

Gilbert Ryle and the Chinese Skeptic: Do Epistemologists Need to Know How to?

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Abstract

Traditionally, epistemology in Western philosophy has been concerned with the problems and questions that arise with propositional knowledge. This, however, is not the only way in which knowledge can be conceived. In this paper I will argue, following Ryle (1949), that 'knowing how to' cannot be reduced to a special case of 'knowing that'. I will also urge that there are at least *prima facie* reasons to believe that the former is prior to the latter. This latter argument will be based upon some insights which derive from the study of epistemological topics in Classical Chinese philosophy.

I. Introduction.

[1] Traditionally, epistemology in Western philosophy has been concerned with the problems and questions that arise with propositional knowledge.¹ This, however, is not the only way in which knowledge can be conceived. Propositional knowledge consists in an agent, S knowing that p, where p is some proposition. However, knowledge claims may also be made with respect to S's knowing how to q. In this case, q is some skill or action, and need not be straight forwardly propositional in nature.² In this paper I will argue, following Ryle (1949), that 'knowing how to' cannot be reduced to a special case of 'knowing that'. I will also urge that there are at least *prima facie* reasons to believe that the former is prior to the latter. Furthermore, I will indicate, following Hansen (1981 & 1983), that there are grounds for believing that the problems presented by the traditional philosophical skeptic do not arise with their usual force with respect to claims about S's knowing how to q, although alternative forms of skepticism may be applicable.

II. Knowing-how and knowing-that.

[2] The fact that the verb 'know' may be syntactically concatenated with a variety of terms of superficially different grammatical categories, does not necessarily reveal anything interesting about the structure of knowledge.³ However, if it can be shown that knowledge of a type marked by one grammatical construction cannot be reduced to the type of knowledge marked by another, then the

¹ See, for example, Bonjour (1985: p. 3) and Dancy (1985: p. 23).

² This claim is not entirely uncontroversial, see White (1982: p. 12). More will be said on this matter below.

³ Although it is worth noting that language is the basis for at least some of our intuitions about knowledge.

alternative constructions would seem to signal an epistemologically significant difference.⁴ In the case of 'knowing how to' and 'knowing that', there are reasons for believing that such a difference exists.

[3] For terminological convenience, I shall refer to those who wish to reduce 'knowing how to' to a special case of 'knowing that' as "propositionalists". According to the propositionalists, when it is said that 'S knows how to q', what this claim amounts to is just that s has internalized the rules, in propositional form, which need to be followed in order to q. For example, suppose q is the ability to ride a bicycle. According to the propositionalists, S will have learned a long list of rules such as "turn the handlebars to the right when the bicycle leans to the right".⁵ This, they maintain, is all 'knowing how to ride a bicycle' consists of. Despite the initial plausibility of this account however, there are a number of reasons for believing that this analysis of 'knowing how to' is inadequate. Ryle (1949: pp. 25-61), as part of his argument for a behaviorist conception of the mind, offers a number of these reasons.

II.1. Ryle.

[4] Ryle (1949: pp. 25-27) takes the propositionalist position to amount to the view that intelligence (and other mental capacities) is defined by the ability to grasp and manipulate true propositions. To act in a manner which may be correctly described as 'intelligent' on this view, is just to apprehend and act in accordance with the set of propositions which constitute the rules for intelligent behavior and to satisfy the criteria specified within those rules.⁶ This account, according to Ryle (1949: p. 29), means that to do something in an intelligent manner actually involves two stages; Firstly, one must "...consider certain appropriate propositions...", that is to say, the rules governing doing that thing, then one has "...put into practice what these propositions or prescriptions enjoin."⁷

[5] Ryle does not wish to deny that occasionally intelligent action may proceed in this way. What he wishes to take issue with is the claim that *all* incidences of 'S's knowing how to q' can be explained by this account. An initial objection is that the

⁴ White (1982: p. 28) objects to the claim (he ascribes to Ryle) that the differences between 'knowing how to' and 'knowing that' mark different kinds of knowledge. He claims instead that there is only one kind of knowledge and that the different constructions only indicate alternative types of objects which knowledge may take. The disagreement here appears to be purely verbal. As such, I will continue to talk in the way that White finds objectionable, as nothing of import seems to turn upon this point.

⁵ This example comes from Pollock (1986: p. 129).

⁶ See Ryle (1949: pp. 28-29).

⁷ Note, Ryle does not clearly distinguish between 'knowing how to q' and 'knowing how to q in an intelligent manner'. Instead he appears to conflate the two. This point is raised by White (1982: pp. 24-25) For the sake of expository accuracy however, I maintain this ambiguity.

propositionalist position entails that, for example, before a chef can cook according to a recipe, he must recite the recipe to himself. However, this seldom appears to actually happen in practice. The propositionalist can easily account for this by counter-claiming that the two stage process must in fact occur, albeit unknown to the agent. This response does not save the propositionalist position from other severe difficulties though.

[6] Firstly, it is claimed by Ryle (1949: p. 30) that there are classes of performance for which it does not seem possible to formulate the propositional rules which regulate performance. Ryle offers this example,

The wit, when challenged to cite the maxims or canons, by which he constructs and appreciates jokes, is unable to answer.

White (1982: p. 25-27) takes Ryle to task over this objection. He claims that it does not adequately support Ryle's position, as the inability to formulate explicit rules does not show that there are no such rules. White's point is well taken. However, it must be noted in support of Ryle, that recent work in cognitive science tends to lend some credibility to the conclusion that he draws from this fact.⁸ Nonetheless, this objection alone is not sufficient to conclusively show the propositionalist position to be false.

[7] A second, more persuasive objection which Ryle raises, is one with respect to the priority of practice over the rules of practice. According to Ryle (1949: p. 30),

Efficient practice precedes the theory of it; methodologies presuppose the application of the methods, of the critical investigation of which they are the products.

For example, prior to anyone being able to formulate the set of rules that guide successful fishing, somebody must be able to fish successfully. The rules of fishing could not be derived a priori, so to speak. If this objection cannot be met by the propositionalists, then it constitutes a decisive argument against their position. It would appear that 'S's knowing how to q' cannot be reduced to a special case of 'S's knowing that p', on the simple grounds that a necessary condition for an account of 'S's knowing how to q' in terms of 'knowing that' is that S already knows how to q! Simple temporal priority in this case rules out the possibility of epistemic priority.

[8] Even if the propositionalists could respond to this objection (although I do not see how they might), Ryle (1949: p. 30) raises a third objection to their position which he describes as "The crucial objection...". Ryle notes that when we perform an action, according to the propositionalist, we have to consult the rules

⁸ See the discussion of recent studies in Bechtel and Abrahamsen (1991: pp. 148-158). Clark (1991: pp. 25-32) is germane to this point also.

for performing that action. However, this act of consulting our putative system of rules in itself constitutes a kind of action (a mentation). What rules govern our consulting of this secondary set of rules? According to the propositionalist, there must be yet another set of rules which guide this mentation, and so on. Ryle maintains that the propositionalist position leads to an infinite regress of sets of rules that guide the application of previous sets of rules.

[9] This objection may be made a little clearer by considering an example. Suppose S wishes to ride a horse. According to the propositionalist account of S's knowing how to ride a horse, all that is required is that S has the relevant set of propositional rules for horse riding and, moreover, that S's actions are guided by that set of rules when actually engaged in horse riding. Ryle's point is that this cannot be the complete story, as S has somehow to choose the appropriate set of rules for horse riding from the presumably huge number of sets of rules that she has at her disposal. The problem for the propositionalist is to explain how it is that S knows how to select the rules for horse riding over, say, the set of rules for making coffee. As the propositionalist can only appeal to yet further sets of rules to explain S's knowing how to select the relevant rules for a particular task, an inescapable and vicious infinite regress is rapidly generated.

[10] It is on the basis of this and the above mentioned objections that Ryle concludes that the propositionalist position is incorrect. 'S's knowing how to q' cannot be reduced to a special case of 'S's knowing that p', where p is some set of action guiding propositions.⁹ But this is just to establish the claim that knowing-how is not a subspecies of knowing-that. The two different grammatical structures do seem to mark a significant epistemological distinction.¹⁰

II.2. 'q'

[11] Throughout the above, the propositionalist position has been contrasted with the counter-claim that 'S knows how to q' is not reducible to a propositional form. However, thus far relatively little has been said about what exactly the 'q' in 'S knows how to q' might be. It is time to redress this situation.

[12] At a purely grammatical level, in order to complete the schema 'S knows how to q', all that is required is a verb in the infinitive.¹¹ The question then becomes, exactly which kinds of infinitive verbs are suitable for substitution for 'q'? Ryle (1949: pp. 42-45) argues that q cannot be simple dispositions or habits. Suppose

⁹ It is worth noting that even if the propositionalist could find some way of meeting these objections, he would still have to face up to the potential difficulties, with respect to rule following, which are raised by Kripke (1982: pp. 7-54).

¹⁰ For the sake of completeness, it is worth noting that Ryle's three objections, raised above, are not the only reasons he offers against the propositionalist position. Nonetheless, the last objection raised is perhaps the most difficult objection for the propositionalist to meet.

¹¹ I am intentionally avoiding the added complications of considering cases of knowing-how which take verbs in the indicative.

a dog was trained to bark twice at the sound of the command "one plus one", we should surely not be tempted to say that such a dog 'knew how to add'. Ryle claims instead that correct kind of thing to be substituted for 'q' are skills or complex dispositions which require the exercise of some intelligent capacity. White (1982: p. 15) also argues for the importance of intelligence. The significance of this condition is that, by and large, the verbs we use when we say that 'S knows how to q' are verbs which refer to capacities which are learned. A skillful clown may know how to trip in an amusing manner, as may an individual who suffers some nervous disorder, however it is only the former kind of case where we wish to attribute knowledge of 'how to trip in an amusing manner'. In the latter case this capacity is purely accidental.

[13] Ryle (1949: pp. 45-46) also points out that judgements with respect to whether or not 's knows how to q' should be based not upon single observations, but upon repeated observations of S's performance. If this were not the case, then it would not be possible to distinguish between lucky flukes, and genuine cases of knowing-how. It follows from these considerations that the kinds of infinitive verbs which are suitable for substitution for 'q' in the schema, are verbs which refer to skills which require intelligent capacities, may be learned, and which refer to skills which may be demonstrated on more than one occasion.¹²

III. Further Questions About Priority.

[14] In section II it was argued that knowing-how could not be reduced to a special case of knowing-that. Although this conclusion rules out one possibility with respect to the interrelation between knowing how and knowing-that, it does not offer a definitive position on the matter. It seems that two possibilities remain.

[15] The first possible position is that knowing-how and knowing-that represent two distinct and irreducible epistemic categories. This is the weaker of the two possible positions. Assuming that the argument of section II is cogent (and the propositionalist can find no adequate response), it would seem reasonable to conclude from this argument that epistemologies which focus exclusively upon knowing-that are in a significant sense incomplete. They can only offer partial accounts of knowledge. A full account of knowledge would require that a separate project be undertaken in order to account for knowing-how.

[16] The second possible conclusion from the arguments in section II is the more radical thesis that it may be possible to reduce knowing-that to a special case of knowing-how. Fairly obviously however, this more radical conclusion should not be accepted without further substantial argumentation. Some support for this more radical conclusion may be adduced from Ryle's second objection nonetheless. If it is the case that 'S's knowing how to q' is a necessary precondition for 'S's knowing that p', then in a significant sense the former would

¹² An intriguing account of an alternative way of filling out 'q' can also be found in Bechtel and Abrahamsen (1991: p.154). Regretably, an investigation and explanation of their suggestion is beyond the scope of this paper.

be prior to the latter. This, however, is still not sufficient to justify the claim that knowing-that may simply be reduced to knowing-how.

[17] If the above arguments are persuasive, then it seems that the first, weaker conclusion may be accepted. The plausibility of the more radical thesis needs further consideration. Regrettably, I know of no simple knock-down arguments which will show this second possible conclusion to be either true or false. Furthermore, the adequate defense of such a radical proposal lies beyond the scope of a paper of this nature. As such, I shall restrict myself to briefly reviewing the evidence, as it stands, for this thesis. This, hopefully, will enable some preliminary conclusions about the tenability of the hypothesis to be drawn.

IV. Hansen's Hypothesis.

[18] In judging the tenability of the claim that knowing-that may be reduced to knowing-how, an important question is whether or not an adequate functional epistemology could be generated on the basis of such a reduction. Hansen's (1981 and 1983) work in classical Chinese philosophy is of significance in answering this question.

[19] Hansen (1981) claims that the only way to make good sense of the epistemological discussions that are found in early Chinese philosophical literature, in particular in the *Lao Tzu*, is by presuming that the concept of knowledge under consideration is knowing-how. He claims that because of the syntax of the classical Chinese language, especially the way the term *chih*/know functions, Chinese philosophers would be far less likely to draw the knowledge/belief distinction that is of such significance in Western epistemologies. It should be noted though, that Hansen's (1981: p. 335, fn 7) claim does not entail that this distinction cannot, in principle, be formulated in Chinese. Hansen (1981: p. 322) offers the following as an explanation of the way that propositional knowledge is interpreted in classical Chinese philosophy,

Chinese, especially Taoist, critical theory focuses on practical knowledge cum skill (knowing-to or knowing-how-to). What we ordinarily regard as propositional knowledge can be viewed as a linguistic or intellectual skill. Intellectual knowing is knowing to (or how to) use a linguistic form as part of a behavioural response to some situation.

If Hansen's suggestion here is correct and provided one is prepared to accept the view of language which goes with this construal of knowledge, then it does appear that a *prima facie* case may be made for the hypothesis that knowing-that may be reducible to knowing-how.¹³ This is because a functional epistemology based upon knowing-how does appear to be possible.

¹³ It is worth commenting that the philosophy of language which underpins this explanation is not entirely uncontroversial. It is based upon a nominalist assumption

[20] Before concluding this section, it is worthy of note that there have been some claims about the reducibility of knowing-that to knowing-how in the cognitive science literature. Bechtel and Abrahamsen (1991: p. 152) interpret Ryle as arguing that,

...propositionally expressed theoretical knowledge (knowing that) is not primary, but rests on knowing how to perform certain activities...

They then go on to describe (1991: pp. 163-175) a preliminary result in which a connectionist type computer network, which they claim may be more appropriately interpreted in terms of knowing-how, rather than knowing-that, successfully learned several basic logical inferences. In their view, logical inference is prototypical example of a task that has traditionally been construed as being propositional. They take the success of their network in learning inferences as evidence for their construal of Ryle's position, and hence the more radical conclusion from his arguments. In all fairness however, the jury is still out on the correct interpretation of connectionist networks and their relation to logic. So the result reported by Bechtel and Abrahamsen only offers the weakest of support for the conclusion that knowing-that may be reduced to knowing-how.

IV.1. Know-how and the skeptic.

[21] In the previous section, I have tried to offer what justification there is for the more radical of the two conclusions mentioned above. On the basis of the argument of section II, the weaker conclusion that there are two distinct kinds of knowledge seems to be secure. Were the more radical conclusion correct, how would this affect the challenge offered in epistemology by the traditional skeptic? Alternatively, if the weaker of the two conclusions is right one, then can the skeptic spread the shroud of his or her doubt across knowing-how as well as knowing-that?

[22] One of Hansen's motivations for suggesting that classical Chinese epistemology does not proceed using the usual conception of knowledge, is that this helps to explain why there is little or no evidence for the existence of skepticism as we know it, in the Lao Tzu. There is a similar absence in other philosophical works of the era too.¹⁴ This would seem to suggest that knowing-how is in some sense immune from the usual skeptical challenge. But how can this be so? Hansen (1981: pp. 322-323) claims that what gives skepticism its purchase with respect to 'S's knowing that p' is the contrast which can be made with 'S's believing that p'. 'S's knowing that p' entails that p is true, but 'S's believing that p' does not. We may have mistaken beliefs, but it makes no sense to talk of mistaken knowledge. All the skeptic needs to do is to find some grounds

which has close affinities to the position urged by the later Wittgenstein. However, a full discussion would be out of place here. For further details see Hansen (1983).

¹⁴ This is not to say that there is no skepticism in classical Chinese philosophy. More will be said on this point presently.

for casting doubt upon the truth of p and the knowledge claim is undercut. S is forced to retreat to the realm of 'mere' belief.¹⁵

[23] In the case of 'S's knowing how to q' however, it is considerably more difficult for the skeptic to get off the ground. Consider the case of skepticism with respect to the senses. Suppose the claim is that 'S knows how to identify objects', with the identification of objects being viewed as a skill here. Traditionally, the skeptic has wished to point to the fact that upon occasion our senses deceive us. This being the case, so says the skeptic, what right have we to assume that at any particular time we are not being deceived? However, if we are dealing with a skill, as noted above (in section II.2), a single incidence of the putative application of that skill will never be sufficient to establish the fact that S possesses that skill. Nor, on the other hand, will a single failure in the performance of that skill prove that s does not possess it. Even the most skilled marksman will occasionally miss the target.

[24] If S, in the example, continually fails to identify objects, then we may have grounds to believe that the skeptic may have a point. Prior to this however, the skeptic cannot succeed in generating doubt. We note the behavior of S over time, and then judge the plausibility of the skeptic's claim. To some degree, whether or not 'S knows how to q' is a question which must be answered empirically. If the evidence goes against the skeptic's claim, then we should have no reason to believe him or her. In the case of skepticism about the senses, it certainly seems that for the most part our senses function well enough, if not perfectly. Given this evidence, surely the burden of proof must lie squarely on the shoulders of the skeptic? Ryle (1949: pp. 60-61) notes that an epistemology based upon knowing-how can easily defuse even the most extreme skeptic, the solopsist, on similar grounds. Thus, it would seem that 'S's knowing how to q' is not open to the attacks of the traditional skeptic, as the skeptic's usual moves simply fail to hit home.

[25] If knowing-how is insulated from the traditional skeptical attack, then it seems prudent to ask whether there are any special forms of skepticism to which it is particularly prone. The answer to this question seems to be affirmative, as Hansen (1981 and 1983) describes a kind of skepticism that does seem pertinent to knowing-how. Given that 'S knows how to q', the worth or utility of 'knowing how to q' may still be called into question. For terminological convenience, I shall refer to this special kind of skepticism as 'Chinese skepticism'. To illustrate the point first with a crass example, suppose that S knows how to cut her own fingers off. One might (not unreasonably) wish to doubt the usefulness of this particular skill. The purpose of doing this would perhaps be to persuade S not to exercise this skill. There may be no doubt that S knows how to cut her fingers off (after all, she could have perhaps proved the point by having already removed a digit or two), but the Chinese skeptics point here, would be to suggest that S abandon

¹⁵ The legitimacy of the skeptics attack need not be addressed here.

that skill. That is to say, S should desist from practicing it, as it is a worthless, or counter-productive skill.

[26] The example above is given here only to clarify the point and is of relatively little philosophical interest. However, there may be skills which the skeptic wishes to call into question which are of greater philosophical import. Hansen draws attention to a number of philosophically significant skills.¹⁶ Firstly, we have a certain faculty for making conceptual distinctions. We, for example, distinguish between valid and invalid arguments. This is something that we know how to do. What the Chinese skeptic may wish to take issue with, is our exercising of this skill. Suppose our skeptic were of sophisticated inclination. In this instance, the skeptic might wish to challenge our knowledge of how to distinguish valid and invalid arguments, on the grounds that the distinction is not useful. Rather, the sophisticated skeptic might argue, we should develop the skill of distinguishing persuasive from unpersuasive arguments. Conceptual distinctions are of philosophical importance, so if the Chinese skeptic can call these distinctions into question, this shows that the skeptic has a philosophically interesting role to play. According to Hansen (1981 and 1983), this is just one of the varieties of skepticism which is to be found in the *Lao Tzu*.

[27] To return to the question of know-how and skepticism, it does seem to be the case that the traditional philosophical skeptic's program is thwarted in the case of knowledge how to. Nonetheless, there is still a place for skepticism, albeit of a special kind, within the scope of a 'knowing-how' epistemology. This new kind of skeptic though is engaged in a somewhat different project from his or her more traditional counterpart. The traditional skeptic aims at destroying knowledge, or at least preventing knowledge claims from being made. The Chinese skeptic on the other hand does not doubt that we have knowledge,¹⁷ his or her goal is rather to critique the knowledge that we have.

V. Conclusion.

[28] Although, from Ryle's arguments discussed in section II, it seems evident that the attempt to reduce 'S's knowing how to q' to a special case of 'S's knowing that p' must be unsuccessful, the interrelation between knowing-how and knowing-that is still not entirely clear. Whilst there is some evidence that knowing-that can be reduced to a variety of knowing-how, it has yet to be shown that such a reduction would be completely successful. Nonetheless, Hansen has given grounds for believing that such a project could yield an adequate epistemology. What is clear from Ryle's arguments is that the weaker thesis, that knowing-how and knowing-that are distinct epistemic categories, seems to be

¹⁶ Note, this is only a brief overview of one of the kinds of skills which Hansen believes that the Chinese skeptic calls into question. A more detailed exposition would be inappropriate here, as it would require an extensive treatment of the view of language which underlies this position.

¹⁷ See Hansen (1983: p. 65).

correct. This shows that a complete epistemology must be able to offer an account of both types of knowledge.

[29] The role of the skeptic is changed within the category of knowledge that concerns knowing-how. The usual arguments which skeptics bring to the debate no longer have the same force. Rather, the skeptic becomes a critic of the appropriateness of the 'q' in 'S's knowledge how to q'. Questions about the existence of knowledge-how do not even arise.

[30] If it turns out that knowing-that can be reduced to knowing-how, then the skeptic's objections (as traditionally presented) would seem to be simply misguided. They could only hold sway for particular ways of expressing knowledge claims. Moreover, the skeptic could be defeated, with respect to any particular knowledge claim, simply by re-expressing that claim in terms of knowing-how. Given that only the weaker conclusion, that there are two distinct epistemological categories, can be warranted here, the traditional skeptic still has a domain, the category of knowing-that. In the category of knowing-how however, the traditional skeptic is replaced by a more genial cousin. In this domain, the role of the skeptic is just to critique of the work of the epistemologist, rather than attempting to destroy what the epistemologist is trying to build.

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