Concepts and Action: Know-how and Beyond

David Löwenstein — May 24, 2019

Introduction

Which role do concepts play in a person's actions? Do concepts underwrite the very idea of agency in somebody's acting? Or is the appeal to concepts in action a problematic form of over-intellectualization which obstructs a proper picture of genuine agency?

Within the large and complicated terrain of these questions, the debate about know-how has been of special interest in recent years. In this paper, I shall try to spell out what know-how can tell us about the role of concepts in action. I will argue that the fact that people possess and exercise know-how is indeed suited to deliver a number of important insights as to where and how concepts play a role in action. But I shall argue that these insights are limited in that they fail to cover the whole realm of relevant phenomena.

Section 1 introduces the topic of know-how and the ways in which one may try to address it. Section 2 presents an interpretation of Gilbert Ryle's seminal work, according to which know-how explains what he calls 'intelligence' in terms of normative guidance. Section 3, goes on to offer an account of this notion in terms of responsible control. Given this background, section 4 establishes that actions which are exercises of know-how are indeed dependent on concepts and conceptual activity. However, the final section 5 considers actions which are *not* exercises of know-how and explores the lim-

its of an appeal to know-how with respect to the entire relationship between concepts and action.

1 The Question of Know-how

There are good reasons for approaching the topic of concepts in action with a special focus on the question of know-how and its exercise. After all, a core proportion of the actions of human persons are exercises of know-how. People do not merely *do* what they do, but *know* how to do so. This is not an acccident. We *care* about our actions, our agency, and our capacities. We aim to *get it right* with respect to how best to do something. If we succeed in such endeavors, it is in virtue of our possessing and exercising our knowledge of how to succeed. In this sense, know-how is a concept at the very core of our self-understanding as acting and knowing beings.

But let us leave these pre-theoretical considerstions aside and ask: What does it mean to know how to do something?

There are many ways and methodologies with which this question may be approached, and indeed *is* approached in the current debate about know-how.[1] One may begin with the linguistic analysis of the English expression 'to know how to', and maybe of cognate expressions in other languages. Alternatively, one may begin with the question of the cognitive science of know-how, with the picture of a subject's knowledge and agency which is salient in the empirical literature. Both of these approaches have fruitfully been employed in the recent literature.[2] But I shall pursue a different project here. This is not to say that these questions are somehow not important or even relevant. It is just to say that they should not be the *core* focus of an account of know-how and instead enter the debate in a second step. As I shall argue, there is a specific explanatory *point* to the concept of know-how

---

[1] For an overview, see Fantl (2008), Bengson & Moffett (2011b), Pavese (2016), Cath (2019b), and Löwenstein (2019).

[2] Accounts starting with the analysis of language include Stanley & Williamson (2001), Bengson & Moffett (2007), Stanley (2011b), and Stanley (2011a). Accounts starting with cognitive science include Bzdak (2008), Wallis (2008), Adams (2009), and Devitt (2011).

which should take center stage in any account of this concept. And it is in the light of this core aim that we can then also assess the question how know-how is expressed linguistically and how it is realized empirically.

In presenting this proposal, I largely rely on my recent book *Know-how as Competence* (2017), setting the account defended there in a broader context.[3] In this paper, however, I will not be able to say anything substantive about the way in which my proposal sheds light on the questions at the center of other methodologies.[4]

I have claimed that know-how is at the core of our self-understanding as creatures who care about their actions. This idea has been a central tenet of the debate about know-how ever since it was cast into its current form by Gilbert Ryle. In his paper "Knowing How and Knowing That" (1945) and his monograph *The Concept of Mind* (1949), Ryle discusses know-how with respect to its role in explaining what he calls 'intelligent practice'. This idea also underlies my proposal for a full account of know-how – an account which follows Ryle in several central respects, but pursues these ideas much further (cf. Löwenstein 2017, § 2.6).[5]

---

[3] Along the way, I will also be able to address some of the many open questions and further issues facing my proposal which have recently been taken up in Brandt (2018), Constantin (2018), Habgood-Coote (2018), Jung (2018), Löwenstein (2018a), Löwenstein (2018b), Cath (2019a), Elzinga (2019), Worthmann (2019a), Worthmann (2019b), Heimann (forthcoming), and Worthmann (this volume).

[4] On the linguistic expressions of know-how, compare Löwenstein (2017), Ch. 7–8. On the cognitive science of know-how, compare Löwenstein (2017), §§ 6.5–6.7.

[5] This proposal is part of what appears to be a new wave of Rylean thought in the debate about know-how. A number of philosophers have independently come to the conviction that Ryle has been widely misunderstood in the recent debate, and that Ryle's ideas still yield important and promising insights for a positive account of know-how. These include Sax (2010), Hornsby (2011), Elzinga (2016), Kremer (2016), Bäckström & Gustafsson (2017), Kremer (2017), Small (2017), Tanney (2017), Waights Hickman (2018), Elzinga (2019), Worthmann (2019a), and Worthmann (this volume). What I present here is what I take to be the most plausible reading and development of Ryle's views, even if I cannot defend it in detail against related views.

2 Ryle on Know-how and Normative Guidance

Ryle's begins with the idea that know-how plays a distinctive role in understanding intelligent practice. He tries to illuminate this relationship with respect to what he calls the "intelligence-concepts" (Ryle 1945, 3) which characterize certain performances. For example, one may do something wisely, cunningly, correctly or successfully, as well as inefficiently or stupidly (cf. Ryle 1949, 26; Ryle 1945, 1–3, 5, 14). But what is meant by 'intelligence' in the first place? What is the common strand in all 'intelligence-concepts'?

It is important to note that Ryle's 'intelligence-concepts' do not only include concepts which refer to what one would ordinarily conceive of as the *presence* of intelligence. Cases of *lack or deficiency* in intelligence – such as stupidity – are also included. This has led John Bengson and Marc Moffett to make the following proposal:

> Hereafter, we reserve 'intelligence' (lowercase 'i') for intelligence in the narrow sense, namely, that which is intelligent but *not* stupid, idiotic, and so forth; we will use 'Intelligence' (capital 'I') as an umbrella term covering all states of intellect and character, including intelligence (in the narrow sense), stupidity, and idiocy. (Bengson & Moffett 2011b, 5–6)

While this distinction is indeed very important, I think that there is a better name for what Ryle has in mind here. What he calls 'intelligent' practice is just another name for *normative* practice. In fact, Ryle comes close to saying so himself.

> When a person knows how to do things of a certain sort (e.g., cook omelettes, design dresses or persuade juries), his performance is in some way governed by principles, rules, canons, standards or criteria. (For most purposes it does not matter which we say.) (Ryle 1945, 8)

Clearly, what unites these terms is that they are expressions of the norms of the performances in question. What people know how to engage in are normative activities. This is also plausible because Ryle's 'intelligence-concepts'

all contain *evaluations* (cf. Ryle 1949, 26; Ryle 1945, 1–3, 5, 14). They do not describe performances in a detached, uninvolved manner. They contain judgements of these performances as to whether or not (and to what extent) these live up to the activity's norms.[6] Thus, the distinction of 'capital-'I' vs. lowercase-'i' intelligence' can be understood as the distinction between the fact that an activity is normative at all and the fact that a person's performances of that activity actually live up to those norms (cf. Löwenstein 2017, §§ 1.1–1.3).

So far, I have merely established a first step in a full account of know-how. To know how to do something requires actually living up to the norms of the activity in question. But know-how also requires more than that.

First, it requires sufficient reliability in living up to those norms (cf. Ryle 1949, 44–45, 125). To know how to do something, a person needs to be sufficiently reliable in achieving success – whatever 'success', i.e. the meeting of the activity's norms, may come down to in the case at hand. Of course, nobody is perfectly reliable and reliable in every circumstance imaginable. But, as Ryle puts it, it is necessary that one "knows how to bring it off in normal situations." (Ryle 1949, 125)[7]

Second, reliability is necessary, but not sufficient for know-how. In a catch-phrase, know-how requires *reliability for the right reasons*. Ryle writes:

> What is involved in our descriptions of people as knowing how to
> make and appreciate jokes, to talk grammatically, to play chess,
> to fish, or to argue? Part of what is meant is that, when they
> perform these operations, they tend to perform them well, i.e.

---

6   I will bracket the nature and status of these norms here. Intuitively, some activities are governed by socially constructed norms, while others – foraging for food, say – appear entirely mind-independent. But at the level of abstraction on which we operate here, this does not make a difference. Compare: There are many and many kinds of facts of which one may have propositional knowledge. Analogously, there are many and many kinds of activities which one may know how to engage in.

7   This may seem problematic because it is very difficult to define exactly which situations count as 'normal' ('enough'). How much wind or intoxication or acoustic distraction or lack of lighting makes it the case that we would not expect a darts champion to perform well? I shall bracket this problem here (cf. Löwenstein 2017, §§ 1.4, 1.7), but I would like to note that it is salient in all abilities and that a conception of abilities can account for this very convincingly, as shown by Romy Jaster (2019).

> correctly or efficiently or successfully. Their performances come
> up to certain standards, or satisfy criteria. But this is not enough.
> [...] To be intelligent is not merely to satisfy criteria, but to apply
> them; to regulate one's actions and not merely to be well-regu-
> lated. A person's performance is described as careful or skilful, if
> [...] [h]e applies criteria in performing critically, that is, in trying
> to get things right. (Ryle 1949, 29)

These considerations establish a distinction between genuine know-how on
the one hand and what I would like to call a 'mere' ability on the other hand.
Know-how is a reliable ability to do something well *because* one is guided by
an understanding of what it takes to do it well. Or so I propose to cash out
Ryle's talk of 'applying' criteria as opposed to merely conforming to them.
In short, then, know-how involves *normative guidance* and this distinguishes
it from mere ability (cf. Löwenstein 2017, § 1.4).

Let me illustrate this distinction with Ryle's own examples.[8] He holds
that machines like clocks and non-human animals like circus seals have mere
abilities as opposed to know-how. In Ryle's words, they have "pure or blind
habits" rather than "intelligent capacities" (cf. Ryle 1945, 15; Ryle 1949,
42). With respect to human persons, Ryle suggests that "[t]he ability to
give by rote the correct solutions of multiplication problems" (Ryle 1949, 42)
does not amount to genuine knowledge how to multiply. For if one gives
correct solutions by sheer rote, then one does not possess an understanding
of multiplication and one does not give correct answers in virtue of being
guided by this understanding. Instead, one merely parrots what one has
learned by heart – an achievement of memory rather than of knowledge how
to calculate.

I have argued that we should follow Ryle's lead and understand know-how
as a specific kind of reliable ability – *an ability to reliably meet the norms
of an activity in virtue of normative guidance*. In this sense, know-how is a

---

[8] There are many other applications of this distinction between genuine know-how and
mere ability. For example, it shows that no plausible Rylean view can hold that ability
is sufficient to know-how (cf. Löwenstein 2017, §§ 5.3–5.5). And it sheds light on core
notions from cognitive science, such as 'procedural knowledge', which may well fall short
of distinguishing genuine know-how from mere ability (cf. Löwenstein 2017, §§ 6.5–6.6).

cognitive achievement.[9] In the next section, I shall offer a full account of this idea.

Before doing so, let me make a methodological remark. If know-how can indeed be understood in this way, then we will have an account of know-how *as competence* or *as skill*. For, arguably, skills or competences are precisely those kinds of abilities which exhibit further such epistemic features over and above 'mere' abilities.[10] However, this point is entirely compatible with the fact that there are cases where we ordinarily say that somebody 'knows how to do something', but cannot do so herself – for example that a sports teacher 'knows how to' do a certain trick, but has never learned to perform it herself. But in these cases, we fail to distinguish mere knowledge or understanding *of* or *about* an activity from a full-blown competence to engage in that activity. We fail to distinguish a mere part of know-how – the understanding of the norms of an activity – from the whole phenomenon – the reliable ability to succeed in virtue of such an understanding.

This distinction between genuine know-how and mere knowledge or understanding *of* or *about* an activity (cf. Löwenstein 2017, §§ 2.1–2.2)[11] can be seen as a sibling of my earlier distinction between genuine know-how and mere ability. It is salient in cases of people who cannot engage in an activity themselves, but show a great understanding of these activities in other ways. This point has been illustrated by Ryle with respect to literary critics (cf. Ryle 1949, 49), by Ellen Fridland with respect to sports coaches (cf. Fridland 2012, 9), and by many others. In making this distinction, however, I do not claim that we need to correct or restrict the ordinary use of 'to know how to' in any way. What I propose is just to distinguish the *phenomena* as clearly as we can. We can discuss where exactly terms like 'know-how' should be applied in a second step.

At this point (if not earlier!), the question of the exact linguistic analysis

---

[9] This has also been stressed by Bengson & Moffett (2011c), Carter & Pritchard (2015), Kotzee 2016, among others.

[10] The relationship between the concepts of know-how, skill, and competence is controversial, but nothing much depends on this in the present context. For further discussion, see Fridland (2014), Kremer (2016), Pavese (2016), among others.

[11] This distinction also sheds light on a number of examples and puzzle cases which have been discussed in the literature about know-how (cf. Löwenstein 2017, §§ 5.1–5.2, 5.5).

of the English expression 'to know how to' becomes very pressing, especially since some philosophers have appealed to such analyses in order to promote views of know-how.[12] However, there are good reasons to understand 'to know how to' as *polysemous* – i.e. as being able to express two distinct, but related concepts (cf. Löwenstein 2017, Ch. 7). Thus, it is no mystery why we speak of 'knowing how to do something' in very different cases. As long as we distinguish the phenomena clearly enough when we do philosophy, this is just fine.

3   Responsible Control

The preceding section has suggested that know-how is an ability to do well in a certain activity because one is guided by an understanding of what it takes to do well in that activity. I shall now go on to spell out more fully what it is to understand an activity and to be guided by such an understanding.

The core idea of this proposal is that normative guidance can be understood in terms of what I call 'responsible control'. That is, a person exercising know-how has *control* over their performances, and this control is *responsible* in the sense that it does not merely happen to meet the the norms of the activity in question, but is *aimed* at doing so. For lack of a better term, I have dubbed the emerging view 'Rylean responsibilism'.

I would like to introduce this account with respect to something Ryle himself already gestures at – the idea that know-how is closely related to what I would like to call 'assessment capacities' (cf. Ryle 1949, 55). An assessment capacity with respect to a certain activity in this sense is the capacity to accurately judge one's own acts and those of others as good, bad, better or worse performances of the activity in question. And given that individual acts are always assessed within the context of a specific situation, a capacity to make *such* assessments is *ipso facto* a capacity to assess *situations* with respect to the question what would count as a good performance of a given

---

[12] These critics include Stanley & Williamson (2001), Bengson & Moffett (2007), Stanley (2011b), and Stanley (2011a). Elsewhere, I have argued that these arguments fail (cf. Löwenstein 2017, Ch. 8).

activity in this situation – in other words, with respect to the obstacles and options the situation offers.

My proposal is that the *understanding* of an activity which guides competent actors *just is* such a capacity to assess performances of the activity one knows how to engage in (cf. Löwenstein 2017, § 4.1). On this basis, we can understand the *guidance* involved in intelligent conduct by appreciating the role of *self*-assessments – of assessments of one's own performances and of one's own surroundings. Again, Ryle gestures in this direction when he talks about how skills are learned from instruction:

> [A]s the child learns to do the things, he also learns to understand better and apply better the lessons in doing the thing. Hence he learns, too, to double the roles of instructor and pupil; he learns to coach himself and to heed his own coaching[.] [...] We are all trained in some degree to be our own referees, and though we are not, all or most of the time blowing our whistles, we are most of the time ready or half-ready to blow them, if the situation requires it, and to comply with them, when they are blown. (Ryle 1949, 148)

I content that these considerations about acquiring skills from teachers are entirely general. Everybody who possesses and exercises a competence 'doubles the role' of the practitioner and the critic – she assesses her own performances and tries to live up to the potential for improvement.

Thus, guidance by an understanding of an activity can be understood as *responsible control of one's acts in the light of assessments of self and situation* (cf. Löwenstein 2017, § 4.4). More fully, to be guided by an understanding of the norms of an activity just is to *exercise* the capacity to assess one's own performances and one's options and to *act in the light of these assessments* in order to meet the norms of the activity in question.

Given this outline of my proposal, I shall now focus on the way in which such an account of know-how sheds light on the question of concepts in action. This will be the topic of the next section. But especially with this goal in mind, it is important to address at least one concern in the remainder of

the present section: Does the appeal to *assessing* and acting in the light of assessments lead to an overly intellectualized account of intelligent practice?

Predictably, I do not think so. The nature of know-how is both practical and intellectual. It is a kind of ability which can only be fully appreciated in virtue of its cognitive and epistemic aspects. In this sense, I contend that my proposal views know-how as intellectual *enough*, but not *too* intellectual. It is located squarely between the prominent 'isms' in the debate about know-how, intellectualism and anti-intellectualism.[13]

The key to dispel the threat of over-intellectualization is a general insight about competences and know-how – an insight which also applies at the level of the assessment capacities which are involved in know-how. Namely, the exercises of such capacities can take many different forms including completely unreflective, automatic, even non-intentional performances. To illustrate, consider the following example:

> I walk down the street and happen to see a sign with words written on it. I do not need desires or reasons in order to read what it says on such a sign. I might even have clear desires and reasons *not* to read what the sign says – say, because I do not want to pollute my mind with advertisements. But I still *do* read the sign and I read it correctly. I exercise my know-how completely automatically. (Löwenstein 2017, 78)

Arguably, performances like such acts of reading do not qualify as intentional actions, however one may construe this term[14], but nevertheless exercises of know-how (cf. Löwenstein 2017, Ch. 3). And this also applies to making assessments and to acting in the light of them.

For example, one can intentionally assess a situation *beforehand* and intentionally perform the act one has consciously judged as best. Alternatively, one can also assess what one does *in action*, *during* a performance. One may realize that one is on the way to complete a very good performance and

---

[13] On demarcating these 'isms' and taking up an in-between position, see also Löwenstein (2017, esp. 2–3, 287–292), Small (2017), Constantin (2018), Worthmann (2019a), and Worthmann (this volume).

[14] On this issue, compare Wilson & Shpall (2012) and Setiya (2014).

therefore make sure to keep on track. Or one may see how one's present course of action could be improved and take advantage of a better option (cf. Montero 2010; Montero 2013). Finally, one can also assess one's own acts *after* performing them, for example when they are completely unreflective automatic performances. Such routine acts or even pure reflexes may nevertheless be understood as guided by an understanding of the relevant activity. For if such routines and automatisms have been intentionally *cultivated* in such a way that their exercises reliably live up to the norms of the activity, then these exercises can *themeselves* be seen as guided by an understanding what it takes to do well in that activity (cf. Löwenstein 2017, § 3.4).

Crucially, the very same considerations apply to completely automatic *assessments* of self and situation. When the assessment one reaches during or after performing is also an automatic reaction to the situation of which one becomes aware only after the fact, it may nevertheless be a genuine exercise of the competence of assessing oneself and one's situation. This is arguably one of the most important aspects of genuine competence. A hallmark of genuine expertise is that it does not require occurrent thinking about or other forms of explicit attention to certain aspects of one's performances and options (cf. Fridland 2014).

In sum, then, given the fact that know-how can also be exercised unreflectively and even automatically, and given that the same holds for the assessment capacities involved in know-how, the account of responsible control I have offered does not threaten to over-intellectualize know-how.[15]

4   Know-how, Concepts, and Propositions

The preceding section has suggested that the notion of responsible control underwrites the idea of normative guidance which is crucial for a full account

---

[15] One may object that my proposal leads to a vicious regress or an explanatory circle because the assessment capacities involved in know-how cannot be *mere* abilities or abilities which just happen to be successful in a *lucky* way, but must themselves be cases of genuine competence including normative guidance. Arguments along these lines can be found in Brandt (2018) and Heimann (forthcoming). Elsewhere, I have attempted to solve this problem (cf. Löwenstein 2017, §§ 4.5–4.7; Löwenstein 2018b).

of know-how. I shall now go on to argue that this involves concepts as well as propositions and indeed propositional knowledge.[16]

With respect to concepts, I take it that my argument is very straight-forward (cf. Löwenstein 2017, § 4.2). To understand an activity and to be guided by such an understanding in the form of an assessment capacity requires having and using a suitable *concept of the activity in question*.[17] This should already be intuitively plausible on any unanalyzed notion of a guiding understanding of an activity. And it follows straightforwardly if such an understanding is cashed out as an assessment capacity in the sense just explained. After all, assessing an act as a performance of a given activity *just is* assessing whether or not it falls under one's *concept of that activity*. Of course, this is not (merely) a question of 'yes' or 'no'. It is a *qualitative* matter which admits of degrees of normative adequacy. But, crucially, so does the corresponding concept. To illustrate, in assessing some act as a performance of, say, play-acting, one does not only ask whether the concept of play-acting *simpliciter* applies to it – i.e. whether what we have in front of us *is* play-acting in the first place. Further, one also asks to what degree the *qualitative* concept of *play-acting well* applies to that performance. The degrees to which it meets the relevant norms are mirrored in the degrees in which the concept of good play-acting applies to it, however this ideal may be specified in the case at hand.

I shall now go on to argue that propositions and propositional knowledge play an equally important role for essentially the very same reasons. To begin with, the *very form and content* of an assessment is already propositional. Take the assessment I reach when I assess my current acts of, say, teaching as too dull and boring. In such a case, I form a judgment with the propositional content *that* my teaching performance is too dull and boring. But this is only

---

[16] I shall bracket the details of the nature and function of concepts, propositions, and propositional knowledge (cf. Laurence & Margolis 1999; Margolis & Laurence 2011; McGrath 2012; Ichikawa & Steup 2012). My present arguments are compatible with a wide variety of views on these issues.

[17] Thus, my proposal has affinities with objectivist intellectualism (cf. Bengson & Moffett 2007; 2011c). Still, I contend that this view falls short of going all the way with respect to the crucial task of explaining intelligent practice (cf. Löwenstein 2017, Ch. 9, esp. § 9.1).

the first step in appreciating the nature of such assessments. For suppose that you make such an assessment and you get things right in virtue of the fact that you possesses a genuine understanding of the activity in question and exercise a genuine assessment capacity to do so. If this is what happens, then you reach a true verdict, you reach it non-accidentally, and you reach it non-accidentally precisely for the right reasons. Arguably, this is a paradigm case of propositional knowledge.[18]

Thus, Rylean responsibilism *does* reserve a crucial role for propositional knowledge in the form of assessments, for objectual knowledge of activities in the form of states of understanding, and for concepts and conceptions of doing things. Still, it does not *identify* know-how with such knowledge as intellectualists do. However, the debate about intellectualism has brought out some crucial results about the candidate knowledge states which also apply here (cf. Löwenstein 2017, esp. §8.4). Most importantly, the knowledge reached by making an assessment does not require any sophisticated conception of the relevant acts and situations. Some people can give helpful descriptions of these, but some cannot. In fact, even expert practicioners sometimes give *false* descriptions. But descriptions are not necessary, at all. Instead, the assessments can be *demonstrative*, and they *must* be if they are supposed play a role in the responsible control of *these* performances in *these* circumstances.[19]

In sum, concepts and propositional contents are a necessary ingredient in the form of responsible control which is distinctive of know-how.[20] In fact, this conclusion can also be established in at least one crucial further way, namely by appealing to the fact that ascriptions of know-how create opaque

---

[18] This story straightforwardly fits the way in which virtue reliabilists try to account for propositional knowledge in general. Indeed, I take it that an assessment capacity is an example of what Ernest Sosa (2015) calls an 'epistemic competence' or John Greco (2009) an 'intellectual ability' or Lisa Mirracchi (2015) a 'competence to know'.

[19] In fact, the relevant assessments are *essentially indexical*, to borrow a famous phrase from John Perry (1979). I must conceive of my acts and options *de se* – i.e. *as mine* – if my knowledge of these is supposed to guide my conduct responsibly. In the same vein, I must understand my options as mine *here and now*.

[20] In fact, there is a plausible case to be made for a dependency in the other direction, as well. For discussion, see Wiggins (2012), Löwenstein (2013), Kremer (2016), Löwenstein (2017), and Worthmann (2019a), among others.

contexts.[21] But I shall bracket these considerations here. Instead, I would like to return to the worry that my proposal threatens to over-intellectualize know-how.

A very persuasive challenge along these lines has recently been proposed by Benjamin Elzinga. He presents an account of know-how in terms of self-regulation which is very close to the view I defended here (cf. Elzinga 2016; Elzinga 2019). However, he holds that concepts and propositions are not necessarily involved in know-how thus understood. To drive this point home, he appeals to studies about rats an honeybees and argues that their behavior exhibits the kind of self-regulation and control sufficient for know-how (cf. Elzinga 2019). Honeybees, for example, "are able to adopt truly novel flight-paths in displacement studies" and "novel route choice of this kind requires a cognitive map" (Elzinga 2019, 7). This is crucial: "The deployment of map-based navigational strategies is where the intelligence required for knowing how comes into play because to know how to do something is to have a resilient, novelty-responsive ability." (Elzinga 2019, 7–8) The same case can also be made for rats and their navigational skills. However, the debates about animal cognition and about the nature of map-like representation do not firmly point to any involvement of concepts and propositions: "It is therefore a philosophically and empirically open question whether rats are capable of propositional thought. If rats know how to navigate their environment, then it's an open question whether know how requires propositional knowledge. It may be that know how requires some other kind of representational knowledge." (Elzinga 2019, 12)

This line of argument is very persuasive, but it still fails to fully establish that there is know-how without concepts and propositions. I think we face a dilemma here.

On the one hand, such control and self-regulation with the aid of map-like representations may turn out to require concepts and propositional representation, after all. This view is defended by Peter Carruthers (2006), among

---

[21] This has been pointed out most prominently by Steel (1974), Carr (1979), Hawley (2003), and Williams (2008). I discuss these issues in detail in Löwenstein (2017, §§ 6.1–6.2).

others. While Elzinga offers plausible objections against some of Carruthers'
arguments (cf. Elzinga 2019, 10–12), I take it that this issue is not yet settled.
And on a view along the lines of Carruthers, where control and self-regulation
with the aid of map-like representations do require concepts and propositional
representation, my account predicts that we have a case of genuine know-how
here and no problem will arise.

On the other hand, it may turn our that there is a form of control and
self-regulation with the aid of map-like representations which somehow falls
short of genuine concepts and propositions. In this case, my account predicts
that the creatures in question possess fascinating and sophisticated abilities,
but abilities which nevertheless fall short of genuine know-how. Again, I take
it that this is unproblematic. A problem will only arise if we have sufficient
independent support for the view that these are indeed cases of genuine know-
how. Elzinga takes himself to have established this (cf. Elzinga 2019, 7–8),
but I am not convinced yet.

To see this, I would like to distinguish a *bare* form of control and self-
regulation from a *responsible* form of control and self-regulation. I take it
that there are clear cases of bare control and self-regulation, namely computer
programs which perform complex statistical or probabilistic calculations very
quickly and also implement some form of mechanism for double-checking and
adjustment. In such a case, I think it is correct to say that the program has
an ability to perform these operations and that it controls and self-regulates
its calculating. At the same time, I contend that this happens merely in a
bare, but not a *responsible* form. It is an impressive ability, but still a *mere*
ability as opposed to a genuine case of know-how. After all, the computer
program does not possess an *understanding* of these calculations, it does
not understand what it takes to calculate well, and it is not *guided* by such
an understanding. Genuine know-how requires *responsible* control in the
sense that actors *understand* their acts *as* good and bad or better or worse
performances of the given activity. And this structure of *understanding as*,
I take it, is the mark of concepts and propositions.

With this background, I can restate my dilemma in response to Elzinga's
challenge. For all we know, it is an open question whether creatures like

rats and honeybees exhibit *bare* control or *responsible* control. In the second case, I am happy to grant them genuine know-how. In the first case, I am happy to deny them genuine know-how, however impressive and sophisticated their abilities may be. Either way, it remains true that concepts and propositional thought are essential for know-how because they account for the very responsibility in responsible control and normative guidance.[22]

5 Acting without Know-how

I have argued that concepts play a key role in actions which are exercises of an agent's know-how. However, it is important to note that *not all action is an exercise of know-how.* What does this mean for the problem of concepts in action?

To begin with, one may worry that it is cheap and moot to claim that not all action is an exercise of know-how, pointing to cases like breathing while sleeping and squinting in the sunlight. Such performances are no exercises of know-how, but simply because they are no actions in the sense of *intentional* actions. However, intentional action is precisely where the very focus of the problem of concepts in action lies. So, in order for my point to have any proper traction, I need to show that even some intentional actions are not exercises of know-how. This may look like a daunting task, partly because it seems to require an account of what makes an action intentional.[23] But I think I can circumvent this issue.

However one may define intentional actions, there is an independent distinction within this realm, originally introduced by Arthur Danto (1965), between basic and non-basic actions. Some actions are done *by* doing something else. But actions can also be done *simpliciter* or *directly* – i.e. *not* by doing something else. An action is basic if and only if it is of the latter kind. For example, when I intentionally blink my eyelid, I do *not* do so by doing anything else, but rather *directly*. In contrast, if I give my friend a wink, I

---

[22] Similar considerations also apply to other examples of non-human animals, of very small human infants, and also of machines and robots (cf. Löwenstein 2017, § 6.6).

[23] Compare note 14.

may do so *by* blinking my eyelid. Blinking my eyelid, then, is a basic action.

In the debate about know-how, is is widely held that one can perform and be able to perform basic actions, but that one cannot *know how* to perform them.[24] Intuitively, there is just nothing to be known with respect to blinking my eyelid such that this knowledge may play any role in my actual doing so.

This intuition can be substantiated more fully given the Rylean responsibilist account of know-how sketched earlier (cf. Löwenstein 2017, 34–35): I have argued that know-how only concerns activities which are structured by norms, and that guidance by an understanding of norms is the key to understanding the intelligence of the relevant performances. This normative structure can be expressed by saying that certain acts *count as* good or bad and better or worse performances of the relevant activity. Given a suitable context, for example, a specific way of playing a ball counts as a wonderful serve. But what this means is that somebody serves wonderfully *by* playing a ball in that specific way. The normative relation of an act's *counting as* something requires the structure of doing something *by* doing something else – the very structure which is distinctive of non-basic actions. Therefore, basic action is never an exercise of know-how.

If this conclusion is true, regardless which specific account of know-how supports it, then the attempt to illuminate the role of concepts in action with appeal to know-how has clear limits. Given that there are intentional yet basic actions, thinking about know-how will offer no help with respect to the question whether and how concepts play any role here. Instead, this burden will shift over to the notion of intentionality in intentional action – a task well beyond the scope of this paper.

But maybe my conclusion is *not* true. Maybe the appeal to basic action *fails* to establish a class of intentional actions without know-how, after all. I shall end this section with two considerations along these lines – as a final push in order to explore the full significance of know-how for the question of concepts in action.

First, while it is widely held that one cannot possess know-how with

---

[24] Proponents of this view include Carr (1981), Katzoff (1984), Stanley & Williamson (2001), Snowdon (2003), and Noë (2005).

respect to basic actions, some philosophers disagree. For example, Kieran Setiya (2012) holds that I *do* know how to perform basic actions simply because I am able to perform them intentionally. But this raises the question what such know-how may consist in. He writes that "knowing how to perform a basic action is being disposed to act on the relevant intention when one has it" (Setiya 2012, 296). Such a disposition, however, falls short of genuine know-how because it fails to account for the intelligence of its exercises – whether or not one shares my view that this explanatory task should be met by appealing to normative guidance and responsible control. What Setiya describes may simply be a mere ability.

Second, one may grant that basic actions are not exercises of know-how, but go on to ask: How clearly are we even able to distinguish basic from non-basic actions? This, I take it, is a paradigm instance of the general vagueness and context-sensitivity of attributions of know-how (cf. Löwenstein 2017, § 1.7). One may plausibly hold that it would be odd to say that I know how to wave my hand and that doing so is a basic action. But consider somebody who has to acquire the ability to do this in the first place, or maybe to re-acquire it after an accident. In such a case, it is natural to say that the person *learns* how to wave their hand and that she does so *by* doing something else – *by* contracting certain muscles, say. Arguably, such a shift of context makes it equally natural to speak of *knowing how* to wave one's hand. Thus, the demarcation of know-how varies with the context-dependent line between basic and non-basic action (cf. Löwenstein 2017, § 44–45).

Given this result, one may worry whether there is any clear case of a *truly* basic action in the first place. This point has been explored most prominently by Michael Thompson (2008) and Douglas Lavin (2013). They argue that the notion of a basic action is problematic in part because any action, even an allegedly basic one, is divisible into parts which are actions themselves – just like any length is divisible into parts which are themselves lengths, however small. On this view, my argument that concepts are involved in the exercise of know-how will, *mutatis mutandis*, cover *all* intentional actions, simply because the set of basic actions is empty.

However, there are good reasons to reject this conclusion. As Kevin Lynch

(2017) has argued, the key feature of basic actions is that something is done, but *not* by doing something else. The relevant question is in which sense the parts of a basic action *are* actually 'something else'. I think that it yields precisely the right criterion.[25] Context-dependence notwithstanding, actions like contracting a muscle are clearly not done by doing something else. Thus, the distinction between basic and non-basic action still stands.

I have argued that know-how fails to account for all actions since some of these are basic actions the exercise of which may involve abilities, but not know-how. Thus, whatever the topic of know-how entails about the role of concepts in action is limited to non-basic actions.

Conclusion

I have argued that know-how is a pervasive and indispensable aspect of our lives as more or less rational agents and that, as such, know-how is a crucial key for understanding the role of concepts in action. But even if I am right that this unlocks core insights about this topic, it has failed to open all the doors. An account of know-how does not speak to the question whether and how concepts are involved in intentional yet basic actions. Here, we are back to a familiar variation on our topic, the question whether and how the very intentionality of an action is itself suited to illuminate the role of concepts in action. Arguably, intentions themselves also require concepts such that any intentional action is a conceptual activity in this sense. If so, there will be *two* ways to see why intentional exercises of know-how are conceptual activities – *qua* intention plus *qua* exercise of know-how. But regardless of how one accounts for intentional action, there is a distinctive way in which

---

[25] Still, I disagree with Lynch about individual cases. He suggests that even a complex martial arts kata which consists in a whole sequence of movements is a basic action because the kata is *defined* as performing this very sequence and, accordingly, performing that sequence is *not* 'something else' (cf. Lynch 2017, 317). But even so, this sequence is divisible in parts which can also be performed individually without any relation to the kata. In this sense, even the sequence *is* 'something else'. Compare muscle contraction, which is not defined as a sequence of parts all of which can also be performed individually.

concepts play a role in exercises of know-how via normative guidance.[26]

References

Adams, Marcus P. 2009. Empirical evidence and the knowledge-that/ knowledge-how distinction. *Synthese*, **170**, 97–114.

Bäckström, Stina, & Gustafsson, Martin. 2017. Skill, Drill, and Intelligent Performance: Ryle and Intellectualism. *Journal for the History of Analytic Philosoply*, **5**(5), 41–55.

Bengson, John, & Moffett, Marc A. 2007. Know-how and concept possession. *Philosophical Studies*, **136**, 31–57.

Bengson, John, & Moffett, Marc A. (eds). 2011a. *Knowing How. Essays on Knowledge, Mind, and Action.* Oxford & New York: Oxford University Press.

Bengson, John, & Moffett, Marc A. 2011b. Two Conceptions of Mind and Action: Knowing How and the Philosophical Theory of Intelligence. *In:* Bengson & Moffett (2011a). 3–55.

Bengson, John, & Moffett, Marc A. 2011c. Nonpropositional Intellectualism. *In:* Bengson & Moffett (2011a). 161–195.

Brandt, Stefan. 2018. Verantwortliche Kontrolle und Ryleanische Regresse. Kommentar zu David Löwensteins *Know-how as Competence. Zeitschrift für philosophische Forschung*, **72**(1), 100–104.

Bzdak, David. 2008. On Amnesia and Knowing-How. *Techné: Research in Philosophy and Technology*, **12**.

Carr, David. 1979. The Logic of Knowing How and Ability. *Mind*, **88**, 394–409.

Carr, David. 1981. Knowledge in Practice. *American Philosophical Quarterly*, **18**, 53–61.

Carruthers, Peter. 2006. *The Architecture of the Mind.* Oxford: Oxford University Press.

---

[26] For feedback on preliminary versions of this paper, I would like to thank Christoph Demmerling, Dirk Schröder, and Hannes Worthmann.

Carter, J. Adam, & Pritchard, Duncan. 2015. Knowledge-How and Cognitive Achievement. *Noûs*, **91**, 181–199.

Cath, Yuri. 2019a. 'Know how as Competence: A Rylean Responsibilist Account' by David Löwenstein. *Australasian Journal of Philosophy*, published online on January 30, 2019.

Cath, Yuri. 2019b. Recent Work: Knowing How. *Analysis*, published online on May 14, 2019.

Constantin, Jan. 2018. A Dispositional Account of Practical Knowledge. *Philosophical Studies*, **175**, 2309–2329.

Danto, Arthur C. 1965. Basic Actions. *American Philosophical Quarterly*, **2**(2), 141–148.

Devitt, Michael. 2011. Methodology and the Nature of Knowing How. *The Journal of Philosophy*, **108**, 205–218.

Elzinga, Benjamin. 2016. Self-Regulation and Knowledge-How. *Episteme*, published online on December 15, 2016.

Elzinga, Benjamin. 2019. Intellectualizing know how. *Synthese*, published online on March 4, 2019.

Fantl, Jeremy. 2008. Knowing-How and Knowing-That. *Philosophy Compass*, **3**, 451–470.

Fridland, Ellen. 2012. Knowing-How. Problems and Considerations. *European Journal of Philosophy*, published online on September 19, 2012.

Fridland, Ellen. 2014. They've lost control: reflections on skill. *Synthese*, published online on Febrary 28, 2014.

Greco, John. 2009. Knowledge and success from ability. *Philosophical Studies*, **142**, 17–26.

Habgood-Coote, Joshua. 2018. Knowledge-How, Abilities, and Questions. *Australasian Journal of Philosophy*, published online on February 11, 2018.

Hawley, Katherine. 2003. Success and Knowledge-How. *American Philosophical Quarterly*, **40**, 19–31.

Heimann, Fabian. forthcoming. Löwensteins Begriff von Kompetenz und Regressargumente. *Zeitschrift für philosophische Forschung*.

Hornsby, Jennifer. 2011. Ryle's *Knowing-How*, and Knowing How to Act. *In:* Bengson & Moffett (2011a). 80–98.

Ichikawa, Jonathan Jenkins, & Steup, Matthias. 2012. The Analysis of Knowledge. *In:* Zalta (1995 ff.). Spring 2014 Edition. http://plato.stanford.edu/archives/spr2014/entries/knowledge-analysis/.

Jaster, Romy. 2019. *Agents' Abilities.* Berlin & Boston: Walter de Gruyter.

Jung, Eva-Maria. 2018. Know-how, Routinen und Automatismen. Ein Kommentar zu David Löwensteins *Know-how as Competence. Zeitschrift für philosophische Forschung*, **72**(1), 105–109.

Katzoff, Charlotte. 1984. Knowing How. *Southern Journal of Philosophy*, **22**, 61–69.

Kotzee, Ben. 2016. Learning How. *Journal of Philosophy of Education*, **50**, 218–232.

Kremer, Michael. 2016. A Capacity to Get Things Right: Gilbert Ryle on Knowledge. *European Journal of Philosophy*, published online on October 19, 2016.

Kremer, Michael. 2017. Ryle's "Intellectualist Legend" in Historical Context. *Journal for the History of Analytic Philosoply*, **5**(5), 17–39.

Laurence, Stephen, & Margolis, Eric. 1999. Concepts and Cognitive Science. *In:* Margolis, Eric, & Laurence, Stephen (eds), *Concepts. Core Readings.* Cambridge: MIT Press. 3–81.

Lavin, Douglas. 2013. Must There Be Basic Action? *Noûs*, **47**, 273–301.

Löwenstein, David. 2013. Why Know-how and Propositional Knowledge are Mutually Irreducible. *In:* Hoeltje, Miguel, Spitzley, Thomas, & Spohn, Wolfgang (eds), *Was dürfen wir glauben? Was sollen wir tun? Sektionsbeiträge des achten internationalen Kongresses der Gesellschaft für Analytische Philosophie e.V.* Duisburg & Essen: Universität Duisburg-Essen (DuEPublico). 365–371.

Löwenstein, David. 2017. *Know-how as Competence. A Rylean Responsibilist Account.* Frankfurt am Main: Klostermann.

Löwenstein, David. 2018a. Précis zu *Know-how as Competence. A Rylean Responsibilist Account. Zeitschrift für philosophische Forschung*, **72**(1), 95–99.

Löwenstein, David. 2018b. Regresse und Routinen. Repliken auf Brandt und Jung. *Zeitschrift für philosophische Forschung*, **72**(1), 110–113.

Löwenstein, David. 2019. ‚Wissen, dass‘ und ‚Wissen, wie‘. *In:* Grajner, Martin, & Melchior, Guido (eds), *Handbuch Erkenntnistheorie.* Stuttgart: J.B. Metzler. 116–121.

Lynch, Kevin. 2017. The divisibility of basic actions. *Analysis*, **77**, 312–318.

Margolis, Eric, & Laurence, Stephen. 2011. Concepts. *In:* Zalta (1995 ff.). Fall 2012 Edition. http://plato.stanford.edu/archives/fall2012/entries/concepts/.

McGrath, Matthew. 2012. Propositions. *In:* Zalta (1995 ff.). Summer 2012 Edition. http://plato.stanford.edu/archives/sum2012/entries/propositions/.

Miracchi, Lisa. 2015. Competence to know. *Philosophical Studies*, **172**, 29–56.

Montero, Barbara. 2010. Does bodily awareness interfere with highly skilled movement? *Inquiry*, **53**, 105–122.

Montero, Barbara. 2013. A Dancer Reflects. *In:* Schear, Joseph K. (ed), *Mind, Reason, and Being-in-the-World. The McDowell-Dreyfus Debate.* London & New York: Routledge. 303–319.

Noë, Alva. 2005. Against intellectualism. *Analysis*, **65**, 278–290.

Pavese, Carlotta. 2016. Skill in epistemology II: Skill and know how. *Philosophy Compass*, **12**, 650–660.

Perry, John. 1979. The Problem of the Essential Indexical. *Noûs*, **13**, 3–21.

Ryle, Gilbert. 1945. Knowing How and Knowing That. *Proceedings of the Aristotelian Society*, **46**, 1–16.

Ryle, Gilbert. 1949. *The Concept of Mind.* Edition of 1963. Harmondsworth: Penguin Books.

Sax, Greg. 2010. Having Know-how. Intellect, Action, and Recent Work on Ryle's Distinction between Knowledge-How and Knowledge-That. *Pacific Philosophical Quarterly*, **91**, 507–530.

Setiya, Kieran. 2012. Knowing How. *Proceedings of the Aristotelian Society*, **112**, 285–307.

Setiya, Kieran. 2014. Intention. *In:* Zalta (1995 ff.). Spring 2014 Edition. http://plato.stanford.edu/archives/spr2014/entries/intention/.

Small, Will. 2017. Ryle on the Explanatory Role of Knowledge How. *Journal for the History of Analytic Philosoply*, **5**(5), 57–76.

Snowdon, Paul F. 2003. Knowing How and Knowing That: A Distinction Reconsidered. *Proceedings of the Aristotelian Society*, **105**, 1–25.

Sosa, Ernest. 2015. *Judgment and Agency*. Oxford: Oxford University Press.

Stanley, Jason. 2011a. *Know How*. Oxford: Oxford University Press.

Stanley, Jason. 2011b. Knowing (How). *Noûs*, **45**, 207–238.

Stanley, Jason, & Williamson, Timothy. 2001. Knowing How. *The Journal of Philosophy*, **98**, 411–444.

Steel, Thomas J. 1974. A Puzzle about Knowing How. *Philosophical Studies*, **25**, 43–50.

Tanney, Julia. 2017. Gilbert Ryle on Propositions, Propositional Attitudes, and Theoretical Knowledge. *Journal for the History of Analytic Philosoply*, **5**(5), 1–15.

Thompson, Michael. 2008. *Life and Action*. Cambridge: Harvard University Press.

Waights Hickman, Natalia. 2018. Knowing in the "Executive Way": Knowing How, Rules, Methods, Principles and Criteria. *Philosophy and Phenomenological Research*, published online on February 15, 2018.

Wallis, Charles. 2008. Consciousness, context, and know-how. *Synthese*, **160**, 123–153.

Wiggins, David. 2012. Practical Knowledge: Knowing How To and Knowing That. *Mind*, **121**, 97–130.

Williams, John N. 2008. Propositional knowledge and know-how. *Synthese*, **165**, 107–125.

Wilson, George, & Shpall, Samuel. 2012. Action. *In:* Zalta (1995 ff.). Summer 2012 Edition. http://plato.stanford.edu/archives/sum2012/entries/action/.

Worthmann, Hannes. 2019a. *Praktische Intelligenz und die Zweiteilung des Wissens*. Berlin: J.B. Metzler.

Worthmann, Hannes. 2019b. Wissen, Können und Verstehen. *Deutsche Zeitschrift für Philosophie*, **67**, 139–145.

Worthmann, Hannes. this volume. Knowledge-How and its Exercises. *In:*

Demmerling, Christoph, & Schröder, Dirk (eds), *Concepts in Thought, Action, and Emotion. New Essays.* Routledge.

Zalta, Edward N. (ed). 1995 ff.. *The Stanford Encyclopedia of Philosophy.* Stanford: CSLI.