryle 1949, 128)

But however *Ryle* thought of this structure of knowledge as the genus common to the species of know-how and propositional knowledge (cf. Kremer 2016), I take it that this idea plausible independently.¹⁹ Just like propo-

Despite a number of differences in detail, arguments along these lines have been variously suggested by philosophers like Carr (1979; 1981a; 1981b), Smythe (1988), Craig (1990), Hawley (2003), J. Williams (2008), Kumar (2011), Tsai (2011b; 2013), and Kremer (2016). On the basis of Robert Brandom's notion of propositional knowledge as what he calls a 'complex hybrid deontic status' (cf. Brandom 1994; 1995; 2000), I have elsewhere sketched an analogous view of know-how (cf. Löwenstein 2011b), generalizing from Brandom's account of perceptual capacity, something he explicitly calls 'another hybrid deontic status' without reconnecting it to propositional knowledge.

sitional knowledge involves but is not exhausted by true belief, know-how involves but is not exhausted by reliable ability. And just like propositional knowledge can be understood as a belief which is true *because* it is justified in the right way, know-how is an ability which is reliable *because* it is intellectually guided in the right way. But of course, this sketch of the parallels between these kinds of knowledge requires much further elaboration.

A further important part of these general epistemological questions concerns the holistic interdependence of know-how and propositional knowledge. As I have argued over the course of this book, not only is it crucial to see that know-how requires certain forms of propositional knowledge, most importantly in the form of correct assessments of the activity in question. Conversely, propositional knowledge also requires know-how in the form of the competence to employ the relevant concepts and in the form of certain more specifically epistemic competences such as the competence to assess an activity. These considerations promise to contribute to a broader picture of both the common nature and the different kinds of our epistemic achievements.²⁰

The arguments presented here raise many further questions and have consequences for a number of important topics, some of which I have already flagged over the course of this book. But it would not be worthy of these further questions to scratch at their surfaces now. Instead, I would like to conclude by stressing that the concept of know-how has indeed turned out to be at the very core of our conception of ourselves. It provides a crucial connection between ourselves as agents and as thinkers, as persons striving for truth and understanding and as persons who try to do well at what they do. Or, to put this point more aptly, Rylean responsibilism reveals that these dimensions have always been interconnected within the concept of know-how.

²⁰ A related topic which I have not been able to discuss is the position Stephen Hetherington calls 'practicalism', the view that propositional knowledge is a species of know-how which is held by Hartland-Swann (1956; 1957) and Hetherington (2006; 2008a; 2008b; 2011a; 2011b); for discussion, see Ammerman (1956), Adams (2009), Madison (2012), Fantl (2012), and Kremer (2016). Elsewhere, I have briefly argued that practicalism fails to give a satisfactory account of the manifestation of propositional knowledge in much the same way in which intellectualism fails to give a sufficient account of the manifestation of know-how in intelligent practice (cf. Löwenstein 2013).