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WE WILL FIGURE IT OUT. KNOW-HOW, HYBRID WAYS, AND COMMUNICATIVE (INTER)ACTIONS[*]

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ABSTRACT. The goal of this paper is primarily to pinpoint some substantial analytical and conceptual difficulties with the account of knowledge how proposed by (Stanley & Williamson, Knowing How, 2001) [henceforth S&W] and (Stanley, Knowing (How), 2011), (Stanley, Know How, 2011) based on (Groenendijk & Stokhof, 1984) [henceforth G&S] semantic analysis of embedded questions. In light of such difficulties, (1) we propose supplementing their account with an integrated approach of knowledge how, and suggest adding a mereological layer to the semantic framework of embedded questions (2) we argue that the characteristics of what we call 'hybrid ways' and 'hybrid knowledge' strongly indicate reopening the issue of the proper account of questions towards the complementary relevant account of interrogation in communicative interactions, and the role of the context (in)forming knowledge-how. As a methodological principle, we remain neutral on the intellectualist *vs* anti-intellectualist debate. We also remain silent on the nature and explanation of the modes of presentations or ways of thinking that should be developed in order to adequately account for hybrid ways and hybrid knowledge.

Key Words: *Know-how, Intellectualism, semantic analysis, embedded questions, wh-complements, mentions-some readings, de re knowledge, hybrid ways, communicative interactions; interrogation; context-sensitivity, situated pragmatics.*

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I. Introduction

Stanley and Williamson articulated and defended in their seminal paper from 2001, 'Knowing How'[1], an intellectualist stance in the epistemological debate concerning the nature of knowledge how. Intellectualism is characterized by the fundamental thesis that know how is a form of propositional knowledge associated with 'know-that' ascriptions[2]. Their view, which generated a large amount of work on knowledge-how, as well as vivid disputes, seems to finally circumvent the issue of the connection between knowing-how and action and eventually mischaracterized both knowledge-how and action.

In a series of subsequent papers, Stanley[3] defended this intellectualist stance, elaborating and clarifying some of the arguments presented in their 2001 paper as well as responding to objections and critiques that have been raised since. A core defense that they have amounted throughout their papers is that linguistic evidence seems to support intellectualism. Of course, this formulation needs unpacking. For our purposes, it is enough to unpack it along two intertwined[4] lines:

A) As a matter of cross-linguistic evidence, ascriptions of know-how (more generally, of know-wh) are introduced using the same verb as ascriptions of know-that.

B) Independently developed syntactical and semantical theories of natural language treat uniformly ascriptions of know-how and know-that (more generally, of know-wh, which are commonly taken to be species of know-that).

Now, (A) and (B) have been used to argue that the 'folk'[5] notion of know-how supports the intellectualist thesis. The argument based on (A) is that detectable differences in epistemic states would have been reflected by now in the linguistic behavior of at least some linguistic communities:

> "Surely, if humans thought of the sort of state expressed by ascriptions of the form 'X knows that p' and the verb "know" in sentences [involving know-wh and know-how] as clearly distinct, there would be many languages

[1] (Stanley & Williamson, Knowing How, 2001)

[2] (Stanley, Knowing (How), 2011, p. 208) calls it *intellectualism about knowing how*.

[3] (Stanley, Knowing (How), 2011), (Stanley, Know How, 2011)

[4] Intertwined because (Stanley, Knowing (How), 2011) points that (B) could be used as an explanation for (A)

[5] As Stanley describes it, the 'folk' notion of know-how is "the one that plays a role in ordinary folk psychological explanations of action. This is the notion expressed by ordinary ascriptions of knowing how, such as "John knows how to ride a bicycle", or "Hannah knows how to swim." " (Stanley, Knowing (How), 2011, p. 208).

> in which different words were employed. The fact that we do not employ different words for these notions suggests they are at the very least intimately related concepts"[6].

The argument based on (B) is that according to some prevalent syntactico-semantic analyses, the same epistemic state is involved in ascriptions of know-how as in know-wh cases, which are uncontroversially[7] considered to be ascriptions of propositional knowledge. So, an essential task for intellectualists is to consolidate (B). This amount, according to Stanley, to showing "that *the same general analysis is called for in all [] cases*[8]", specifically that

> "[a]ll the intellectualist must show is that whatever complications exist for the semantics of embedded questions, the nature of PRO[9] and the interpretation of infinitives do not entail that [sentences involving know-how ascriptions] should be given a distinct analysis than [sentences involving know-why and know-when ascriptions]"[10].

Be that as it may, if the *same general analysis* proves to make wrong predictions or fail to account for consensually accepted legitimate instances of ascriptions of know-how, as we will argue, then something is definitely off with the analysis, and, as a consequence, it falls on the shoulders of the intellectualist to repair or change the analysis in order to properly address such cases.

As a preliminary step, we notice that both intellectualist and anti-intellectualist positions are built on the idea that one can and could and should *isolate* propositional knowledge, respectively abilities or dispositions. But it would be difficult and even counter-productive to separate the issue of kn-how from that of the action, on one side, and from that of meaning, i. e. of conversational interaction, on the other side. Our aim is not to entirely dismiss S&W linguistic argument, but to revert it by

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[6] (Stanley, Know How, 2011, p. 38).

[7] "It is a common assumption between the Rylean and the Intellectualist that sentences involving constructions like "know where +infinitive", "know when + infinitive", "know why + infinitive", etc. all can be defined in terms of propositional knowledge. But given that ascriptions of knowing-how in English look so similar to such ascriptions, it is hard to see how they could ascribe a different kind of mental state. This provides a powerful argument in favor of the conclusion that our ordinary folk notion of knowing-how is a species of propositional knowledge." (Stanley, Knowing (How), 2011, p. 208).

[8] (Stanley, Knowing (How), 2011, p. 221) his emphasis.

[9] PRO is considered in the syntactical theories to which Stanley subscribes an unpronounced pronoun. For more on this see (Stanley, Know How, 2011, especially chapter 3, PRO and the Representation of First-Person Thought).

[10] (Stanley, Knowing (How), 2011, p. 211).

showing that their analysis of the structure of the meaning suggests that there is a fundamental *discontinuity* in the framework of "knowing how to" linguistic constructions connected to action. So, our goal is not to propose an alternative syntactico-sematic analysis in which ascriptions of know-how are treated differently than ascriptions of knowledge that, for we remain neutral on the intellectualist *vs* anti-intellectualist debate. We confine ourselves to pinpoint some difficulties with the account of knowledge how proposed by S&W and Stanley, based on such a general analysis. More precisely, we will challenge the account of knowledge how articulated by Stanley and S&W based on G&S's[11] semantical analysis of embedded questions, revealing that it raises substantial technical and conceptual difficulties. In light of such difficulties, (1) we propose supplementing their account by an integrated approach of knowledge how, suggesting adding a mereological layer to the semantic framework of embedded questions, although we remain silent on the nature and explanations of the presupposed modes of presentations or ways of thinking that should be developed in order to adequately account for hybrid ways and hybrid knowledge, (2) we argue that the characteristics of what we call 'hybrid ways' and 'hybrid knowledge' strongly indicate reopening the issue of the proper account of questions towards the complementary relevant account of interrogation in communicative interactions, and the role of the context (in)forming knowledge-how.

II. Linguistic evidence & arguments for intellectualism

Before concentrating on Stanley's tweaks of G&S's analysis of embedded questions in order to account for ascriptions of know-how, it is worth to briefly discuss the significance of the linguistic evidence and arguments for intellectualism. Suppose that we all agree that (A) and (B) are beyond dispute or doubt. Does this entail that intellectualism is, in fact, right? Well, it certainly follows that the folk notions of know-how and know-that support the intellectualist thesis, showing that there is just one folk concept of knowledge, but this, in itself, is not refutable evidence that the epistemic state ascribed to agents by sentences of the form 'X knows how to ϕ' is *of the same kind* with that ascribed to agents by sentences of the form 'X knows that p'. It may be that advances in neurosciences prove definitively that states ascribed by the latter are of a distinct kind than that ascribed by the former, that is, the scientific notions of know-how and know-that are different from their folk counterparts. So, the significance of the linguistic evidence is limited, pending upon scientific confirmation. But – and he is right – unless proven otherwise, the default assumption should be that the same kind of epistemic state is ascribed by the two notions. Stanley is certainly aware of all this:

[11] (Groenendijk & Stokhof, 1984)

> "Of course, it could be that the fact that the same verb is used cross-linguistically for embedded question constructions as for attributions involving "that" clause complements is a kind of widespread error. Perhaps we have a single concept for propositional knowledge and the kind of knowledge ascribed in sentences [involving know-wh and know-how ascriptions], but science will reveal that in fact (say) propositional knowledge ascriptions and ascriptions of knowing-where or knowing-who are very different in kind. In short, perhaps the situation is similar to what happened with the concept corresponding to the expression "jade". Our single concept turned out to be a concept corresponding to two very different kinds, jadeite and nephrite. One concept of knowledge turns out upon further investigation to be fractured"[12].
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> "Of course, it may be that science will discover that our one concept of knowledge, like our previous concept of jade, answers to different kinds. But this does not show that the default position is that there are distinct kinds of knowledge. Even in the case of jade, the default position is that there was only one kind of jade. After all, we had a great deal of evidence that jadeite and nephrite were the same kind – they appeared to be the same. It took a definitive chemical discovery to undermine that default position. It should take a similar definitive scientific discovery to undermine the default position that all of the ascriptions in [sentences involving know-wh and know-how ascriptions] ascribe the same kind of state as ascriptions of the form 'X knows that P'"[13].

Critical responses to their arguments proposed alternative analyses of the logical form or the semantics of English know-wh ascriptions or invoked cross-linguistic data that invalidated the intellectualist analysis[14]. For example, languages like French and Italian where the sentences which translate English 'S knows how to Φ' ascriptions have a bare infinitive as the complement of 'knows', rather than an embedded question. (Stanley, Know How, 2011) responds to this kind of challenge by arguing that these sentences in other language are best interpreted as containing an implicit interrogative[15]. (Pavese, 2016), questions the significance of the cross-linguistic data, arguing that it does not support the conclusion that English 'S knows how to Φ' ascriptions are ambiguous between an interrogative and a bare infinitive interpretation. Methodological criticisms of S&W's linguistic argument often start with the thought that there is something wrong with using mere linguistic premises, about knowledge how ascriptions, to support substantive

[12] (Stanley, Know How, 2011, p. 38)
[13] (Stanley, Know How, 2011, p. 39)
[14] (Cath, Knowing How, 2019); see also (Ditter 2016), (Rumfitt 2003) and (Wiggins 2012)
[15] See (Abbott 2013) and (Ditter 2016) for criticisms.

conclusions about the nature of knowledge how itself. As (Cath, Knowing How, 2019) shows, the intellectualist argument does not rely exclusively on linguistic (syntactico-semantic) considerations. Therefore, it does not seem that empirical considerations in favor of the so-called anti-intellectualist position are providing strong or decisive arguments against the intellectualist position. Intellectualism is not threatened by the kinds of empirical considerations that have been claimed to support anti-intellectualism. These arguments may fail but they remind us that intellectualists have never just ignored the potential relevance of non-linguistic considerations. More positively, we think one can partially defend S&W's general linguistic approach to knowing-how—if not their linguistic argument per se—by pointing to the fruitfulness of this approach. Of course, the debate can then turn to these further premises. But the point remains that it is uncharitable to regard S&W's argument as committing some kind of methodological blunder. As we see it, the real value of Glick's[16] discussion of S&W is that it shows us how their argument crucially relies on these implicit premises, and how intellectualists sometimes lean on those premises in question begging ways when replying to opponents. In relation to the semantic uniformity premise, there has been a lot of discussion about whether intellectualists have provided good evidence for/against claims of this kind, and the difference between the evidence needed to reject a strict ambiguity claim versus a polysemy claim about knowledge-how ascriptions (for related discussion see e.g. (Abbott 2013), (Kremer 2016), (Löwenstein 2017), and (Sgaravatti and Zardini 2008)). There have been lots of other developments that do not fit neatly into the broad themes discussed above. This includes new arguments, and new replies to old arguments. For example, (Habgood-Coote 2018) argues that intellectualism faces a *generality objection* akin to the famous generality problem for reliabilism. On the intellectualist side, (Pavese 2017) convincingly shows how intellectualists can answer the *gradabiliy* objection that intellectualism is false because knowledge-how comes in degrees whereas knowledge-that does not ((Ryle 1949), (Sgaravatti and Zardini 2008)). Another development is the emergence of views of knowing-how that bend, or break out of, the familiar categories of 'intellectualism' and 'Ryleanism'. (Bengson & Moffett, 2012), for example, develop a view on which knowing-how is a (nonpropositional and non-dispositional) objective attitude to a way of Φ-ing. (Santorio 2016) offers a non-factualist view of knowing-how, influenced by expressivist views in metaethics, and (Hetherington 2011) develops a view according to which knowing-that can be analyzed in terms of knowing-how. A lot of work has also been done on relations between knowledge-how and other areas, including: epistemic injustice (Hawley 2011), the

[16] (Glick, 2011)

philosophy of education (Winch 2016, Kotzee 2016), 'what it is like'-knowledge (Tye 2011), the philosophy of sport (Breivik 2014), and knowledge of language (Tsai 2011, Devitt 2011). For a long time, this sort of view, which Hetherington calls practicalism, has been around in various ways. But the discussion of Hetherington is important for developing it in more depth, and also for considering this view in relation to more recent literature on know-how. And the advent of work based on questions about the importance and the role of know-how is a last trend worth noting ((Carter and Pritchard 2015), (Habgood-Coote, Know-How, Abilities, and Questions, 2019), (Hawley 2011), (Markie 2018)). One area that has not seen a lot of development is 'experimental philosophy' (X-Phi) on the intuitions appealed to in the knowledge-how debates. Experimental philosophy (X-Phi) on the intuitions appealed to in the knowledge-how debates is one field that has not seen a lot of progress. Some XPhi studies on knowledge-how have been performed[17], but still nothing like the number and variety of studies found in other epistemology fields. It's going to be fascinating to see if there is more work in the future in this area.

Our position is that a stronger argument against S&W position could be construed by tackling both the "linguistic argument" and its presuppositions. With that we gradually move the discussion on the terrain of "communicative interaction" (Gallagher 2020, ch 7) and introduce a more adapted methodology.[18] Our conviction is that defining knowledge-how in connection with answering a question is still a fruitful approach,[19] on the condition that one acknowledges that there are many ways of answering a question on knowing how to perform an action. Sometimes we are able to provide pertinent knowledge in a propositional form, sometimes not. In the last case, we may choose to perform the action that someone asks how to do it or give her some other kinds of indications. In these situations, we have to

[17] See (Bengson, Moffett, and Wright 2009), (Carter, Pritchard, and Shepherd 2019)

[18] We are pointing here to a multimodal and co-operative approach (Katila and Raudaskoski 2020), which promises to better describe knowing-how as co-produced by the agents in a specific physical context and intertwined with observable (inter)action. This method would enable us not only to identify somatic sequences of the interaction and locate knowing-how in a specific moment of it, but to uncover the ways in which the meaning is constituted in that type of interactive situation. With that, we hope we pertain to a micro-analytic level.

[19] However, there are cases when knowing-how consists in more than answering a question and they have to be seriously taken into account. Reading a book on swimming will not make you a swimmer. Neither you or other people will say that you know how to swim, although you might be able to answer some questions about swimming. In this case one may say that you don't know how to swim "in a practical sense." (Habgood-Coote 2019, p. 88) Indeed someone who has read a book on any activity requesting knowing-how might be able to answer the question of how to perform that activity, but she is most probably not able to effectively (physically) perform that activity in any context.

find a way to convey both the explicit and the implicit knowledge required by the performing of the respective action. In order to describe knowing-how in real-world communicative (inter)actions, we have to take into account the whole interactive situation.

Our aim is to capture knowing-how in interaction while being fundamentally *situated* in local interactions between the agents and to describe the way in which the meaning structure profiles the connection of knowledge (propositional or not) and action.

III. Stanley's semantical account of know-how

Given that (B) is, or at least was, the default position in linguistics, it is unsurprising to find several syntactico-semantic frameworks that were developed so as to provide a unified treatment of sentences ascribing know-wh and know-that. Stanley articulates a custom-made semantical account of knowledge how based on such a framework, Groenendijk and Stokhof's framework for the analysis of wh-complements, to be specific. Some of the details of Stanley's semantical account will prove essential for our analysis, so we begin by laying out those relevant details.

Groenendijk and Stokhof's semantical treatment of questions is couched in a two-sorted type theory (T2). The qualification 'two-sorted' comes from treating *s* as a basic, but different sort of type than the more familiar types *e* and *t*. Entities of type *s* are interpreted as possible worlds (Thus, the domain of constants and variables of type *s* is a set W of possible worlds.). Variables of type *s* are essential in T2 for formulating the context-dependent feature of expressions. More precisely, the context dependence character of expressions is technically preserved by supplying such expression with a variable of type *s*. Thus, *to walk*, in T2, is represented by W(a), in which *a* is of type *s*, and W is of type <s, <e, t>>, thus treating W(a) as a predicate, whose type is <e, t>. The heavy lifting of capturing the context-dependence of the expression is done by the assignment function g(a), for the value of W(a) is the value of W applied to the value of g(a), that is the extension of W applied to the extension of g(a), which, obviously dependents on the world assigned to *a* by *g*. With this setting in place, let us have a look at how a sentence such as *Hannah walks* would be represented in T2. In a first stage, the sentence would be translated by the formula W(a)(h), where h is a constant of type *e*, denoting Hannah. Now, W(a)(h) is an expression of type *t*, and such expressions are not considered propositions in T2, but formulas. Propositions, in T2, are expressions of type <s, t>, that is, functions from possible worlds to truth values. Thus, in order to render the sentence *Hannah walks* as a proposition in T2, thus completing the translation, we have to construct

it, in a second stage, as an expression of type <s, t>. This is done easily by lambda abstraction over *α*: λa(W(a)(h). The semantic value of λa(W(a)(h), with respect to model M and assignment g, denoted by $[\![\lambda a(W(a)(h)\ ]\!]_{M, g}$, is that proposition $p \in \{0, 1\}^W$ such that for every $w \in W$, $p(w) = 1$ iff $[\![(W(a)(h)]\!]_{M, g[w/a]} = 1$. As a technical note, g[w/a] is the assignment that agrees with g in all values with the (possible) exception of assigning w to a. As one can observe, p or λa(W(a)(h), denotes that function that takes every world in W in which Hannah walks to the true, and to the false every world in W in which Hannah doesn't walk, so λa(W(a)(h) or p is, in effect, a characteristic function for the subset of worlds in which it is true that Hannah walks. So, there it is, the expression λa(W(a)(h) denotes the proposition that captures the sentence *Hannah walks*; its sense is λaλa(W(a)(h).

Now, λa(W(a)(h) doesn't contain any free variables of type *s*, so, in the light of the above remarks, it's not context dependent. In order to capture the context dependent feature of expressions, we have to further transform the expression λa(W(a)(h) by equipping it with a variable of type *s*. To this end, G&S modify the expression λa(W(a)(h) in the following manner: λi(W(a)(h) = W(i)(h)). Let us look at the interpretation of this expression. According to the semantics of T2, $[\![\lambda i(W(a)(h) = W(i)(h))]\!]_{M, g}$ expresses that proposition $p \in \{0, 1\}^W$ such that for every $w \in W$, $p(w) = 1$ iff $[\![(W(a)(h) = W(i)(h))]\!]_{M, g[w/i]} = 1$ iff $[\![(W(a)(h)]\!]_{M, g[w/i]} = [\![(W(i)(h)]\!]_{M, g[w/i]}$ iff $[\![(W(a)(h)]\!]_{M, g} = [[\![(W(i)(h)]\!]_{M, g[w/i]}]$. So, at the world g(a), λi(W(a)(h) = W(i)(h)) is the characteristic function of all the worlds in W at which the truth value of the sentence *Hannah walks* is the same as at g(a). In other words, λi(W(a)(h) = W(i)(h)) denotes the proposition that Hannah walks at the worlds at which it is true that Hannah walks, and the propositions that Hannah doesn't walk at the worlds at which it is false that Hannah walks. Glossing, we can say that the semantic value of λi(W(a)(h) = W(i)(h)) is what we usually express by *whether Hannah walks*.

Now, the above analysis of the semantics of wh-complements is the building block for the semantical analysis of embedded questions as proposed by G&S. And it is the template that Stanley uses for his account of knowledge how. But he has to modify this template in order address some specific intuitions concerning different readings of embedded questions. The one intuition that is relevant for our endeavor here is that related to the mention-all mention-some distinction. Here's Stanley discussing the issue:

> "[T]he natural interpretation of most finite embedded questions is in fact the mention-all reading. To know who went to the party seems to require knowing, of each person who went to the party, that they went to the party […]. However, embedded questions with infinitival complements do not naturally give rise to mention-all readings:

(5)a. Hannah knows where to find an Italian newspaper in New York.
b. Hannah knows how to ride a bicycle.

> The natural reading of the examples in (5) is not a mention-all reading. Example (5a) means that Hannah knows, of some place, that it is a place where she could find an Italian newspaper in New York. Example (5b) means that Hannah knows, of some way of riding a bicycle, that it is a way in which she could ride a bicycle. It is not necessary for the truth of (5a) and (5b) that Hannah know of *every* place that is a place she could buy an Italian newspaper in New York, that it is so, or that Hannah know [sic!] of every way that is a way in which she could ride a bicycle, that it is so. All that is required for the truth of (5a) is that Hannah knows, of *some* place, that it is a place where she could find an Italian newspaper in New York. Similarly, all that is required for the truth of (5b) is that Hannah knows, of *some* way of riding a bicycle, that it is a way in which she could ride a bicycle. But the Groenendijk and Stokhof semantics for questions […] was designed to deal with only the so-called "mention-all" readings of embedded questions, and so cannot explain the natural readings of embedded infinitival questions"[20].

Noting that "there is no commonly accepted proposal for treating mention-some readings of questions in the literature"[21], Stanley advances the following one:

[wh-to-Φ] = λjλi(∃p[(x can Φ (p, j) & (x can Φ (p, i)])

Of course, this proposal needs to be appended with the context-sensitivity feature of questions; the treatment is similar to that of quantified noun phrases, the task of capturing context-sensitivity being delegated to a domain property assigned to a domain variable, F, in Stanley's notation. Thus, the proposal yields:

[wh-to-Φ] = λjλi(∃p[(F(p, j) & x can Φ (p, j) & (F(p, i) & x can Φ (p, i)])

Now, besides the standard merits of his proposal – adequately addressing the mention-some reading, and the context sensitivity character of the questions – Stanley adds a further merit, namely that his proposal is compatible with what he explicitly calls *de re* ascriptions of know-wh and know-how:

> "Sometimes, in order to know where to Φ or how to Φ, it is enough to know that there is some place or other at which one can Φ, or some way or other in which one could Φ. Dialogues like the following are quite natural:

[20] (Stanley, Know How, 2011, p. 116)
[21] *ibidem*

> (8) I know where to get a good Italian meal in this neighborhood. Steve told me that there was some really good place on Second Avenue. We will walk up and down until we find it.
> (9) I know how to open this door. Hannah told me that there was some way of doing it that involves using a credit card. *We will figure it out* (our emphasis).
> The semantic clauses I have given for mention-some readings easily capture these readings. But it is typically the case that, when one knows where to Φ or knows how to Φ, one has *de re* knowledge of a place to Φ or a way to Φ – when one knows where to get a good Italian meal, one knows of some place that it is a good place to get an Italian meal. This additional requirement comes from the domain associated with mention-some questions.
> In those cases in which acquaintance is required for knowing where to Φ or how to Φ the context sets additional demands on the domain for the embedded question. In order for a place to Φ or a way to Φ to be sufficient for knowing where to Φ or how to Φ, the agent must be acquainted with that place or that way. So, in a case in which I utter, "Hannah knows where to find an Italian newspaper in New York City", where I mean Hannah knows of a specific place to find an Italian newspaper in New York City, I intend a domain F such that a place satisfies F only if Hannah has *de re* acquaintance with it; and *mutatis mutandis* for knowing how."[22]

Naturally, in what follows, we will call *de dicto* knowledge, the kind of non-*de re* knowledge of ways that Stanley describes in examples (8) and (9) above.

IV. Hybrid ways and situated communicative interaction

We are definitely agreeing with the legitimacy of the *de dicto* reading of where to Φ or know how to Φ. In some cases, the reference of an embedded question seems not to be a contextually relevant way *w* of ϕ-ing, for *w* has a particular and determinate character in a *de re* reading, as a highly contextualized method or recipe for ϕ-ing, and that seems to be at odds with knowledge how ascriptions claimed in a general manner. In such cases, the agent doesn't seem to imply that it knows a determinate *way* of ϕ-ing for every possible situation, but something along the line of a capacity to structure the information provided by the context in order to successfully perform ϕ: given a situation, I can incorporate the knowledge of the particulars characterizing the situation so that I, most likely, succeed in ϕ-ing. So, a more likely construal of this kind of knowledge is that the

[22] (Stanley, Know How, 2011, p. 121)

agent is highly capable of organizing its knowledge as a function of the context in order to successfully perform ϕ. However, as we will argue such cases often contain a hybrid way of knowing how to Φ.

Suppose that you are at a party and Hannah asks you to give her a ride home. You don't know where exactly Hannah lives, so you request indications. Hannah asks if you know how to get to the bus station on street M from where you are, and suppose you do. You know it in a *de re* manner. Next Hannah indicates that to get to her place you just need to keep going west from the bus station on M street, then make the first turn to the right, and then the second to the left, and the first building on the right is her home. So, according to Stanley's analysis, I know how to get to Hannah's home. But my knowledge of a way to Φ is neither completely de re, nor completely de dicto. It is a hybrid. And such hybrid ways are not captured by Stanley's semantical clauses, if we treat the ways w according to the semantic of T2, that is as indecomposable: Under this assumption embedded in the construction of T2's semantic it is clear that the domain F in such cases cannot consist of ways w, known completely in any de re/de dicto combination, for the knowledge of w involved is, as mentioned, hybrid. I don't know how to get to Hannah's home in a direct, de re manner, nor in a de dicto manner, but partially de re (up to the bus station), and partially de dicto (from the bus station to Hannah's home). Sure, if F consist of de re knowledge of ways w, it also consists of de dicto knowledge of ways, so F consists of ways w known in both readings. But this doesn't help in the above scenario. I don't know how to Φ completely de re and, as a consequence, de dicto, I know it partially de re, and partially de dicto. Stanley's familiar maneuver of sweeping under the rug of the domain F all the sensitive aspects of knowing how doesn't work either: suppose we allow F to consists of ways w known in a hybrid third way, partially de re and partially de dicto. As a consequence, the w's in the range of F have structure (how else to explain the hybrid knowledge *partially* de re and *partially* de dicto of the same way w?), and, as such, are decomposable, which runs counter to T2's semantic. In T2's semantic, the *w's* are expressions of type *e*, they are existentially quantified, and, as such, considered as distinct unitary elements composing a domain. We hope it's clear that as long as we consider the ways w to Φ to be indecomposable, no solution is available. And to allow the decomposition of ways opens a pandora's box of complications. Technically, one has to alter the semantics of T2 with a mereological component, and although we think this is feasible, it is by all means a task that eludes the scope of this paper. As a further, conceptual complication, an explanation of modes of presentations or ways of thinking that adequately account for hybrid ways and hybrid knowledge has to be articulated, for it is evident that the 'practical modes

of presentation', or 'practical ways of thinking' that Stanley, and Stanley and Williamson appealed to in response to the sufficiency objection are not up to the task.

So, the semantical clauses proposed by Stanley doesn't seem to adequately account for such cases. And such cases, we argue, are predominant. For example, when we say that someone knows how to entertain the public, we often mean a hybrid way w of knowing how to tell (some specific) jokes adjoined by a 'figure it out' kind of knowledge, based on the particular characteristics of the public, and, equally important, the interactions with it. When we ascribe to an agent the know-how of playing free jazz, or free improvisation, we again assume a hybrid way of a de re knowledge how of playing a specific musical instrument with a 'figure it out' knowledge based on the interaction with the other players. The same could be argued even for instances of know-how standardly addressed and discussed by intellectualists, such as know how to swim, to hit the ball, etc. These considerations, we think, reopen the issues concerning the proper account of questions.

Answering by doing

There are many ways in which one can provide an answer in an interrogative situation. We acknowledge that that individual has knowledge-how when the answer is action-oriented. Among the various answer someone could provide, there is a distinctive one, which consists in doing effectively that action. The answer is embedded in the action itself. We say then that the learner is learning by doing (like the cricket players).

Is that action still an answer or is it just an action? Someone could say: 'I was asking you to tell me how to do it, not to do it (in my place)'. Not always a real action is a real answer. When exactly qualifies an action as an answer to a question?

When someone perform an action as answer, can we say that she knows how to do it? Not all the time. She might have done it by accident or she might have a false belief about what she is doing, like the cricket players. We still feel the need, in these cases, to point to a "mental action" which is supposed to be the true locus of knowledge. The agent would keep her knowledge mentally stored. While not able anymore to perform the real action, she would still preserve the knowing how. This discussion leads us to a whole series of conundrums.

It seems that

[t]he appeal to answering by doing means that an ability to answer a question on the fly is both an ability to activate knowledge and an ability to do, producing both a successful action and an answer to a question (at least in good cases). The ability to answer the question *how to V?* on the fly is at the same time

an ability to answer the question *how to V?* by doing V, and an adverbial ability to V by answering the question *how to V?* (Habgood-Coote 2018b, p. 91)[23]

The problem with this description is that not all the time a successful action is an answer. The close proximity of the question and the answer by doing is not sufficient to say that that action was an answer to that question. When someone ask how to do it, explicitly or implicitly, she asks an explanation, not a mere description. She might instead look on internet or see a movie or read some equations. But she needs more than that. She needs to be not only verbally or visually (from distance) instructed, but to effectively learn how to do it, somehow from inside. It is obvious that that person needs to make an effort herself, but also coach has to provide relevant information for the internal conversion of the agent, i.e. information which goes deep, which resonates with body-in-action.

In this case, separating the piece of standing knowledge from the ability to apply that proposition to the action makes the work of the performer extremely difficult, because she has to bring them together in a very prompt manner. Spontaneous fluid action, which is in fact the mark of knowing-how, would be difficult to explain in this way.

In order to avoid these difficulties, we propose to let aside the discussion about the mental states of the individual agent and to take into account the whole interactive situation.

Relying on (Charles Goodwin 2000)'s ethnographic study of conversation, Gallagher[24] proposes a fuller description of the interactive situation (in which contexts are relational), that he frames as "a shared agentive situation", "a shared context within which <agents> encounter each other."[25] It includes:

- The gestures and facial expressions of the other person
- Their bodily movements, postures, and proximity
- The intonation of voice
- The other's attention—the means to grab it for joint attention
- The temporal flow/rhythm of interaction
- Instituted norms
- Social rules, roles, and identities
- Knowledge of completed actions
- Knowledge of person-specific traits, preferences, attitudes, etc.

[23] While entirely agreeing that one of the distinctive marks of knowledge-how is the performer's capacity to answer "on the fly", we do not share Habgood-Coote's abilitism. The structure of interrogation will lead us to an approach based on the concept of communicative (inter)action.

[24] (Gallagher, Action and Interaction, 2020, p. 159)

[25] *ibidem*

• The rich material environment[26].

One can see from this kind of analysis that this approach takes into account both the speech acts and the real actions of real-embodied agents. They are all placed in an encompassing semiotic context, which includes a variety of circumstances in which the agents are speaking and acting: the posture, movement, and position of embodied agents, the environmental arrangements, affordances, other persons, etc.

The model inspired by the conversational analysis offers not only a complete, virtually exhaustive model of the interactive situation, but also possibly a new way of understanding its *embedded plurality of ways of answering a question*. A single action brings together different kinds of resources. (Goodwin 2013) They are classified as it follows:

-Individual actions are constructed by assembling diverse materials, including language structure, prosody, and visible embodied displays.

-Semiotically charged objects, such as maps, when included within local action, incorporate ways of knowing and acting upon the world that have been inherited from predecessors.

-New action is built by performing systematic, selective operations on these public configurations of resources.

Finally, we have three categories of "objects" at hand (in the most general sense of the word): actions (of an embodied individual), objects (for the agent) and new actions (as an outcome of the interaction of the agent with the objects in the interactive field). It is worth to notice that the emergence of a new action is fully taken into account in virtue of the "we'll figure it out" way of knowledge.

Goodwin's interactionist model manages to capture not only the entirety of the situation but also its dynamics. He emphasizes that "visible, public deployment of multiple semiotic fields that mutually elaborate each other"[27]. "For example, spoken language builds signs within the stream of speech, gestures use the body in a particular way, while posture and orientation use the body in another, etc."[28]

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[26] Goodwin adds an important qualification, if vision and "getting in each other's face" are important aspects of this example of dynamical interaction, "this is by no means a fixed array of fields. Thus, on many occasions, such as phone calls, or when participants are dispersed in a large visually inaccessible environment (e.g., a hunting party, or a workgroup interacting through computers), visual co-orientation may not be present". Contexts change over time; they may be enriched or impoverished, but they always count towards the production of understanding or misunderstanding.

[27] (Goodwin, Action and Embodiement within Situated Human Interaction, 2000, p. 1495)

[28] (Goodwin, Action and Embodiement within Situated Human Interaction, 2000, p. 1494); see also (Gallagher 2020)

There is here a complex *integration* of primary and secondary intersubjective capacities, situated within a pragmatic and social context, that is both supplemented with and supporting communicative processes[29]. We can map all of these rich details onto the model of a "meshed architecture" to help us understand how the various factors are *integrated* in social interaction[30]. Through their analysis, Gallagher and Varga showed how the model of meshed architecture, imported from performance studies and resonating with Merleau-Ponty's concept of intertwining, can specify and contribute in a substantial manner to how cognition plays a role in performance and how other factors situate performance[31]. Through a more detailed view of how functional integration (the coupling of agent and world) and task dependency (a notion that pertains to organization and coordination)[32] work in situated cognition, the concept provides a framework for taking into account the specific form of engagement of the agent in knowing how to perform an action as *simultaneously* motoric[33] and epistemic.

V. Conclusions

Resuming, we have shown that ascriptions of know-how such as 'I know how to get to Hanna's house' or 'I know how to get there' are not adequately handled by Stanley's account of know-how based on G&S's semantic analysis of questions. We have argued that in such ascriptions the ways w responding to the embedded question typically present in know-how ascriptions have a hybrid character. This hybrid character seems to be the norm in knowledge how ascriptions, not the exception. As such, we proposed an integrated approach towards know-how by gradually moving the discussion on the terrain of "communicative interaction" and introduce a more adapted methodology. In order to describe knowing-how in real-world communicative (inter)actions, we have to take into account the whole interactive situation. Our conviction is that defining knowledge-how in connection with answering a question is still a fruitful approach, on the condition that one acknowledges that there are many ways of answering a question on knowing how to perform an action. There is here a complex integration of primary and secondary intersubjective capacities, situated within a pragmatic and social context, that is

[29] (Gallagher 2020, p. 159).
[30] (Gallagher & Varga 2020, pp. 1-9).
[31] (Gallagher & Varga 2020, p. 7-8).
[32] See (see Slors 2019).
[33] (Gallagher and Aguda, 2020).

both supplemented with and supporting communicative processes. We can map all of these rich details onto the model of a "meshed architecture"[34] to help us understand how the various factors are integrated in social interaction.

REFERENCES

Bengson, J., & Moffett, M. A. (2012). Nonpropositional Intellectualism. In J. Bengson, & M. A. Moffett (Eds.), *Knowing How. Essays on Knowledge, Mind, and Action* (pp. 161-196). New York: Oxford University Press.

Carter, A., & Pritchard, D. (2015). Knowledge-How and Cognitive Achievement. *Philosophy and Phenomenological Research*, 181-199.

Cath, Y. (2015). Revisionary intellectualism and Gettier. *Philos Stud, 172*, 7-27.
doi:https://doi.org/10.1007/s11098-013-0263-y

Cath, Y. (2019). Knowing How. *Analysis, 79*(3), 487–503.

Ditter, A. (2015). Why Intellectualism still fails. *Philosophical Quarterly*, 500-515.

Gallagher, S. (2020). *Action and Interaction.* Oxford: Oxford University Press.

Gallagher, S., & Aguda, B. (2020). Anchoring Know-How: Action, Affordance and Anticipation. *Journal of Consciusness Studies*, 3-37.

Gallagher, S., & Varga, S. (2020). Meshed Architecture of Performance as a Model Situated Cognition. *Front. Psychol*.

Glick, E. (2011). Two Methodologies for Evaluating Intellectualism. *Philosophy and Phenomenological Research, 83*(2), 398-434.

Goodwin, C. (2000). Action and Embodiement within Situated Human Interaction. *Journal of Pragmatics*, 1489-1522.

Goodwin, C. (2013). The Co-Operative, transformative organization of human action and knowledge. *Journal of Pragmatics*, 8-23.

Groenendijk, J., & Stokhof, M. (1984). *Studies on the semantics of questions and the pragmatics of answers.* Amsterdam: Phd Dissertation.

Habgood-Coote, J. (2018). The generality problem for intellectualism. *Mind and Language*, 242-262.

Habgood-Coote, J. (2019). Know-How, Abilities, and Questions. *Australasian Journal of Philosophy*, 86-104.

Hawley, K. (2003, January). Success and Knowledge-How. *American Philosophical Quarterly, 40*(1), 19-31. Retrieved from http://www.jstor.org/stable/20010094

Pavese, C. (2016). Skill in epistemology II: Skill and know how. *Philosophy Compass, 11*(11), 550-560.

Pavese, C. (2017). Know-how and Gradability. *Philosophical Review*, 345-383.

[34] see (Gallagher & Varga, Meshed Architecture of Performance as a Model Situated Cognition, 2020).

Ryle, G. (1949). *The concept of mind.* London: Hutchinson.

Stanley, J. (2011). *Know How.* New York: Oxford Univeristy Press.

Stanley, J. (2011). Knowing (How). *Nous, 45*(2), 207–238.

Stanley, J., & Williamson, T. (2001). Knowing How. *The Journal of Philosophy, 98*(8), 411-444.

Tsay, Y. (2011). Relationship between Organizational Culture, Leadership Behavior and Job Satisfaction. *BMC Health Serv Res*.

Tye, M. (2000). Knowing what it is like: The ability hypothesis and the knowledge argument. In P. Preyer, *Reality and Humean Supervenience: Essays on the Philosophy of David Lewis.* Rowman & Littlefield.