Why Intellectualism still fails

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Forthcoming in *Philosophical Quarterly*

Abstract

Intellectualism about knowledge-how is the view that knowing how to do something amounts to knowing a fact. The version of intellectualism defended by Jason Stanley and Timothy Williamson holds that knowledge-how is a species of knowledge-wh, i.e. knowledge-where, -when, -who etc. It draws its major motivation from the uniformity between ascriptions of knowledge-how and ascriptions of knowledge-wh in English, being all infinitival embedded question constructions. My aim in this essay is to challenge intellectualism of this sort. I argue that the linguistic motivation for the view is not preserved across languages and that it cannot be sustained from the perspective of other languages. I will show this by examining ascriptions of practical knowledge and knowledge-wh in Russian, Turkish and German. The cross-linguistic data further suggest that 'know how' is ambiguous in English. In the end, the cross-linguistic data will be used to question an argument for the propositionality of the kind of knowledge-how at issue.

1 The Intellectualist Thesis

Intellectualism about knowledge-how is the thesis that knowing how to do something amounts to knowing a fact. It thus stands in opposition to Gilbert Ryle's (1949) view, which denies that knowing how is a species of propositional knowledge. The intellectualist thesis has been recently revived by Jason Stanley and Timothy Williamson in their (2001), and further elaborated and defended against criticisms by Stanley (2011a, 2011b). I will here refer to the most recent version in Stanley (2011a, 2011b).

Stanley claims that for a subject *S* to know how to *V* is for her to know the answer(s) to a 'how'-question. Knowing how is in this sense a species of knowledge-wh, which includes, e.g. knowing when, knowing where, knowing who etc. Essentially,

the intellectualist holds that *S* knows how to *V iff S* knows, of a way *w* in which she could *V*, that it is a way in which she could *V*. Furthermore, in order for this to be an ascription of genuine *practical knowledge*, *S* has to think of *w* under the right mode of presentation, in this case a *practical mode of presentation*, a specific form of *de se* thought. The invocation of practical modes of presentation is supposed to account for cases in which the truth conditions of the left-hand side of the equivalence above come apart from those of the right-hand side (cf. Stanley 2011b: 209ff., 2011a: 122ff.), as in cases in which *S* is thinking of *w* under a *demonstrative mode of presentation* not sufficing for an ascription of practical knowledge.

One of the primary motivations for the view is drawn from the uniformity of *ascriptions* of knowledge-wh in English. It is thus essentially linguistically motivated. Ascriptions of knowledge-wh are *infinitival embedded question constructions* in English. Sentences like (1) are standardly represented by constructions of the form (2), where PRO marks the unpronounced subject of the infinitival clause (cf. Stanley 2011a: ch.3)[1].

(1) John knows how to play the piano.

(2) John knows how PRO to play the piano.

There are three salient aspects of this to be briefly mentioned here. First, the question word 'how' quantifies over *ways*, in analogy to, e.g. 'where' quantifying over places. Second, PRO admits of two interpretations; the first being PRO_{John} in which PRO is co-referential with the antecedent subject of the main clause: 'John'; the second being PRO_{arb} in which PRO is synonymous with the English 'one' and serves as subject of a *generic* embedded question construction (cf. ibid.: 74ff.). Third, infinitival embedded

[1] Note, however, that this representation is not the only one available according to current linguistic theory. See Abbott (2013: 4f.) for alternative analyses.

questions involve modality. Using the framework of Kratzer (1977), Stanley (2011a: 114) interprets the modal force associated with infinitives in constructions like (1) as an *ability* or *dispositional* modal. A natural paraphrase of (1) would thus be 'John knows how he could play the piano'. As Stanley emphasizes, though, the modality contained in infinitival embedded questions is not the same as that associated with explicit ability modals like 'can' (cf. Stanley 2011a: 125ff.).[2] Abstracting away from the details, the difference is due to the distinct modal parameters associated with the evaluation of the respective modalities. Intuitively, an utterance of (1) is true if John succeeds in playing the piano *under normal circumstances*, whereas 'explicit ability modals involve a modal parameter that is determined by how things are at the actual world' (ibid.: 128). In other words, a true utterance of (1) using an explicit ability modal would, depending on the context, (usually) require of the actual world, for instance, not to impede John's playing either by illness or external factors such as the lack of a piano. As Stanley (ibid.: 126) points out, the difference between the modal parameters associated with the two modalities is another way for the intellectualist to account for cases in which the truth of the two sides of the equivalence above comes apart without invoking practical modes of presentation.[3] In particular, the difference between the modality involved in the infinitival construction and explicit ability modals is to show, *inter alia*, that knowledge how does not imply ability.

[2] See Glick (2013: 20) for a discussion of how much of a concession to the anti-intellectualist this understanding of the modality contained in the infinitival embedded question construction is. Despite being sympathetic to Glick's criticism of Stanley's account of the distinct modal character of know-how ascriptions, I will not go into this issue here, since it is largely independent of the main point of the present paper, which mainly concerns the cross-linguistic evidence against intellectualism.

[3] Glick (2013: 19ff.) provides some forceful criticism of this strategy of Stanley's to explain the coming apart of the two sides of the equivalence.

2 The Cross-linguistic Challenge

One criterion of success for the intellectualist position is the cross-linguistic validity of the view. As Stanley himself puts it, the question is whether states of knowing how to do something, in the intellectualist sense, 'are plausibly expressed by ascriptions of knowing how to do something in languages other than English.' (2011a: 131) He mentions two particular worries: 'First, if ascriptions of knowing how are sufficiently semantically distinct in other languages, this provides evidence for an ambiguity in English knowledge ascriptions. (…) Second, it would be a significant objection to the view of knowing how I have endorsed if it could not be plausibly taken to be what is expressed by ascriptions of knowing how in other languages. I would then be advocating an error theory of such ascriptions for speakers of such languages.' (ibid.) Ian Rumfitt (2003) was the first to raise this issue for intellectualism by drawing attention to languages exhibiting different kinds of constructions in expressing practical knowledge. Rumfitt points out that there are languages, such as French, which use the propositional knowledge verb *savoir* without complementing it with the question word *comment* in attributions of practical knowledge. Moreover, he remarks that languages like Russian use a distinct word for ascriptions of practical knowledge, which is also not complemented by any question particle. None of those constructions involve embedded questions. Abbott (2013) has recently provided additional linguistic evidence in support of Rumfitt's observations.

Stanley (2011a, 2011b) tries to respond to the worry about French by applying his favoured semantic account directly to the case of French, arguing that the French construction does involve a silent question word, after all. I shall not evaluate this response separately here, since I think it is made independently implausible by the data I will advance. I will, however, take issue with Stanley's general interpretation of the

cross-linguistic data and especially with his diagnosis that '"How" is the only question word that is optionally pronounced in embedded question constructions across languages' (Stanley 2011b: 234), from which he argues that 'The fact that some languages employ a different verb to translate "know how + infinitive" may simply be a reflection of this purely accidental grammatical fact about "how"' (ibid.). I will do this by providing evidence from Russian, Turkish and German, examining their respective expressive characteristics, showing that the relevant uniformity between ascriptions of knowledge-wh, including knowledge-how in a propositional sense to be qualified, is preserved in these languages despite their using different constructions to ascribe practical knowledge. This latter point will be used to argue that there is good reason to believe that the English expression 'know how' is ambiguous, pointing to different states attributed in 'know how' locutions. It will emerge that both worries quoted above are indeed more serious than Stanley acknowledges. My arguments are intended to lend further and more systematic support to the cross-linguistic worries previously expressed by Rumfitt and Abbott.

2.1 Some Cross-linguistic Data

Consider the following paradigmatic example of an ascription of practical knowledge in English:

(3) John knows how to play the piano.

Contrast this sentence with the analogous sentence using an explicit ability modal:

(4) John can/is able to play the piano.

Recall that Stanley subtly distinguishes the implicit modal involved in (3) from the explicit modal in (4), explaining that 'explicit ability modals involve a modal parameter that is determined by how things are at the actual world' (2011a: 128). To put it slightly differently, according to Stanley, a successful ascription of ability by means of an

explicit ability modal requires of the actual world that it provide the agent with the opportunity to execute the relevant action.

I will now turn to translations of (3) and (4) and examine their respective characteristics, starting with Russian.

In Russian, (3) is translated as

(3R) джон умеет играть на пианино.

(John umeyet igrat' na pianino.)

In attributions of practical knowledge, Russian uses a special verb, уметь, which, as Rumfitt (2003: 164) has already pointed out, can neither be complemented with a that-clause nor with a question particle followed by an infinitive. It is followed by a bare infinitive. The verb уметь is built from the root word ум, a noun which translates mind or intellect in English, and is thus clearly associated with intelligence. The strong link between intelligence and practical ability, which is expressed by attributions using уметь, is further illustrated by its cognate noun умение (umeniye), the meaning of which ranges from understanding to skilled ability and mastery. The verb уметь is sharply distinct in its use conditions from both the propositional knowledge verb знать (znat'), which can be complemented with both a that-clause and a question particle and can thus be used to attribute knowledge of the answer to a question, and from the explicit ability modal мочь (moch'), which functions like 'can' or 'to be able to'.

A translation of (4) above in the intended sense, for instance, would use мочь. Thus, Russian also allows for sentences like (5R) illustrating the difference between the modal profiles of уметь and мочь.

(5R) джон умеет играть на пианино, но он не может сейчас.

(John umeyet igrat' na pianino, no on ne mozhet seychas.)

(5) John knows how to play the piano, but he is currently not able to do so.

More interestingly though, Russian speakers can also express that they possess *propositional* knowledge about how to do something without actually knowing how to do it, which does obviously not express the same as (5R). To ascribe this kind of knowledge, Russian uses the verb for propositional knowledge знать, followed by the question word как (how) and an infinitive. It is thus grammatically and lexically identical to the English 'know how + infinitive'-construction. A literal translation of (6R) would sound odd in English and would have to be paraphrased in order to make sense at all:

(6R) джон знает как играть на пианино, но он не умеет играть.

(John znaet kak igrat' na pianino, no on ne umeyet igrat').

Literally: John knows how to play the piano, but he doesn't know how to do it.

The literal translation sounds like a blatant contradiction in English, which is due to the fact that знать как (to know how) and уметь are both translated by the English 'know how', although their meanings are clearly distinct, with only the latter being used in ascriptions of practical knowledge. A more natural translation would go something like this:

(6) John knows how to play the piano, but he can't play it himself (because he has never learned to do it).

The first conjunct of (6) would thus have to be interpreted not as an ascription of practical knowledge, but as knowledge how *generally one* could play the piano; knowledge which may consist of propositions of the sort 'A piano is played using one's hands', or more specifically of information one has acquired by reading a book about piano-playing and perhaps listening to piano music. In analogy to an example Stanley (2011a: 128) discusses, John knows how to play the piano' is true in the given context if the PRO is meant as PRO_{arb}, instead of the usual PRO_{John}. Or else, perhaps less

plausibly in this context, the *modal force* of the know-how ascription might be interpreted deontically; i.e. John knows how one/he *ought* to play the piano – not how one *could* do it (cf. ibid.).

In any case, the Russian construction is perfectly straightforward and not in the same way context-sensitive; above all, the construction in the first conjunct could not be used to ascribe practical knowledge explicitly. The class of ascriptions of knowledge-wh in Russian, знать где (where), знать кто (who), знать какда (when) etc., including знать как, is uniform both semantically and syntactically. But neither of them is used to ascribe practical knowledge in the sense at issue. The question word как (how) is furthermore literally translated in constructions like (6). It is crucial to note that the Russian construction знать как + infinitive can be used in the deontic and generic sense just like the relevant uses of 'know how' in English in which no practical knowledge is ascribed; however, the Russian знать как + infinitive construction is not used to explicitly ascribe practical knowledge. A similar feature can be observed in Turkish and German, as will be shown below.

Turkish, which is in many respects structurally dissimilar to the other languages considered[4], features another interesting characteristic in the spectrum of ascriptions of usual propositional knowledge including knowledge-wh, practical knowledge, and abilities. It uses the verb for propositional knowledge with different complements in all of the three constructions. Sentence (3) above translates as follows:

(3T) John piyano çalmasını biliyor/ çalabiliyor.[5]

Structure: John piano play+(ending) knows/ play+a-knows.

[4] For example, the usual sentence structure in Turkish is subject-object-verb. Further important characteristics include vowel harmony and agglutination.

[5] The '/' indicates that 'çalmasını biliyor' and 'çalabiliyor' are interchangeable in an affirmative ascription of practical knowledge as in (3T). The intersubstitutivity of the constructions is furthermore not restricted to the third person singular case.

Bilmek is the Turkish verb for 'to know'. In (3T) it combines with a finite form of *çalmak* (to play), which is suffixed with an appropriate ending to express an attribution of practical knowledge. This contrasts with an ascription of knowledge-how in the sense of knowledge-wh in Turkish, which contains the question particle *nasıl* (how) explicitly and does not imply the existence of practical knowledge. Sentence (6) above is thus expressible straightforwardly:

(6T) John piyano nasıl çalındığını biliyor ama (kendisi) çalmasını bilmiyor.

Structure: John piano how play+(passive-ending) knows, but (himself) play+(active-ending) doesn't know.

The second conjunct of (6T) (*ama* stands for 'but') cannot be understood as an explicit ability modal in the above sense, which requires of the actual world to provide the opportunity for John to manifest his ability. This can be illustrated by looking at a translation of (5):

(5T) John piyano çalmasını biliyor ama şu anda çalamıyor.

Structure: John piano play+(ending) knows, but currently cannot play.

It is important to note here that the practical knowledge verb-construction is much more closely cognate to the explicit ability modal than to the propositional knowledge construction containing the question particle *nasıl*. In affirmative uses as in (3T), the former two are even intersubstitutable *salva veritate* in Turkish; there is no perceivable difference between the meanings of the two utterances. In Turkish, constructions using *bilmek* in an embedded question construction to express knowledge-wh function perfectly uniformly, but are sharply separated both semantically and syntactically from ascriptions of abilities and practical knowledge. In particular, an embedded question construction of this type using *nasıl* never implies the presence of practical knowledge of the relevant sort. The same is true for Russian and German.

The fact that attributions of practical knowledge are more akin to ascriptions of ability than to ascriptions of propositional knowledge in some languages can be further illustrated by the example of German, which uses *können* for both ascriptions for the former two but not the latter. *Können* translates both 'can' and 'know how'. (3) and (4) are thus translated homophonically as

(3G)/(4G) John kann Klavier spielen.

Marking the semantic difference in German between the English (3) and (4) in an affirmative utterance is, just as in Turkish (3T), hardly possible, although the context usually determines which sense is intended. In order to express (5) a German speaker would usually say this:

(5G) John kann Klavier spielen, aber er ist derzeit nicht dazu in der Lage/dazu imstande/dazu fähig.

In principle, one could also use *können* in the negated second conjunct of the sentence. Using the suggested other very similar modals just highlights that what John lacks in this context is not his 'internal ability'[6] but only the opportunity in the wide sense including critical physical features of his.

In analogy to Russian and Turkish, German also has the resources to express (6) unproblematically:

(6G) John weiß, wie man Klavier spielt, aber er kann es (selbst) nicht.

The first conjunct expresses that John possesses propositional knowledge about piano-playing by means of the propositional knowledge verb *wissen*, followed by a finite construction, including the question word *wie* (how), with the general third-person pronoun *man* (one) as subject. It can both express the PRO_{arb} reading and the deontic

[6] For a more detailed account of what is meant by 'internal ability' and its difference to opportunity see Glick (2012).

reading above, mirroring this part of the modal profile. As we have seen, this is indeed a common feature of all the languages considered. Notice further that the first conjunct of (6G) can be a translation of sentence (3) in a context in which (3) is not used to attribute practical knowledge to John, but only the kind of knowledge that is attributed by the PRO_{arb} reading or the deontic reading. Other knowledge-wh constructions in German are constructed in exact similarity.[7]

It is striking that Stanley alleges that German lacks 'direct translations of the English construction' (2011a: 132) for the 'accidental syntactic reason that [it] do[es] not allow *any* infinitives in embedded questions.' (ibid.: 136). He concludes from this that languages like German do not 'allow direct translations of any sentence of the form "x knows wh to *Φ*"' (ibid.)[8], taking this as a reason not to further discuss the case of German. As I understand Stanley's remarks in this connection, he suggests that languages that are like German in the relevant respect do not have the expressive resources to express the kind of knowledge-wh that is at issue here or the kind of practical knowledge that is paradigmatically ascribed by English 'know-how'-locutions. I argue that this is definitely too quick. There are a few things to note here.

First, it is one thing to say that German lacks translations that are grammatically isomorphic to the target language sentences, but quite another thing to allege that it doesn't have adequate translations at all. Preservation of grammatical structure of the sort envisaged by Stanley is not a necessary requirement for adequate translatability. A very large number of languages would not be translatable into one another by such a

[7] For example, 'John knows where to find an Italian newspaper' would be translated as 'John weiß, wo man eine italienische Zeitung findet' (or alternatively: 'John weiß, wo eine italienische Zeitung zu finden ist'), 'John knows when to call the police' as 'John weiß, wann die Polizei zu rufen ist' etc.

[8] The same would be true for Turkish, given that Turkish does not allow for infinitives in embedded questions either.

criterion of translatability. [9,10] It is indeed true that German does not translate sentences of the form 'x knows wh to *Φ*' by using an infinitival embedded question construction; but I argue that this latter fact constitutes no good reason to conclude that German cannot translate sentences ascribing knowledge-wh or practical knowledge. The analogous claim holds true for Turkish. On the contrary, all the languages considered here have the resources to ascribe knowledge-wh by using the respective constructions involving the relevant question word, as well as practical knowledge by using the relevant constructions (without a question word) explained above, although they all use constructions that slightly differ from one another. In particular, they plausibly all assign the same state of practical knowledge as English; at least I see no reason for assuming otherwise. I will come back to this point in section 2.2.

Second, it is noteworthy that Stanley does not mention that German uses *können* to ascribe practical knowledge, presumably mistakenly believing that *können* does not translate 'know how' because *können* lacks the required cognitive sense. But it is not true that *können* translates only the modal auxiliary 'can' and cannot be used for cognitive, intelligent activities. In fact, the *DWDS*[11] lists this practical knowledge sense first and distinguishes it from different senses listed second. *DWDS* defines ›können‹ + Inf. / ›können‹ + Akk.obj. as 'die geistige, körperliche Fähigkeit zu etw. haben, etw. verstehen, beherrschen' (having the cognitive, physical capacity for doing something, to understand sth., to master sth.). The second sense listed is ›jmd. kann etw. tun‹ and

[9] It is furthermore unclear why the case of Defaka that Stanley (2011a: 136f.) adduces is supposed to count as evidence in favour of his view - while languages like German are quickly dismissed - given that Defaka uses a construction that is grammatically much more remote from the English construction than the relevant German construction is.

[10] Even translations from Greek or Latin into English or German would often be impossible on such a criterion of translatability. (For example, the fact that German and English translate the Latin *Accusativus cum Infinitivo* mostly by a that-clause does not mean that those are not adequate translations.)

[11] *Digitales Wörterbuch der deutschen Sprache des 20. Jahrhunderts*, Berlin-Brandenburgische Akademie der Wissenschaften (ed.). URL: http://www.dwds.de

expresses that the process or condition mentioned in the infinitive is possible due to certain circumstances or conditions. This sense captures exactly the modal profile of 'can'. Etymologically, moreover, the primary meaning of *können* is clearly cognitive (*geistig vermögen, wissen, verstehen*).[12] There should be no doubt that German has the expressive resources to ascribe states of practical knowledge in the intended sense.

2.2 Some Morals

What morals can be drawn so far from the cross-linguistic data? Recall that one of Stanley and Williamson's main motivations for arguing that knowledge-how is a species of knowledge-wh is drawn from the syntactic uniformity between knowledge-wh ascriptions in English. In English, ascriptions of practical knowledge have the same grammatical appearance as other ascriptions of knowledge-wh, both lexically and syntactically. But none of the languages considered here exhibits the same uniformity between ascriptions of practical knowledge and knowledge-wh. Syntactically, ascriptions of practical knowledge are not part of the class of knowledge-wh ascriptions in any of these languages. As shown in the previous section, all of the three languages considered here lack a question word in the ascription of practical knowledge; the constructions that are used in attributions of practical knowledge differ significantly from those that are used in attributions of knowledge-wh. What is more, all of these languages *do* have a uniform pattern for ascriptions of knowledge-wh in which knowledge-how in the non-practical-knowledge-implying sense is included. The argument from syntactic uniformity which motivates intellectualism from the perspective of English thus comes under pressure from all three languages considered.

[12] See the entry on *können* in *DWDS* for further details. See also *Deutsches Wörterbuch von Jacob Grimm und Wilhelm Grimm* for a more detailed etymology of *können*. For a digitalized online version see URL: http://woerterbuchnetz.de/DWB/.

The most obvious pressure is perhaps exerted by the case of Russian, for the following reason. As mentioned in the previous section, Stanley seems to suggest that languages like German or Turkish which do not admit of infinitival embedded question constructions, thus not allowing for what he calls 'direct translations' of 'know how' attributions, do not constitute a cross-linguistic challenge to intellectualism. Although I think that this way of putting the cross-linguistic challenge is mistaken, relying on an overly narrow sense of translatability as preserving grammatical structure (in the sense of a syntactic isomorphism), it is worth noting that even if one did exclude languages like German and Turkish from consideration, the case of Russian would still constitute a significant challenge to intellectualism. For Russian does have infinitival embedded question constructions and it translates 'knows where/when/who/what' uniformly by this sort of construction. Yet there are still two possible constructions for translations of 'know how': one that uses an infinitival embedded construction with the translation of 'know' (знать) plus the translation of the question word 'how' (как); and one that uses уметь without a question word. But only the latter construction is used to ascribe practical knowledge. And as opposed to French, Russian does not simply admit of leaving out the question word, but uses a different construction in the first place to ascribe practical knowledge. One might legitimately wonder why Russian also lexically differentiates between ascriptions of practical knowledge and knowledge of the kind that is ascribed by the infinitival embedded question construction. This is a potentially significant difference to the case of French that Stanley (2011a) discusses.

The languages considered here thus provide independent cross-linguistic challenges to the motivation for intellectualism from the syntactic uniformity of knowledge-wh ascriptions in English. While Russian does allow for infinitival embedded question constructions, it does not use such a construction for ascriptions of

practical knowledge. And although German and Turkish do not allow for *infinitival* embedded question constructions, they do have the resources to ascribe states of knowledge-wh, including knowledge-how in a theoretical, non-practical-knowledge-implying sense; importantly, none of these ascriptions are used for attributions of practical knowledge. Moreover, the fact that English uses an infinitival construction seems not to bear the significance Stanley assigns to it, given that even the wh-constructions using the question particles in Turkish and German, which, unlike those in Russian and English are not infinitival, do furthermore also admit of a modal reading that captures the modal profile of the English infinitival construction *minus* the implication of practical knowledge in the case of some translations of 'know how'. Practical knowledge ascriptions are furthermore both lexically and syntactically distinct from ascriptions of knowledge-wh in all of the three languages considered here. It is also worth highlighting that practical knowledge ascriptions in German and Turkish are much closer to ascriptions using explicit ability modals than to ascriptions of knowledge-wh[13] – as exemplified by the German sentence (3G)/(4G) and the Turkish sentence (3T), explicitly stated contextual information is needed to tell the former two apart.

I think that this latter point supports the tentative metaphysical conclusion that practical knowledge of the envisaged sort is in fact much more closely associated with ability than with any kind of theoretical *propositional* knowledge, if any such conclusion from linguistic data alone is warranted at all. Despite this being only a comparative conclusion, it is highly relevant for the present purpose, for it arguably deprives intellectualism of one of its most important unifying elements. *Prima facie*, none of the languages considered provides any evidence for the view that practical

[13] Russian is, as far as I can tell, neutral in this respect.

knowledge is knowledge of facts and thus a form of knowledge-that. Accordingly, it would be difficult for an intellectualist to even present the argument to a monoglot speaker of one of these languages in the first place.[14] Thus, granted that it is legitimate in the first place to infer something about the metaphysics of knowledge and ability from facts about the structure of language, the cross-linguistic data constitute significant evidence in favour of anti-intellectualism.

At this point, one could raise the obvious question whether Stanley could respond by applying his favoured semantic account to the ascriptions of practical knowledge in the languages at hand. Though the prospects for this seem very dim, since neither of the constitutive features of the intellectualist's semantic analysis is cross-linguistically present across the board, with the question word 'how' lacking in all of them. However that might be, Stanley has not made an attempt to account for these languages; but lacking such an account, it seems that intellectualism is in fact advocating an error theory of practical knowledge ascriptions for speakers of the languages considered – an outcome that Stanley himself deems undesirable, as pointed out above. It is of course an option for the intellectualist to hold that the ascriptions of practical knowledge in the languages considered here do not exactly translate English know-how ascriptions, attributing instead a slightly different sort of practical knowledge. According to this proposal, know-how attributions in English are special in that they ascribe something that none of the languages considered can express. I think this view is very implausible for independent reasons, but it makes the very idea of a cross-linguistic challenge obsolete, making intellectualism virtually irrefutable from a purely linguistic standpoint. For the dialectic at hand, however, I think that the view that practical-knowledge-in-English is unique in this sense is negligible, since

[14] Cf. Rumfitt (2003:162) for the same point applied to French.

intellectualists of the sort considered here do in fact accept the cross-linguistic challenge and consider it one criterion of adequacy for their account.

We can thus finally reverse the dialectical situation. As pointed out above, the grammatical and semantic uniformity between knowledge-wh ascriptions including knowledge-how in the propositional sense remains unscathed in all the languages considered. Therefore, rather than judging from the perspective of English that 'Only ascriptions of knowing how to *V* are linguistic outliers' (Stanley 2011a: 134) one should notice that, from a cross-linguistic perspective, it is rather surprising that the clear semantic differences displayed in other languages do not extend to a syntactic and lexical difference in English, thus reversing Stanley's point. This stands in opposition to Stanley's claim that the alleged semantic uniformity between ascriptions of knowing-wh does not extend to a cross-linguistic syntactic uniformity, which '(…) suggests that the variation between languages in the expression of knowing how has to do with grammatical rather than semantic facts' (ibid.). In particular, in neither of the considered languages is 'how' optionally pronounced in the actual embedded question construction. In addition, neither of the practical knowledge ascriptions in these languages invites an account that assigns answers to a question as semantic values.

I contend that at the very least, these considerations shift the burden of proof to the intellectualist. If there is no particular reason to prioritize English over other languages in an investigation that is supposed to yield insight into the nature of practical knowledge through the investigation of properties of the relevant ascriptions, then the cross-linguistic evidence advanced here puts strong pressure on the intellectualist's account of the nature of states of knowing how. The cross-linguistic data do, after all, strongly suggest that the English expression 'know how' is ambiguous. As Berit Brogaard, another proponent of intellectualism, acknowledges, '"know" is, familiarly,

lexically ambiguous' (2012: 138). There is the objectual 'know', as in 'John knows Peter', and there is the non-objectual 'know' occurring in constructions with a that- or wh-complement. She advances as evidence for this ambiguity the fact that 'the two occurrences of "know" translate into different words in languages such as German and Italian' (ibid.). Yet, she then goes on to argue that the same does not hold for 'X knows how to *V*', taking this as a serious problem for the anti-intellectualist. As I have shown above, however, this claim is clearly wrong, because occurrences of 'know how' do in fact translate into different words and constructions in other languages. The evidence for the objectual and the non-objectual sense of 'know' is thus paralleled by the evidence for the ambiguity of 'know how': in analogy to the two senses of 'know', the practical knowledge sense and the non-practical-knowledge-implying sense of 'know how' translate into different words and constructions in German, Turkish and Russian. This ambiguity of 'know how' in English constitutes further evidence for the anti-intellectualist view that there are in fact two metaphysically different states that can be ascribed using a 'know how'-locution in English. A correct interpretation of the cross-linguistic data thus shows that the cross-linguistic challenge is much more serious than usually acknowledged by intellectualists.

In the next section, I want to exploit the cross-linguistic data further to question an argument of Stanley's for the propositionality of knowledge-how.

2.3 Is Practical Knowledge Propositional?

In a discussion of the view that knowing how is a non-conceptual state, Stanley claims that 'ascriptions of knowing how create *opaque contexts*' (2011a: 168), thereby supporting the view that knowledge-how is a propositional state. I want to argue that this argument is problematic. To illustrate my point, I will use an example analogous to one given by David Carr, which Stanley adduces (cf. 2011a: 168f).

Suppose that John is a highly gifted pianist who has never learned to read music notes and who has learned his entire repertoire by carefully listening to his neighbour, who is a professional pianist. One of the pieces he has learned and memorized is Beethoven's *Hammerklavier-Sonata*. John gives the piece he has learned the title *100*. He then gives a concert with *100* in the programme. After hearing the performance, an amazed listener remarks: 'This is Beethoven's *Hammerklavier-Sonata*!'

The question is now whether we can adequately describe John as knowing how to perform the *Hammerklavier-Sonata*. According to Stanley and Carr, this is not the case, even though performing *100* and the *Hammerklavier-Sonata* are the same actions. As Carr points out, 'sentences about knowing how, unlike those about ability, are truly non-extensional' (1979: 407). I claim, however, that this is only partly true, which again comes to the surface if we consider how our considered languages treat the same case. If the ascription creates *opaque contexts* in one language, we should expect it to do so in others, too. And indeed, if we translate the case in one of the three languages considered here in one way, namely by using the relevant embedded question construction, the failure of substitution is preserved. This should not come as a surprise in consideration of the fact that, as has been repeatedly observed above, this construction is used in ascriptions of a kind of knowledge that is relatively uncontroversially propositional. But since this construction is not used in ascriptions of practical knowledge, the opacity phenomenon in these contexts constitutes no evidence for the propositionality of practical knowledge.

If, however, we translate the case in what I take to be the intended sense, i.e. as ascriptions of genuine knowing how in the sense of practical knowledge, the opacity intuitions becomes more difficult to get a grip on. The problem is that intuitions about the opacity differ widely when we look at the relevant practical knowledge ascriptions

in our three languages. My own linguistic intuitions tell me that in all of Russian, Turkish and German, the translations using the relevant practical knowledge ascription do not create opaque contexts. So if John умеет играть *100* (knows how to play), he also умеет играть *Beethoven's Hammerklavier-Sonata.* The same holds for the analogous cases in Turkish (…*çalmasını biliyor*) and German (*kann… spielen*). Thus, these ascriptions are in this respect, contrary to Carr's claim, just like abilities.[15] In my experience, this intuition is shared by many speakers of these languages.

However, it is also true that many speakers feel a pull towards the opacity intuition. Some speakers report that once something like the 'mental' or 'cognitive' aspect of the capacity becomes salient when they think of the relevant ascriptions, the opacity intuition is recreated. Such speakers hesitate to assent to a sentence like 'John *kann* die *Hammerklavier-Sonate* spielen, wenn er *100* spielen kann.' (John knows how to play the *Hammerklavier-Sonata*, if he knows how to play *100*), and similarly for Russian. Interestingly, though, the same phenomenon can be observed with English speakers' uses of the modal auxiliary 'can' in contexts in which 'can' is used to denote ability and not just some possibility or other. When some 'mental' aspect of the ability becomes salient, some English speakers are inclined to disagree with a sentence like 'John can play the *Hammerklavier-Sonata*, if he can play *100.*' The linguistic data concerning opacity intuitions are thus ambiguous even in the case of ascriptions of ability using explicit ability modals. But this fact alone does not provide good reason to believe that the relevant abilities are propositional.

[15] That the demonstration of a successful performance suffices in general for a true ascription of ability might be contentious, especially in cases where the successful performance is due to luck. I don't think, however, that it is very contentious in the example given here, where the task to be performed is so immensely complex and difficult that its successful performance is quite certainly not due to luck.

I argue that these data suggest that speaker's opacity intuitions in ascriptions of practical knowledge are no reliable guide to the question of the propositionality of practical knowledge. The fact that we can sometimes strengthen or weaken the opacity intuition by making certain aspects of the practical knowledge ascribed more or less salient in speaker's minds offers no reliable clue to the metaphysical nature of states of practical knowledge. I contend that the linguistic data concerning opacity are far too complex and inconclusive to warrant any conclusions about the propositionality of practical knowledge.

3 Conclusion

In conclusion, we can observe that the motivation for intellectualism is not preserved from a cross-linguistic perspective. All three of the languages considered here attribute practical knowledge in a way that does not support an intellectualist analysis. Practical knowledge attributions are not part of the class of knowledge-wh attributions in any of these languages. These languages thus lack one of the primary features that motivate an intellectualist analysis of practical knowledge from the perspective of English. The constructions used in Russian, Turkish and German are lexically and syntactically distinct from ascriptions of knowledge-wh in these languages. What is more, all of the considered languages have a uniform pattern of ascribing knowledge-wh, including knowledge-how in a purely propositional/theoretical and non-practical-knowledge-implying sense. These languages thus contain, unlike English, explicit expressive resources to distinguish a kind of knowledge-how that is not ability- or practical-knowledge-implying from one that constitutes practical knowledge. Given that a plausible version of intellectualism should be cross-linguistically generalizable, the

cross-linguistic data presented here provide strong reasons to believe that intellectualism about know-how fails.[16]

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[16] An earlier version of this paper was presented to the Ockham Society at Oxford University in November 2013. I would like to thank the audience for comments and encouragement. Many thanks to Cian Dorr, Jason Stanley, Florian Steinberger and Timothy Williamson for helpful discussion and comments on earlier versions of this paper, and to an anonymous referee for The Philosophical Quarterly for valuable comments. Special thanks to Yasemin Ditter-Kaval for help with the Turkish language examples and for her encouragement and support. This article was written while I was supported by a scholarship of the German National Merit Foundation.

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