

Why Know-how and Propositional Knowledge Are Mutually Irreducible

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The distinction between knowing how to do something and knowing that something is the case is a piece of common sense. Still, it has been suggested that one of these concepts can be reduced to the other one. Intellectualists like Jason Stanley (2011) try to reduce know-how to propositional knowledge, while practicalists like Stephen Hetherington (2011) try to reduce propositional knowledge to know-how. I argue that both reductionist programs fail because they make the manifestations of the knowledge to be reduced unintelligible. Contrary to both, I suggest that know-how and propositional knowledge are distinct, but conceptually interdependent.

1. Introduction

The distinction between knowing how to do something and knowing that something is the case is a piece of common sense. Still, it has been suggested that one of these concepts can be reduced to the other one. Intellectualists like Jason Stanley try to reduce know-how to propositional knowledge (cf. Stanley and Williamson 2001, Stanley 2011a and 2011b), while practicalists like Stephen Hetherington try to reduce propositional knowledge to know-how (cf. Hetherington 2006, 2008, and 2011). Both views have been worked out in much detail on which I cannot comment here. But my arguments are independent from these issues.

I argue that both reductionist programs fail because they make the manifestations of the knowledge to be reduced unintelligible. Contrary to both, I suggest that know-how and propositional knowledge are distinct, but conceptually interdependent. Before substantiating these points, I start with some pre-theoretic remarks about know-how.

2. Know-how

The concept of know-how has its point in explaining what Gilbert Ryle, the grandfather of the current debate, calls ‘intelligent practice’. He 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. 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-regulated. (Ryle 1949: 29)

I take it that this expresses the common sense view: First, know-how is a capacity to perform an activity *well* – that is, a capacity to succeed in that activity, to meet its standards. But second, not every capacity to meet the standards of an activity amounts to know-how. Not every such capacity is intelligent. Know-how involves an *understanding* of what the activity in

question demands – an understanding of its standards. Without such an understanding, one could only possess a mere ability or a mere disposition.

Know-how, by contrast, requires being *guided* by these standards. It is a *skill*, an intelligent ability – that is, an ability to perform well in an activity in virtue of one’s understanding of the standards which govern it.

Given this background, I shall now turn to my criticisms of intellectualism and practicalism.

3. Against Intellectualism

Intellectualism is the view that know-how is a species of propositional knowledge. Roughly, it holds that knowledge how to A is knowledge that one can engage in A-ing in certain ways with which one is practically acquainted. But intellectualism fails because it leads to a vicious regress in the explanation of the manifestation of know-how.

Ryle has proposed to argue along these lines (1945; 1949), but I cannot adequately discuss the different possible interpretations of his texts here (cf. Löwenstein 2011). Instead, I shall present what I take to be the best version of the Rylean regress argument.

Suppose that a manifestation of know-how – like fishing successfully or drawing a correct inference – just is a manifestation of propositional knowledge. Then, the intelligence of these performances stems from the *application* of this propositional knowledge to the case at hand. After all, *having* propositional knowledge does not necessarily entail that it always bears on practice. But applying propositional knowledge is *itself* something one may do intelligently or not. Thus, it must itself be understood as an exercise of know-how.

Unfortunately, intellectualism requires us to also reduce *these* instances of know-how to propositional knowledge. This leads to an infinite chain of instances of propositional knowledge and leaves us with an inadequate account of the manifestation of know-how. Thus, intellectualism is false.

In order to make this argument as clear as possible, I present an explicit reconstruction:

1. The explanation of S’s intelligently A-ing must involve appeal to S’s employing their knowledge how to A such that S intelligently As.
2. RA: Intellectualism: Knowledge how to A is, for certain ways of acting φ , knowledge that $\varphi(A)$.

3. The explanation of S’s intelligently A-ing must involve appeal to S’s employing their knowledge that $\varphi(A)$ such that S intelligently As.
4. If S employs knowledge that p such that S acts intelligently, then S intelligently applies the proposition that p to the case at hand.

5. The explanation of S’s intelligently A-ing must involve appeal to an infinite number of instances of S’s intelligently applying propositions to cases – namely that $\varphi_1(A_1)$, that $\varphi_2(A_2(\varphi_1(A_1)))$, and so on ad finitum – where A_{n+1} refers to the activity of intelligently applying the knowledge that $\varphi_n(A_n)$.
6. No explanation of a subject’s acts may involve appeal to their execution of an infinite number of other acts.

7. Intellectualism is false.

Of course, premise 4 is the most crucial element of this argument. Everything depends on the question what ‘acting intelligently’ and ‘intelligently applying propositions’ come down to.

Stanley has rightly stressed that the commonplace understanding of the objection only attacks a straw man – that it over-intellectualizes intellectualism. This is because premise 4 is understood to hold that the application of a proposition to a case involves separate mental acts of considering and applying propositions, and that these acts are intentional actions. But there is clear phenomenal support for the view that the application of a proposition to a case often proceeds automatically and unintentionally (cf. Ginet 1975: 6-7). Thus, any *prima facie* plausible view – intellectualist or not – will deny that applying propositions to cases *always* involves separate intentional acts (cf. Stanley 2011: 14).

But unfortunately, this is a red herring: Stanley's objection only attacks premise 4 if intelligent practice is understood as intentional practice. But I have already pointed out that what Ryle calls 'intelligent practice' are activities which are regulated by standards such as efficiency, success, and correctness. Intelligence, in short, is being guided by norms.

Is applying propositions to cases 'intelligent' in this sense? Yes. It is possible to make mistakes in applying propositions to a case and it is possible to do so better or worse. Thus, this activity is clearly governed by norms. Ryle provides paradigm cases of people who exhibit such failures and shortcomings – e.g. the chess player and his maxims and the dull student of reasoning and his logical rules (cf. Ryle 1945: 5-7).

Stanley agrees about these points but disagrees about their consequences. He understands applying a proposition to a case as an automatic triggering of a representation of the proposition in question:

Triggering a representation can certainly be done poorly or well. But this does not show that it can be done intelligently or stupidly. [...] Since triggering a representation is something we do automatically, [...] [premise 4 in the above reconstruction (D.L.)] results in a manifest implausibility. (Stanley 2011: 16)

Thus, Stanley thinks that an activity which is performed well, but automatically, does not qualify as intelligent. This is a puzzling view, since automaticity and intelligence certainly go together in many important cases.

Take, for instance, my knowledge how to read. I often read intentionally, but I also often read unintentionally and automatically – say, when I happen to see a sign in the street. But both are genuine exercises of my know-how. Both are governed by the same norms. Also, reading is not unique at all: We sometimes draw inferences or calculate sums automatically and unintentionally – according to internalized logical or mathematical principles. Thus, Stanley's view that automaticity excludes intelligence and thereby blocks the regress is mistaken.

However, this might be just another red herring. Stanley could simply bracket the question of automaticity and intentional action and hold that, in my terms, the application of propositions is a case of *mere ability* as opposed to intelligent know-how. But this last option also fails. As Ellen Fridland (2012) has beautifully shown, the capacities on which intellectualism must rely are clear cases of intelligent skills. For they must somehow make distinctions within all the available information and determine which piece of propositional knowledge would be the best guide in the current situation. And they must ensure that the application of this piece of knowledge actually results in an intelligent performance.

To illustrate, the propositional knowledge to which know-how is allegedly reducible can be individuated in a coarse-grained way or in a fine-grained way. But Fridland shows that either option causes serious trouble for intellectualism.

On the coarse-grained reading, different people can have the same know-how in virtue of knowing the same propositions, and one can put the same know-how, the same propositions, into practice on different occasions. But then, it becomes an open question how exactly such coarse-grained knowledge can guide a person through the endless particularities of any given situation. And whatever does this work must be intelligent.

On the fine-grained reading, know-how is reduced to great numbers of pieces of propositional knowledge, each specifying how something can be achieved for an individual person in a particular situation. But then, it becomes an open question how exactly the application-process selects one proposition from this vast number of ever so slightly different pieces of knowledge. Again, whatever does this work must be intelligent.

The intellectualist reply under consideration would have it that competent people merely happen to do these things well without being guided by an understanding of what it takes to do them well. But this is absurd. Competences to adjust to the specificities of cases are at the heart of intelligent practice.

I conclude that the regress argument stands to scrutiny. Intellectualism fails.

4. Against Practicalism

Let me now turn from intellectualism to practicalism – the view that propositional knowledge is a species of know-how. Roughly, it holds that knowledge that *p* is knowledge how to engage in the activities in what Hetherington calls “*p*’s epistemic diaspora” (2011: 37) – a loose and open-ended list of activities including accurately asserting that *p*, basing decisions upon the truth of *p*, and so forth. But practicalism is bound for a complementary infinite regress in the explanation of the manifestation of propositional knowledge.

As seen above, propositional knowledge can be intelligently applied. But, more broadly, propositional knowledge manifests itself when a subject is in some way or other informed by her knowledge – that is, when she intelligently acts in the light of this knowledge.

Suppose that such a manifestation of propositional knowledge just is a manifestation of know-how. However, a manifestation of know-how must be understood as a *reflective exercise* of know-how. That is, the subject must employ their understanding of the standards governing the activity.

I have already introduced this pre-theoretic idea above. While I cannot offer a full account of the understanding of an activity’s standards here, I shall nevertheless make one a more substantive claim: To understand the standards which govern an activity involves *at least a minimum* of knowledge of the sufficient and necessary conditions for meeting those standards – that is, propositional knowledge of the form ‘Ceteris paribus, X suffices for A-ing well’ or ‘Ceteris paribus, good A-ing is possible only given Y’. Without any such propositional knowledge, it is impossible to understand the standards of A-ing.

Thus, know-how is not *exhausted* by propositional knowledge – as intellectualism would have it. However, it entails at least *some* propositional knowledge.

Unfortunately, practicalism requires us to also reduce *these* instances of propositional knowledge to know-how. This leads to an infinite chain of instances of know-how and leaves us with an inadequate account of the manifestation of propositional knowledge. Thus, practicalism is false.

As before, I shall now present an explicit reconstruction of my argument.

1. The explanation of *S*’s acting intelligently with regard to the fact that *p* must involve appeal to *S*’s intelligently acting in the light of their knowledge that *p*.
 2. RA: Practicalism: Knowledge that *p* is, for certain activities ϕ , knowledge how to $\phi(p)$.
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3. The explanation of *S*’s acting intelligently with regard to the fact that *p* must involve appeal to *S*’s intelligently acting in the light of their knowledge how to $\phi(p)$.

4. If S intelligently acts in the light of their knowledge how to $\varphi(p)$, then S exercises their knowledge how to $\varphi(p)$.
 5. If S exercises their knowledge how to A, then S intelligently acts in the light of their knowledge that C(A), for at least some sufficient and at least some necessary conditions C on meeting the standards of A-ing.
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6. The explanation of S's acting intelligently with regard to the fact that p must involve appeal to an infinite number of instances of S's exercising know-how – knowledge how to $\varphi_1(p)$, how to $\varphi_2(C_1(\varphi_1(p)))$, and so on ad finitum – where φ_{n+1} refers to those activities know-how of which is allegedly identical with the propositional knowledge that $C_n(\varphi_n(\dots(p)))$.
 7. No explanation of a subject's acts may involve appeal to their execution of an infinite number of other acts.
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8. Practicalism is false.

Of course, the crux of this argument lies in premises 4 and 5.

Premise 4 may sound strange. Intelligently acting in the light of one's knowledge is perfectly intelligible when it concerns propositional knowledge. Then, it covers basing decisions upon the truth of the proposition known, asserting it, and so forth. However, what could it mean to intelligently 'act in the light of' *know-how*? But premise 4 is independent from this general problem. Practicalism maintains that all of the examples just mentioned are activities in 'p's epistemic diaspora'. Intelligently acting in the light of p is therefore understood as exercising the know-how to engage in those very activities. Premise 4 is an integral part of practicalism.

This shifts the burden of the argument to premise 5. Practicalists will probably reply that the intelligent exercise of knowledge how to A does not require any propositional knowledge about the sufficient and necessary conditions of meeting the standards of A-ing.

But how could this be true? Know-how is more than a mere disposition or a mere ability. It is a skill, an intelligent ability – an ability to achieve something in virtue of one's understanding of what it takes. Thus, rejecting premise 5 requires an account of this understanding which does not entail any propositional knowledge. But this is impossible.

To illustrate, consider the otherwise plausible idea that an understanding of some activity A consists in a meta-disposition to correct shortcomings in A-ing. However, if this meta-disposition is not accompanied by *any* propositional knowledge about A-ing, then it is only a blind regulatory mechanism rather than an *understanding* of A-ing.

Compare the following case: I have the ability to digest food and I certainly possess several mechanisms which correct shortcomings in my digestive system. Still, I do not know how to digest food. After all, these regulatory mechanisms are blind. They do not constitute my understanding of my digestive ability. And even those who *have* such an understanding do not digest in virtue of their understanding of digestion, but independently of it.

I conclude that the regress argument stands to scrutiny. Practicalism fails.

5. Equal Fundamentality

I have argued that both intellectualism and practicalism fall prey to vicious regresses. From this, we should draw two lessons.

First, the only option to escape from both regresses is to maintain the distinction between know-how and propositional knowledge.

How does this stop the anti-intellectualist regress? To intelligently perform an activity and thereby to manifest one's know-how does not require what intellectualism makes it require – the intelligent application of one's knowledge. Unlike propositional knowledge, know-how is a species of ability. And *qua* ability, it can be executed *directly*, without being applied.

What about the anti-practicalist regress? To intelligently act in the light of propositional knowledge does not require what practicalism makes it require – the reflective exercise of one's knowledge. Unlike know-how, propositional knowledge can inform a performance without being *activated* in the performance, but simply as part of its background reasons.

Thus, the distinction between know-how and propositional knowledge stops both regresses.

The second lesson I would like to draw from my findings is that know-how and propositional knowledge are distinct, but still interdependent.

Ryle famously held that know-how is conceptually prior to propositional knowledge since one cannot know that *p* without knowing how to find out whether *p* and without knowing how to use the concepts which are part of the content that *p* (cf. Ryle 1945: 15-16). I agree. But we should also appreciate a complementary insight: One cannot know how to do something without having at least a minimum amount of propositional knowledge about the sufficient and necessary conditions of meeting the standards of doing so. In this sense, propositional knowledge is conceptually prior to know-how.

Thus, both kinds of knowledge presuppose each other. To possess knowledge *at all* always means to possess *two kinds* of knowledge states.

This view retains parts of the respective motivations for intellectualism and practicalism: One cannot understand one of these concepts without understanding the other one, too. But the dependence runs in *both* directions. They are equally fundamental.

One might object that this proposal *also* leads to a regress problem. For any piece of knowledge still triggers an infinite chain of *other* pieces of knowledge. Knowledge how to A requires some propositional knowledge about the standards of A-ing, which in turn requires knowledge how to employ certain concepts, and so on. If such an infinite chain of knowledge is a problem for intellectualism and practicalism, how can it be all right *now*?

I should start by replying that I happily bite the bullet on offer. If we count pieces of knowledge, the number of pieces we will find is infinite. This is not an uncommon view – holism. It is pointless to try to capture the holistic web of knowledge in terms of a list.

However, the problem with intellectualism and practicalism is *not* that they imply this view – holism. What these theories were shown to imply is the much more problematic view that intelligently performing activities and acting intelligently with regard to facts both require the execution of an infinite number of *further acts*. *This* is why we must reject them.

The holistic interdependence of two distinct kinds of knowledge states does *not* entail that a manifestation of knowledge requires the execution of infinite numbers of further acts:

True, exercising know-how also requires acting in the light of propositional knowledge about the standards of the activity in question. But this is where the regress stops. Exercising *one* piece of know-how does not require exercising any *further* piece of know-how. *Having* propositional knowledge always requires *having* know-how. But acting in the light of the former does not require exercising the latter. When I act in the light of my knowledge that *p*, I do not exercise my knowledge how to find out whether *p*.

Thus, both vicious regresses are blocked.

6. Conclusion

I conclude that the distinction between know-how and propositional knowledge is crucial in understanding what Ryle calls ‘intelligent practice’, but that the interconnections of these concepts are an important topic which should be explored further.¹

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