What's the Point of Knowing how?

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Introduction

In *The Concept of Mind*, Ryle introduces knowledge-how with a rebuke to philosophers:

Theorists have been so preoccupied with the task of investigating the nature, the source and the credentials of the theories that we adopt that they have for the most part ignored the question what it is for someone to know how to perform tasks. In ordinary life, on the contrary, as well as in the special business of teaching, we are much more concerned with people's competences than with their cognitive repertoires, with the operations [that they engage in] than with the truths that they learn. (Ryle, 2009, p. 17)

Ryle is surely right that we have a practical interest in thinking about who knows how to do what. However, he doesn't anywhere consider what the source of this concern might be. In this paper, I want to consider what the practical needs driving our concept of knowledge-how might be. Building on Craig's discussion of the function of the concept of knowledge (Craig, 1990, 2007), I will argue that the we use the concept of knowledge-how to play a pair of roles – helping us to extend our capacities, and facilitating responsible cooperation – and that these roles are in tension, leading us to inconsistent judgement. This is a negative feature, and drawing on the literature on inconsistent concepts (Scharp, 2007,

2013, Weiner, 2009a, 2009b), I will suggest a way to revise the concept of knowledge-how to play these roles consistently.

A couple of preliminary points. I will follow the convention of capitalising concepts, so 'KNOWS' denotes the concept of knowledge, and 'KNOWS-HOW' denotes the concept of knowledge-how. For the purposes of this paper I will set the debate between Intellectualists and Anti-Intellectualists to one side, since I take it that we can investigate the point of KNOWS-HOW without resolving the issue of whether it has a propositional object.

In the first section, I offer an account of what it is to investigate the function of a concept, drawing on Craig's genealogical account of knowledge. In the second section, I set out Craig's argument that the point of KNOWS-HOW is to facilitate the pooling of capacities, a view which I call *Pooling Capacities*. In the third section, I criticise *Pooling Capacities*, pointing out several features of knowledge-how which do not sit well with it. In the fourth section, I offer an alternative account – *Mutual Reliance* – that connects the concept of knowledge-how to our need for co-operation. In the fifth section, I suggest that neither account gives a complete story about the function of KNOWS-HOW, because we use KNOWS-HOW to play both roles. I then suggest a way to modify our concept of knowledge-how to play both roles without falling into inconsistency.

1 Functional Theorising

There has been a recent surge of interest in philosophical accounts which appeal to the functions of concepts in order to understand the phenomena which those concepts pick out (Craig, 1990, 2007, Haslanger, 1999, 2000; Williams, 2002; Dogramaci, 2012; Fassio &

McKenna, 2015; Henderson & Greco, 2015). It is common to introduce functional theorising with a programmatic passage from Craig's *Knowledge and the State of Nature*:

Instead of beginning with ordinary usage, we begin with an ordinary situation. We take some prima face plausible hypothesis about what the concept knowledge does for us, what its role in our life might be, and then ask what a concept having a role would be like, what conditions would govern its application. (Craig, 1990, p. 2)

Although this passage is an effective piece of philosophical propaganda, there are several issues which need to be untangled before we can employ this methodology in good faith:

- i. How should we understand function talk?
- ii. What's the role of history in functional theorising?
- iii. How should we evaluate different hypotheses about the function of KNOWS?

1.1. What is the significance of function-talk?

Talk about the function of a *concept* should be sharply distinguished from both the function of *speech acts* involving that concept, and the function of the *phenomenon* picked out by that concept. These distinctions are often smudged. For example, we often hear that on Craig's view the function of KNOWS is to 'flag good informants'. It is easy to hear this

¹ I use 'functional theorising' to pick out the generic approach of thinking about concepts in terms of their functions. Genealogy – whether real or hypothetical – is a kind of functional theorising, but there are also non-historical versions of this approach.

either as the pragmatic claim that saying that someone knows implicates that they are a good informant (hearing 'flagging' as implicating), or as the substantive point that knowing something just is being a good informant (hearing 'flagging' as referring to).² Neither claim captures the core of Craig's account. Craig says nothing about the pragmatics of knowledge-ascriptions, and explicitly denies that knowing is identical to being a good informant (Craig, 1990, Chapter 10). His view in the first instance concerns the function of the concept KNOWS, not the pragmatics of knowledge ascriptions or the functional properties of knowledge.

To avoid this confusion, I avoid talk about 'flagging', instead saying that on Craig's view the function of KNOWS is to facilitate the pooling of information by helping to foster responsible practices of information-sharing. This is not to say that the pragmatic or substantive claims are unimportant – both provide important sources of evidence about the function of KNOWS

With these distinctions in hand, we can ask how to understand function-talk (Kappel, 2010). At the foundation of any functional approach is the claim that there is some important relation between our concepts and our practical needs.³ Craig offers a quasi-historical gloss on this idea, but I think that Jane Heal gives a clearer picture of the connection:

I shall take it that our concepts are bound up with our interests, that is to say things which matter to us because their presence in human life contributes to that life

² See (McKenna, 2013; Hannon, 2015; McGrath, 2015) for presentations of Craig's view as concerning the pragmatics of knowledge ascriptions, and (Kelp, 2011; Lackey, 2012) for presentations of Craig's view as offering a first-order account of knowledge.

³ Function talk has various other purposes. For a helpful taxonomy, see (Queloz forthcoming)

going well. What motivates the assumption is the fact that we are finite in our cognitive resources while the world is immensely rich in kinds of feature and hence in the possibilities it offers for conceptualization. Given our finitude, the fact that use of a certain concept enables the making of true judgements employing that concept does not, by itself, make intelligible our possession of it. Intelligibility requires further that thinking in terms of the concept is a worthwhile use of resources for us, in that it enables or enriches realization of one or more of our interests. The nature of those interests may throw light on the distinctive logical shape and content of the concepts in question. (Heal, 2013, p. 342)

Heal's idea is that we cannot explain why we deploy our limited cognitive resources to represent some distinction merely by claiming that the distinction is 'out there'.

Concepts need to pull their weight – practically speaking – to be worth employing.

Consider why we employ the concept FOOD. There are myriad ways in which we might represent distinctions between different kinds of food and non-food stuffs, but we employ the concept FOOD which picks out (roughly) edible, nutritious, non- poisonous objects rather than various alternates – such as FOOD* which picks out both food and mud – because FOOD addresses our need for nourishment by making it easier to decide what to eat.

Note that this form of reasoning applies equally to natural and non-natural kinds, meaning that contrary to Craig's claim that knowledge is not a 'given phenomenon' (Craig, 1990, p. 3), functional theorizing is quite compatible with knowledge being a natural kind (Kornblith, 2002, 2011). The idea is that KNOWS picks

out a real distinction 'out there' in the world, but that to explain why we need to pick out that particular distinction we must appeal to our practical interests.⁴

That our conceptual scheme is answerable to our practical needs does not mean that all our concepts have distinctive functions. Perhaps the function of some terms is just to pick out their extensions (Kornblith, 2011), perhaps some concepts have multiple functions in different contexts (Weiner, 2009a, 2009b), and perhaps some concepts answer to our needs only as part of a network of concepts. However, to pursue functional theorising, we don't need to think that all concepts have functions, only that *some* of them do. The best way to tell whether a concept has an interesting function is to cook up some hypotheses and see how well it explains the contours of the concept (Craig, 1990, pp. 3–4).

Given these ground-clearing points, we can sketch out Craig's account of KNOWS. ⁵ Craig appeals to the idea we have a basic interest in pooling our information given the combination of the need for true information to guide action, and our access to different bodies of information. He suggests that KNOWS helps us address this need, suggesting the following functional claim:

Pooling Information: We care about knowledge because we want to pick up information from other people; we use the concept of knowledge to make judgements about whose testimony to solicit and believe.

How does KNOWS play the role associated with *Pooling Information*? Craig focuses on the situation of the inquirer looking for someone to answer a question, and her use of

⁴ Although it is tempting to think that thinking about the function of KNOWS is an alternative to thinking about what knowledge is, I think it is much more plausible to think of the two approaches as complementary (Gardiner 2015).

⁵ Given Craig's distinct account of KNOWS-HOW, what follows is an account of the function of KNOWS as it figures in knowledge-that and knowledge-wh ascriptions.

knowledge ascriptions to pick out a good informant (Craig, 1990, Chapter 2). However, he also discusses various other ways in which deploying KNOWS can facilitate the pooling of information, including the self-ascription of KNOWS to determine whether one can responsibly answer a question (Craig, 1990, pp. 63–5), and the use of KNOWS to recommend informants to others (Craig, 1990, pp. 82–97). Generalising across these various situations, we can say KNOWS facilitates the pooling of information by picking out a state which is an epistemic standard on answering a question.

1.2. A Genealogy of KNOWS?

It is common to claim that Craig's project aims at providing a picture of the way in which KNOWS came into currency in some ancient non-knowledge ascribing society.⁸

Although might be an interesting project,⁹ Craig offers a pretty clear warning against historical interpretations of his view:

I shall not treat its [i.e. KNOWS's] development diachronically, and that is not just an omission: if what I shall say is along the right lines, the core of the concept of knowledge is an outcome of certain very general facts about the human situation; so general, indeed that one cannot imagine their changing whilst anything we can still recognise as social life persists (Craig, 1990, p. 10).

⁶ In his complementary account of the function of KNOWS, Reynolds also suggests that we use knowledge ascriptions to provide social pressure to drive up epistemic standards (Reynolds, 2002, 2008, 2017).

⁷ This is extremely close to the claim that knowledge is the norm of assertion. On this connection, see (Fricker, 2015; Habgood-Coote 2018a). For the claim that Craig's account of KNOWS supports the knowledge norm of practical reasoning, see (Greco, 2008, 2012; Hannon, 2013; McKenna, 2013, 2014).

⁸ For this interpretation, see (Kusch, 2009, 2011; Kelp, 2011; Gardiner, 2015)

⁹ See (Sterelny, 2012) for a historical genealogy which stresses the importance of pooling information and skills for human evolution.

Although he makes use of a state of nature narrative, the point of this story is not to present either a real or imaginary history of KNOWS, and he claims that any historical elements of his account are epiphenomenal (Craig, 2007, pp. 191–2). How should we understand Craig's use of historical devices? I suggest that the state of nature story serves as a framing device to present general claims about the human situation, which aim to allow us to grasp the practical needs which are at foundation of KNOWS. These quasi-historical elements are helpful in grasping our practical needs, but they are not an essential part of the account of the function of KNOWS. We could just as well start with hypotheses about our practical needs, and then consider how these needs might shape our conceptual repertoire.

1.3. How should we evaluate competing accounts of the function of KNOWS?

Following Craig's discussion, various alternative accounts of function of KNOWS have emerged: that KNOWS functions: i) as an inquiry stopper (Kappel, 2010; Kelp, 2011; Rysiew, 2012), ii) to regulate patterns of blame (Reynolds, 2002; Beebe, 2012), iii) to mark an epistemic threshold (Gerken, 2015), or iv) to provide assurance (Austin, 1946; Lawlor, 2013). If we want to think about the function of KNOWS-HOW, we need to have some criteria for assessing competing accounts of the function of a concept. Drawing on Craig's discussion, I suggest the following:

¹⁰ It is true that Craig's discussion of Objectivisation can sound like a stage in the historical development of a concept (as interpreters who stress the importance of proto-knowledge stress).

development of a concept (as interpreters who stress the importance of proto-knowledge stress (Kusch, 2011)). By contrast, I take it that we should understand Objectivisation as a kind of *conceptual* pressure.

- i. That the hypothesis can explain key features of the target phenomena, including its extension, its key properties, the 'constellation of thoughts' which go along with the concept, and cases in which our judgements are messy or unclear;
- That the function of the concept shows up in the pragmatics of speech acts which employ that concept;¹¹
- iii. That the practical need identified is suitably important and general to explain the employment of the concept.

2. The Function of KNOWS-HOW

I will focus on two hypotheses about the function of KNOWS-HOW:

Pooling Capacities We care about knowledge-how because we want to pick up capacities from other people; we use the concept of knowledge-how to make discernments amongst potential teachers.

Mutual Reliance: We care about knowledge-how because we need to be able to rely upon people to do stuff for and with us; we use the concept of knowledge-how to make judgements about who to rely upon.

Pooling Capacities focuses on our need to extend our practical capacities, and is a natural partner for an information-pooling account of KNOWS-THAT (Craig, 1990, Chapter 17; Reynolds, 2002, pp. 57–8). By contrast Mutual Reliance focuses on our need to

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¹¹ See (Haslanger, 1999, pp. 462–3, 2000, p. 33).

rely on others' capacities as part of our practices of co-operation (Moore, 1997, pp. 173–4; Hawley, 2011, p. 287; Kotzee, 2016).

We might want to add another candidate function, which connects knowledge-how to intelligent action:

Explaining intelligence: We care about tracking intelligent action; we use the concept of knowledge-how to predict and explain the intelligence of action.

The idea that the point of thinking and talking about knowledge-how is to help us to explain intelligence is in the background of Ryle's discussion of the connection between knowledge-how and intelligence epithets (Ryle, 1945, 2009), leading Bengson and Moffett to give it a central role in their picture of the knowledge-how debate (Bengson & Moffett, 2011b, pp. 4–17), and this idea also figures in Stanley's discussion of knowledge-how (Stanley, 2011a, p. viii, 175-7).

Although it appears popular, I don't think Explaining Intelligence is especially plausible. We do sometimes use knowledge-how ascriptions to ascribe intelligence — 'Tine really knows how to play the trumpet' — but these seem like special cases. We talk about knowing how to walk, to wiggle our ears, and to write 'cat', and there does not seem anything especially intelligent about these activities (at least as ordinarily performed). It also looks like the concept SKILL is a much better candidate for playing the role picked out by Explaining Intelligence. At first pass, to be skilled at doing something is just to be

disposed to perform a certain kind of action sufficiently intelligently, ¹² suggesting that SKILL fills the conceptual niche picked out by *Explaining Intelligence*. It's also notable that *Explaining Intelligence* also doesn't explain why we should care about tracking intelligent action. Although it is nice to have a concept to help us give each other kudos on well-done performances, this is hardly a deep practical need.

3. Pooling Capacities

Given Craig's information-pooling account of KNOWS-THAT, our first thought might be that KNOWS as it occurs in ascriptions of the form 'S knows how to V' functions to pool information about the answers to how-to questions (Craig, 1990, p. 149). Craig points out that this hypothesis faces two key problems:

- Many knowledge-how ascriptions pick out a state which has very little to do with being a good informant;
- ii. There is an intuition that 'S knows how to V' means 'S can V' (Craig, 1990, p. 150).

Pooling Information applied to KNOWS-HOW does not seem well-positioned to explain either fact.

We might suggest that the function of KNOWS-HOW is just distinct from the function of KNOWS-THAT, meaning that 'knows' picks out different distinctions in these two constructions. Although there is some linguistic evidence for an ambiguity thesis

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¹² The standards for 'sufficient' intelligence, comparison class, and the scale involved in skill ascriptions will plausibly be set by context, as with other gradable adjectives (Kennedy, 2007)

(Rumfitt, 2003; Wiggins, 2012; Ditter 2016) Craig is wary of the linguistic commitments this view would require (Craig, 1990, p. 150). ¹³ He also suggests that:

If we regularly find the same word filling two slots it is fair to conclude that the slots must be related and try to specify this relationship. (Craig, 1990, p. 141)

Following this thought, Craig's strategy is to give an analogous account of the function of KNOWS-HOW, and then explain why we should use the same word to play both functions.

The first step is to appeal a parallel between our needs for information and capacities:

We may start with the obvious point that human beings need both true beliefs and capacities to act, since every action calls for both. The inquirer seeks a true belief on the question whether p; the apprentice, as we may call him, seeks the capacity to do A. His purposes may be furthered either by someone who tells him, or by someone who shows him, how to do A. (Craig, 1990, p. 156).

The suggestion is that KNOWS-HOW is connected to our need to pool capacities, given that i) we need practical capacities for successful action, ii) we have different capacities, and iii) we are able to teach each other how to do stuff. Craig proposes that KNOWS-HOW plays a role in facilitating the pooling of capacities by picking out a

¹³ These linguistic commitments are multiplied by the complexity of the cross-linguistic evidence. See (Rumfitt, 2003; Stanley, 2011a, 2011b; Abbott, 2013; Douskos, 2013; Ditter, 2016).

standard on teachers. This role is analogous to *Pooling Information*, giving us *Pooling Capacities*:

Pooling Capacities: We care about knowledge-how because we want to pick up skills from other people; we use the concept of knowledge-how to make discernments amongst potential teachers.

Whereas being a good informant is a unitary state, Craig claims that being a good teacher can involve being able to tell others how to V, being able to demonstrate to others how to V, as well as a range of in-between cases (Craig, 1990, p. 156).

The teacher-flagging dynamic shows up in the pragmatics of knowledge-how ascriptions. Consider the following exchange:

Anika: I'm looking to learn to play the recorder: do you know anyone who could teach me?

Marta: Sure! Parzifal knows how to play the recorder.

Although Marta's response doesn't directly address Anika's question about who might teach her, there is a clear implicature that Parzifal would be a suitable teacher for Anika. This kind of exchange mirrors the use of knowledge-wh ascriptions to flag informants, and provides a nice preliminary argument for *Pooling Capacities*.

Craig claims that Pooling Capacities is in a good position to respond to the issues for the application of *Pooling Information* to KNOWS-HOW. *Pooling Capacities* allows that

knowing how can involve either the ability to answer a how-to question, or the capacity to engage in the activity in question. This explains why some knowledge-how ascriptions can be paraphrased in terms of knowledge-that (as with 'Janelle knows how to spell 'Cat"), whereas others resist this kind of paraphrase (as with 'Janelle knows how to swim'). Teachers who focus on demonstration will fall under KNOWS-HOW, but because they will inarticulate about the relevant how to questions, they will not fall under KNOWS-THAT, whereas teachers who focus on telling will fall under both KNOWS-HOW and KNOWS-THAT. The connection between demonstration and ability also explains the ability sense of 'knows how' ascriptions. Because the standard way to demonstrate an activity will be by doing it, sometimes we will just be seeking someone who just has the capacity to perform some activity. This view can also explain cases of agents who know how but are not able, since testimony-focused teachers will sometimes not be able to do what they teach. Craig points out that the view also predicts that knowledge-how requires an element of understanding on top of ability, since a good teacher who uses demonstration will decompose her performance by pointing out its most important aspects and pantomiming those parts which are difficult to understand (Craig, 1990, p. 158).

To explain why we should use the same verb to pick out knowledge-how and knowledge-that, Craig appeals to the idea that KNOWS-THAT and KNOWS-HOW pick out an overlapping bundle of properties, leading the two kinds of knowledge to 'huddle together' (Craig, 1990, p. 156). This huddling has three aspects. Both informants on a factual question and telling-focused teachers are informants, meaning that they fall under KNOWS-THAT. Secondly, cases like a knitting demonstration with running commentary (Craig, 1990, p. 156), or the demonstration of a mathematical proof (Craig, 1990, p. 157) blur the boundary between telling-how and demonstration. In these cases, showing

involves "self-conscious, reflective demonstration in which the teacher draws attenition to the essential features of the performance, perhaps doing some of them more slowly, or exaggerating them slightly." (Craig 1990: 159). Thirdly, Craig suggests that ability-related know-how and knowledge-that are connected in virtue of the fact that knowing-that is a matter of being able to answer a certain range of questions (Craig, 1990, p. 157). This triangle of connections between being an informant, being a telling-teacher, and being a demonstration-teacher provides a rationale for using the same concept to pick out both bundles of properties

Although he doesn't make this point, Craig could also appeal to the conceptual connections between *Pooling Information* and *Pooling Capacities*. Both concepts function to pool states which are prerequisites for action. We might think that on Craig's view KNOWS-THAT and KNOWS-HOW instantiate a more general function which we might call *Pooling Conditions for Action:*

Pooling Conditions for Action: We care about knowledge because we want to pick up the preconditions for successful action from other people; we use the concept of knowledge to make discernments amongst potential sources of those states.

Since *Pooling Information* and *Pooling Capacities* are instances of *Pooling Condition for Action*, endorsing this general function for KNOWS gives us a nice function-based explanation of why knowledge-that and knowledge-how are both species of knowledge.¹⁴

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¹⁴ For related discussions of the general function of KNOWS, see (Reynolds, 2002, 2017, pp. 83–4; Buckwalter & Turri, 2014).

4. Problems for Pooling Capacities

Pooling Capacities presents an appealing picture of the function of KNOWS-HOW. However, it faces two serious worries: i) that knowing how to do something and being a good teacher of that activity come apart, and ii) that our interest in knowledge-how ascriptions appears to be more closely connected with our need for co-operation than our need for instruction.

4.1. Knowing how and Teaching

Pooling Capacities predicts that there is a close connection between knowing how to do something, and being a good teacher of that activity. However, there we don't have to look hard to find cases where knowing-how and being a good teacher come apart.

A great many agents with knowledge-how are inarticulate, either possessing no beliefs or even false beliefs about how to V (Michaelson and Brownstein 2015). In fact, there is a body of empirical evidence which suggests that the degree of skill in some activity is negatively correlated with the ability to tell others how to engage in that activity (Keele & Summers, 1976; T. Brown & Carr, 1989; Beilock & Gray, 2012; Brownstein, 2014, pp. 557–8; Montero, 2016, pp. 87–91). Craig is aware of this point, claiming that teachers who can't tell can still show. However, it is easy to find agents who know how but cannot teach even by showing. Someone who knows how to perform a basic action — such as wiggling their ears, walking, or adding numbers in their head — cannot teach

someone else how to engage in that activity just by doing it in front of them (Setiya, 2008, n. 51). Showing also fails when it comes to very complex actions, or actions which require practice to gain sufficient various physical capacity. ¹⁵

Craig might maintain that inarticulate teachers can supplement their performance by pantomiming: performing other actions as a means of demonstration. However – as Craig is well aware (see above) – pantomiming requires an understanding of the important features of the activity, and how to make those aspects salient to an apprentice. Neither ability is entailed by knowledge-how. Someone who has false beliefs about how to engage in some activity (Wallis, 2008; Brownstein & Michaelson, 2016) might make mistakes in their pantomime, and it is a common experience to pantomime some activity only for one's audience to fail to pick up on the aspects of the activity you were trying to make salient.

We also find divergences between knowing how and being a good teacher in the other direction, with good teachers who on the face of it do not know how to do what they teach others to do. Consider Jeff King's ski Instructor case:

INSTRUCTOR: Pat has been a ski instructor for 20 years, teaching people how to do complex ski stunts. He is in high demand as an instructor, since he is considered to be the best at what he does. Although an accomplished skier, he has never been able to do the stunts himself. Nonetheless, over the years he has taught many

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¹⁵ In fact, in many cases of showing, the teacher seems to be functioning as a source of evidence about how to perform the relevant action. See Hawley's example of learning how to carve a tomato rose by watching someone else do it in (Hawley, 2010, p. 402) and Small's discussion of teachers as second-personal sources of skills (Small, 2014a). This distinction echoes Craig's distinction between informants and mere sources of information (Craig, 1990, Chapter 5).

people how to do them well. In fact, a number of his students have won medals in international competitions and competed in the Olympic games.¹⁶

My preferred interpretation is that Pat knows how to teach others to perform the moves, without knowing how to them. This interpretation of this kind of case is controversial for reasons that we will return to in section 5 but at this point it suffices to note that to the extent that it is plausible that the teacher in this case does not know how to do the moves it poses a further problem to *Pooling Capacities*. 17

We have seen that there are substantive differences between knowing how to do something and being in a position to teach that activity. This poses a pretty serious problem for *Pooling Capacities*, since this view predicts if not a necessary connection, at least a close fit between knowing how to do something and being an effective teacher.

4.2. The Client's Perspective

Although the teaching-flagging pragmatic function is undoubtedly important, it is not the only pragmatic function associated with knowledge-how ascriptions. We also make knowledge-how ascriptions with an eye to who can help us ∂o various things:

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¹⁶ Description taken from (Bengson, Moffett, & Wright, 2009). For discussion, see (Stanley & Williamson, 2001, p. 416) and (Stanley, 2011a, p. 128).

¹⁷ For a defence of this interpretation, see (Habgood-Coote 2018a).

When I seek a plumber, hairdresser, or architect, usually this is because I need the drains fixed, my hair cut, or a building designed. I need have no interest in learning how to do these things myself, nor in finding someone who can either teach or assess others. Perhaps I know how to do such things already but am too busy or too lazy to get them done myself (and I can't reach to cut my own hair). (Hawley, 2011, p. 287)¹⁸

Rather than occupying Craig's position of the apprentice, in these cases we occupy what Hawley calls *the Client's position*. From the point of view of success, having access to someone with the right capacities is often just as good as having those capacities oneself. ¹⁹ Although Hawley's examples involve agents looking for means to achieving their own ends, this perspective also has an important role in joint projects. When a group is planning to pursue some collective endeavour, they will have an interest in working out how to best assign agents to parts of that task.

This perspective shows up in the pragmatics of knowledge-how ascriptions. Consider the following exchange:

Nat: I need someone to record a Trombone part for a piece that I'm working on: do you know anyone who could help?

Guiditta: Sure! Trenton knows how to play the Trombone'

¹⁸ See (Moore, 1997, pp. 173–4) and ((Kotzee, 2016, pp. 227–9). Craig also makes this point in passing: "I am very pleased that there are people who know how to disarm and dismantle a nuclear missile; but whether those who instructed them would also be prepared to instruct me is of no interest to me at all." (Craig, 1990, p. 92).

¹⁹ In fact, in some contexts it can be appropriate to say that an agent knows how to do something if they know how to get someone else to do it for them. Consider: 'Do I know how to get a 2:1? Sure — you just need to pay an essay-writing service'.

As with the exchange between Anika and Marta, Guiditta's response does not directly answer the question of who might record the line for Nat, instead making a claim about Trenton's knowledge. The natural way to understand this exchange is to think that Guiditta's response implicates that Trenton will be able to help with Nat's recording.²⁰

This collaborator-flagging function points toward the idea that we use knowledgehow ascriptions to evaluate collaborators, getting us to *Mutual Reliance*:

Mutual Reliance: We care about knowledge-how because we need to be able to rely upon people to do stuff for and with us; we use the concept of knowledge-how to make discernments about who to rely on.

It is important to note that saying that someone has knowledge-how is not sufficient to certify them as a fully trustworthy collaborator: we also need to know that the potential collaborator will put sufficient effort into achieving the relevant end. KNOWS-HOW can help us to ascertain which agents are competent, and we can presumably use other concepts to judge which agents will be amenable to committing to do the act, and who will follow through if they do commit. A natural suggestion is that we evaluate an agent's commitment by asking whether they intend to do the thing in question. This closely connects with Bratman's idea that the point of intentions (and presumably, of operating with the concept INTENDS) is to facilitate co-operation (Bratman, 1987).²¹

²⁰ Surprisingly, the debate about the connection between know-how and ability has neglected the possibility that the relation is pragmatic. See (Hintikka, 1975, p. 11).

²¹ The background suggestion here is that Bratman's planning view of intention could be reconstructed as an account of the practical function of the concept INTENDS, rather than as an account of the function of intentions.

Mutual Reliance nicely predicts the connection between knowing how and ability. If we are after people who we can rely upon to do some task, then we will want someone who is broadly competent at that activity. It is an interesting question what kind of ability condition is predicted by Mutual Reliance, but I would suggest that something like Hawley's normal worlds reliability condition is along the right lines (Hawley, 2003), which has the benefit of also able to explain many of the apparent counterexamples to an ability condition on knowledge-how.

The needs associated with *Mutual Reliance* appear to be even more basic than those associated with *Pooling Information*. When we seek an informant, we are not just after someone who is well-epistemically positioned on a question we care about, we also want someone who can effectively transmit their beliefs to us. Similarly, when we want to find someone to teach us how to do something, fundamentally what we are after is someone who is competent at teaching others how to do something. As we have seen in the previous section, being a good teacher of some activity comes apart from knowing how to do it, and these divergences are no surprise if we think that someone who wants to be taught something is after someone who knows *how to teach*, rather than someone who knows *how to*

5. The Inconsistency of KNOWS-HOW

As things stand, the evidence about the function of KNOWS-HOW is ambivalent.
Pooling Capacities explains the teacher-flagging function of knows-how ascriptions and can be combined with Craig's plausible Pooling Information to yield a general account of KNOWS. However, this account gets into trouble with the gap between knowing how and being a good teacher, and doesn't explain the competence-flagging function of knows-how ascriptions. Mutual Reliance explains the competence-flagging function of know-how ascriptions, and the connection between knowing-how and ability. However, it does not provide an obvious explanation of the teacher-flagging function. I want to take this mixed bag of evidence at face value, suggesting that the concept of knowledge-how plays not one, but both functions.

We can support this claim by thinking about cases where the two functions come apart (i.e. incompetent teachers, and competent non-teachers). Philosophers are split on what to say about cases like INSTRUCTOR:

To construct such examples [i.e examples of unable knowers] we need to describe cases in which the subject can show, teach, or tell (or otherwise convey to) us how to do something, and hence must be credited with knowing how to do it, but is for some reason or other unable to do it. There is no assumption here that the presence of knowledge entails that it can be passed on by the knower, but it makes a denial of the knowledge ascription very hard when the subject can, apparently, convey the relevant information to someone else. (Snowdon, 2004, pp. 9–10 italics added).

What could justify the judgement that the instructor knows how to do the jumps, if not her ability to do them here and now? [...] *Teachers and critics, although very*

knowledgeable, do not, by that very fact, have the relevant practical knowledge. (Noë, 2005, pp. 283–4 italics added).²²

In these passages, Snowdon and Noë make diametrically opposing judgements. Snowdon concludes that an agent like Pat does possess knowledge-how, on the grounds that the ability to teach someone else how to do something is sufficient for knowing how to do something. By contrast, Noë concludes that an agent like Pat does not possess knowledge-how, on the grounds that the ability to do something here and now is necessary for knowing how to that activity. These principles suggest loyalty to opposing pictures of the function of KNOWS-HOW. Snowdon's appeal to the principle that being able to teach someone how to do something is sufficient for knowing how to do it suggests that his conception of knowledge-how is latching onto the function associated with *Pooling Capacities*, whereas Noë's appeal to the idea that only the ability to do something here and now is necessary for knowledge-how betrays a conception of knowledge-how that expresses the function associated with *Mutual Reliance*.

Although survey evidence suggests that ordinary speakers ascribe knowledge-how to Pat,²³ I don't think that this judgement is stable. I suspect that if we were to add into the vignette a second agent who is looking for a teacher then it would be natural to judge that Pat knows how, whereas if the second agent was looking for someone to do ski stunts for a film, it would be natural to judge that Pat *does not* know how.

 $^{\rm 22}$ See (Small, 2014b) for an alternative explanation of this disagreement.

²³ Over 90% of participants in (Bengson et al., 2009) judged that Pat does know how to do the moves he teaches to his students (although 11.3% of these respondents also judged that Pat was able to perform the moves, which suggests some confusion).

We find the same pattern of conflicting judgements in cases of agents who are competent but useless as teachers. ²⁴ Consider the following exchange from an interview with Kimberly Kim, the youngest person to win the US Women's amateur golf tournament:

KIM

Interviewer: You're 5 down going into the 16th hole this morning. You finish with three birdies. I mean they weren't even long birdie putts. What did you do to motivate yourself to win three holes in a row?

Kim: I have no idea. I guess it was like God playing for me. I don't know how I did it.

Thinking back, I don't know how I did it. I just hit the ball and it went good.²⁵

Does Kim know how to score birdies on the last three holes of the course she was playing on? It can seem obvious that Kim knows how to score three birdies in a row on that course. After all, it was Kim who scored the three birdies and the achievement was hardly a fluke. Being competent at doing something is surely sufficient for knowing how to do it. However, we can feel the attraction to saying that she *does not* know how to score three birdies in a row. She claims to have no idea how she brought off this task, and she

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²⁴ Professional sportspeople problematise our account of competence, since they engage in activities with a low success rate. Rather than ditching the idea that sportspeople are competent, we might think that as the difficulty of a task increases, the degree of reliability required for competence goes down (Sosa, 2011, pp. 53–55), or that the standards of reliability are set by context.

²⁵ Quoted in (Brownstein, 2014, p. 555)

would clearly be a useless teacher. We might that the doesn't know how: she *just did it*.²⁶ To know how to do it, she would need to be able to transmit that knowledge to someone else. As with INSTRUCTOR, we seem to get different judgements depending on which perspective we take up.

This pattern of judgements suggests that KNOWS-HOW has more than one function, making it what Weiner calls a *Swiss-army knife* concept (Weiner, 2009a, 2009b). When we use KNOWS-HOW to play the function associated with *Pooling Capacities* we judge that Pat knows-how and that Kim does not, and when we use KNOWS-HOW to play the function associated with *Mutual Reliance* we make the opposite judgements. This leads us to accept the following pair of biconditionals:

PC: S is a good teacher of V-ing iff S knows how to V.

MR: S is competent at V-ing iff S knows how to V.27

These inference patterns appear to manifest our competence with the concept, leading us to make inconsistent judgements, suggesting that the inconsistency arises from the nature of KNOWS-HOW, making it an *inconsistent concept* (Weiner, 2009a, 2009b; Scharp, 2013, Chapter 2).

I think that it is plausible that this pattern of inconsistent judgements shows up both in ordinary discourse, and in philosophical theorising. However, I want to focus my revisionary proposal on the philosophical uses of knowledge-how ascriptions. Ordinary

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²⁶ On the 'Just do it' mythology, see (Montero, 2016)

²⁷ The two opposing reactions to INSTRUCTOR demonstrate our commitment to the left to right direction of PC, and the right to left direction of MC, and the two opposing reactions to KIM demonstrate our commitment to the right to left direction of PC and the left to right direction of MC.

language is so riven with inconsistencies and vagueness that it would be perverse to insist on strictly regimenting 'knows how' ascriptions. Further, some of the inconsistencies in ordinary language might be benign, or even beneficial. For example, Weiner suggests that using an inconsistent concept of KNOWS might be an efficient way to fill a number of conceptual niches, and points out in cases where the inconsistencies are manifest, we can get along for practical purposes by switching idioms to talk about justification or evidence (Weiner, 2009a, 2009b). Even if we decided that it was particularly important to regiment 'knows how' it is not at all obvious how one would go about changing ordinary usage.

Whereas ordinary language can tolerate some inconsistent usage, in philosophical discourse we want to offer a transparent and consistent theoretical framework. This ambition gives philosophical disputes between speakers employing 'knows how' with different functions a special character. Rather than expressing a dispute about the way the world is, or about the meaning of 'knows how' ascriptions, in these case the core of the disagreement is about how we *ought* to use 'knows how' ascriptions. These kinds of philosophical disputes are *metalinguistic negotiations* (Plunkett & Sundell, 2013; Plunkett, 2015). A metalinguistic negotiation is a disagreement in which speakers mean different things by their words, but the disagreement is not resolved by discovering the 'ordinary' meaning of the term, because the speakers are disagreeing not about what a term does mean, but about what it *ought* to mean.²⁸ Snowdon and Noë are clearly disagreeing about something, and their respective patterns of reasoning are in line with different meanings for 'knows how'. It is also unlikely that the discovery that ordinary language patterned one way or the other would resolve the disagreement. This means that we should treat Snowdon and Noë as putting forward opposing proposals for how to regiment our use of

²⁸ See (Plunkett, 2015, p. 847) for diagnostic criteria.

'knows how'.²⁹ Snowdon's proposal is that we ought to use 'knows how' with a meaning consonant with *Pooling Capacities*, whereas Noë's is that we ought to use 'knows how' to express a meaning in line with *Mutual Reliance*. The only way to resolve this dispute is by deciding which way we ought to use 'S knows how to V'.

We could offer either *Pooling Capacities* or *Mutual Reliance* as the basis for a revisionary account, account, and there is a touch of arbitrariness about the choice. We could try to argue that one of the functions is in some sense more fundamental, but it is difficult to see how one would assess this kind of claim.³⁰ Instead, I suggest that we divide up the conceptual work, using different concepts to play the two roles. We've already seen a hint of this idea when we observed that relying on someone as a teacher is a special case of relying on someone to do something. My proposal is that we use the notion of knowing bow do something to facilitate co-operation, and use the notion of knowing how to teach others to facilitate the pooling of capacities. When we say that someone knows how to V, we flag them as someone who can be relied upon with regards V-ing, and when we say that someone knows how to teach V-ing we flag them as someone who can help us to extend our capacities. This revision is in part a concession to Mutual Reliance, in that it treats looking for a teacher as a special case of looking for someone to rely on, but we don't lose the conceptual work associated with *Pooling Capacities*. On this proposal, in philosophical contexts we should say that Pat doesn't know how to do the jumps, but knows how to teach them, and that Kim knows how to score three birdies in a row, but not to teach others to do the same.

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²⁹ Are ordinary speakers also engaged in a metalinguistic negotiation? Perhaps sometimes, but I suspect that for the most part they are more concerned with gaining capacities or relying on others than with worrying about what 'knows how' ought to mean.

³⁰ See (Moore, 1997, pp. 173–4) for a claim of fundamentality for *Mutual Reliance*, and (Reynolds, 2002, pp. 158–9) for a claim of fundamentality for *Pooling Capacities*.

To be clear, this is a proposal about the function of KNOWS-HOW, and not an account of what knowledge-how needs to be like for KNOWS-HOW to play this role (or, alternatively an account of what 'knows how' ascriptions *ought* to mean). An account of the function of a concept constrains the account of the phenomena picked out by that concept, but there is no simple route from conceptual function to a first-order account. However, following that KNOWS helps us to pick individuals by allowing us to evaluate their epistemic standings, I would suggest that the revisionary account predicts normative connections between knowing how to do and intending, and knowing how to teach and teaching.³¹

This proposal is related to a move that several philosophers have pursued regarding cases like INSTRUCTOR. It is common to distinguish a number of different meanings for the embedded interrogative sentences of the form 'S knows how to V', and to say that the special practical sense is associated with questions about how S can V. Distinguishing these readings opens up the possibility that when we say 'Jim knows how to do the stunts' what we mean is that he knows how one can do the stunts, or how one ought to do the stunts (Stanley & Williamson, 2001, pp. 422–25; Noë, 2005, p. 284 note 4; Stanley, 2011a, pp. 128–9). The problem with this proposal is that there is scant linguistic evidence for this claim. Distinguishing the different readings of interrogatives is difficult and falls back on somewhat unreliable intuitions about paraphrases (see, Bhatt, 2006). Rather than making linguistic claims by fiat, the revisionary proposal allows us to screen off cases like Pat's by saying that we ought to use 'knows how' in such a way that Pat counts as knowing how to teach the moves but not as knowing how to do them

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³¹ Specifically, that knowledge-how is the norm of intending (Habgood-Coote 2018a §4.3.; Habgood-Coote 2018b).

One issue for the revisionary proposal concerns what it should say about the general function of KNOWS. *Pooling Information*, and *Pooling Capacities* combine to yield *Pooling Conditions for Action*. A generalisation of *Mutual Reliance* connects our interest in thinking about knowledge with our need to rely on one another:

Co-operation: We care about knowledge because we want to be able to rely upon others to do various things; we use the concept of knowledge to make judgements about who to rely upon.

We can distinguish two aspects of our reliance on others: we need to be able to rely on others being competent at performing certain tasks, and on them being competent at responding to the facts. If we think that KNOWS-HOW helps us to address the first issue, then it would be natural to suggest that KNOWS-THAT helps us to address the second. This connects with Williamson's idea that knowledge-ascriptions play a distinctive role in explaining and predicting action (Williamson, 2000, pp. 60–4), and the idea that knowledge is the norm of practical reasoning (Hawthorne & Stanley, 2008; Fantl & McGrath, 2009). We need to do more work to fill out this picture of the function of KNOWS, but that is a task for another day.

Conclusion

In this paper, I have followed Ryle's hint that we have an important practical interest in knowing how by giving an account of the point of our concept of KNOWS-HOW. Taking my lead from Craig's genealogical account of knowledge I have argued that in ordinary life, KNOWS-HOW reflects two functions — Pooling Capacities, and Mutual Reliance — and that the multi-function nature of KNOWS-HOW leads us to inconsistent

judgements. Although this multi-function concept of knowledge-how might an efficient conceptual tool for cognitively limited agents, I have argued that this concept is not suitable for serious theorising. I have proposed a revisionary account of KNOWS-HOW, on which we use straight knowledge-how ascriptions to play the role associated with *Mutual Reliance*, and ascriptions concerning knowing how to teach to play the role associated with *Pooling Capacities*.

The take-away lesson from this paper is that the debate about knowledge-how has an important metalinguistic dimension. This debate concerns not only the first-order question of what knowledge-how is like, but also the metalinguistic question of what the concept of knowledge-how ought to be like. I have argued that we should want KNOWS-HOW to do work both in helping us to collaborate and pool capacities, but I don't think that my case is overwhelming, and I can imagine more being said in favour alternative views. However, to pursue this disagreement in good faith, we need to be clear that the debate is not about the nature of knowledge-how, but about which function (or functions) we want the notion of knowledge-how to play.³²

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³² Thanks to Katherine Hawley, Robin McKenna, Kieran Setiya, Caroline Touborg, and audiences in St Andrews and Edinburgh. This research was funded by a UK Arts and Humanities Research Council doctoral scholarship

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