

ON THE POSSESSION AND ATTRIBUTION PROBLEMS FOR COLLECTIVE KNOW-HOW

[SOBRE LOS PROBLEMAS DE POSESIÓN Y ATRIBUCIÓN PARA EL SABER CÓMO COLECTIVO]

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ABSTRACT: In this paper, I examine two issues that any account of know-how, but particularly an account of group know-how, needs to deal with: the possession problem, which is the need to explain how a group can be in a state of knowing how to do something, and the attribution problem, which is the need to account for the conditions in which it is admissible to attribute know-how to a group. I argue that (despite some initial appearances) they are independent problems, which is specially important in the context of theories where know-how cannot in general be reduced to proposition-oriented attitudes.

KEYWORDS: Know-how; Group know-how; Know-how attributions; Collective states; Non-propositional intentionality.

ABSTRACT: En este ensayo, examino dos problemas que cualquier teoría del saber cómo y en particular una teoría del saber como grupal debe tratar: el problema de la posesión, que es la necesidad de explicar como un grupo puede estar en un estado de saber como hacer algo, y el problema de la atribución, que es la necesidad de dar cuenta de las condiciones en las que es admisible atribuir saber como a un grupo. Argumento que (a pesar de ciertas apariencias iniciales) estos problemas son independientes, lo que es especialmente importante en el contexto de teorías del saber cómo donde este no puede en general reducirse a actitudes proposicionales.

PALAVRAS-CLAVES: Saber como; Saber como grupal; Atribuciones de saber como; Estados colectivos; Intencionalidad no-proposicional.

1 INTRODUCTION

Does NASA know how to prepare a mission to send people to Mars? It should, since it is part of its strategic plans. Do philosophers of science, as a group, know how to evaluate scientific theories? Yes, although there is no consensus on how to do it. Does the Argentinian rowing team know how to improve their record? They seem to be putting some efforts into doing so. If we want to make sense of these apparent attributions of know-how to collective entities, we need a theory of collective or group know-how. This has not gone unnoticed, and there are several proposals in the literature—most notably, Birch's (2019), Tollefsen & Pallerms (2018) and Habgood-Coote's (2022).

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My goal in this paper is to address some preliminary questions that need to be addressed by anyone who wants to develop an account of collective know-how. First (section 2), I will argue that we need to recognize and distinguish between two different types of problems that are central for providing an account of know how, which I will call the *POSSESSION* and *ATTRIBUTION* problems. The main goal of this paper is to explore the consequences of distinguishing between these two problems. A secondary objective is to map out various alternatives for constructing theories of collective know-how, some of which can get obscured by failing to distinguish the *POSSESSION* and *ATTRIBUTION* problems.¹ In section 3, I will examine how distinguishing between these problems bears on the way we should understand the desiderata for a good account of collective know-how, and in section 4 I will argue that failing to make the distinction leads to problems with some existing accounts. Finally, in section 5, I will argue that adopting an account of know-how as a non-propositional attitude (a move which I favour independently) puts pressure on the *POSSESSION* problem, and examine some ways to tackle it. My goal there is not to defend non-propositionalism fully, but merely to show that the difficulties with tackling the *POSSESSION* problem do not rule it out.

2 DISTINGUISHING THE PROBLEMS

An account of (collective) know-how needs to solve two fundamental problems. These are what I will call the *POSSESSION* and *ATTRIBUTION* problems. Roughly:

POSSESSION: What does it mean to say that a (collective) entity possesses know how?

ATTRIBUTION: Under what conditions is it appropriate to say that a (collective) entity knows how to do something?

The key difference is that while the *POSSESSION* problem is metaphysical (it basically asks what is the nature of the facts that collective entities know how do something, that is, how the relevant entities can have the mental states or dispositions that seem to be required for knowing how to do something), the *ATTRIBUTION* problem is semantic/conceptual.²

In the individual case, the *POSSESSION* problem has to do with the ontology of individual minds. I take it that most authors in the literature on know-how assume that it is legitimate to say that in some sense individuals can possess mental states, and in particular intentional states; for the rejection of this assumption, the options are also well known. In the collective case, the *POSSESSION* problem is an instance of the more general problem of how to account for the putative epistemic statuses and mental states of collective entities. From the intellectualist perspective, the problem is to account for the possibility of collective belief or knowledge. From the anti-intellectualist perspective, the problem is to account for the possibility of collective ability. The usual worries about social ontology arise here: what is the connection between the collective attitudes and dispositions and those of the individuals involved? Do groups have themselves the relevant properties, or do these putative properties reduce to individual ones? Those who are interested in the *POSSESSION* problem for their accounts of know-how don't need to fully solve these problems generally, but they must develop at least the sketch of a general account, or draw from existing work on the issue. The difficulty is that even if one accepts a plausible solution to the *POSSESSION* problem at the individual level (in this paper, for the sake of simplicity, I will assume that this is

so), it is not obvious that one can carry that over to the collective level; for example, it is not necessarily the case that a group's know-how will have to be explained even partially by their members individually having know-how.

Since we are not making for the moment any substantive claims about the nature of know-how, we should distinguish between intellectualist and anti-intellectualist ways to pose the *POSSESSION* problem, depending on whether know-how is taken to be a kind of propositional attitude (in which case we are typically dealing with a so-called intellectualist account) or some kind of disposition (in which case we are typically dealing with a so-called anti-intellectualist account):

INTELLECTUALISTPOSSESSION: What does it mean for a collective entity to possess propositional attitudes of the kinds that are relevant to know-how?³

ANTI-INTELLECTUALISTPOSSESSION: What does it mean for a collective entity to possess dispositions of the kinds that are relevant to know-how?

Conciliatory or moderate intellectualist and anti-intellectualist positions may require answering both types of questions. Thus, the scope of the *POSSESSION* problem depends on the kind of view about the nature of know-how under consideration.⁴ In either case, the underlying problem is

POSSESSION (PROPER): What does it mean to say that a collective entity possesses the states or dispositions that are relevant to their know how?

This is what I will refer to as the *POSSESSION* problem henceforth.

The first goal I want to pursue here is to distinguish the *POSSESSION* and *ATTRIBUTION* problems more precisely. A somewhat natural, but I think misguided, way to think about these problems is to treat the *ATTRIBUTION* problem as encompassing the *POSSESSION* problem in a way that makes it pointless to distinguish them. The thought might be that possessing know how should be one of the conditions under which it is appropriate to say that a collective entity knows how to do something, so that an answer to the *ATTRIBUTION* problem, when fully spelled out, would entail a solution to the *POSSESSION* problem (in the limit case, possessing know how could just be the same as being attributable with knowing how). This assumes that something like this is true:

LINK: S is attributable with know-how only if S possesses know-how relevant attitudes or dispositions.

That is, that the possession of some kind of attitude or disposition is a necessary condition for the appropriateness of know-how attributions. The problem with adopting this idea at the outset is that it obscures the possibility of answers to the *ATTRIBUTION* problem that do not treat the possession of the subject of a particular kind of state as a necessary condition for being attributable with know how. Ruling this possibility out requires further argument.

To see why considering this possibility is important, we need to distinguish between two broad ways in which someone could approach the *ATTRIBUTION* problem (as we will see, these ways to approach *ATTRIBUTION* will eventually have counterparts on how to approach the *POSSESSION* problem). On the one hand, one can take a time-slice perspective:

TIME-SLICE: An appropriate know-how attribution at a time t only requires information about the state of the subject and environment at t .

A somewhat natural way to take this approach is to assume that the subject of attribution is in some kind of state or satisfies some condition at t , and that this state is what needs to be explained in the terms of the *POSSESSION* problem. For example, someone could say that the subject knew how to do something at a given time because they had some kind of propositional attitude at that time. This is in line with many intellectualist approaches (although anti-intellectualist approaches could go along these lines too), and it rationalizes endorsing *LINK*.

When it comes to dispositional attributions, a different approach may be suggested. From a time-slice perspective, the attribution of a specific disposition to a subject entails a judgement to the effect that the subject has at t some disposition to behave in a certain number of ways. The question, now, is what is the ground of this judgement. Because dispositions need not be manifested at each time that their bearers have them, there might not be enough information at a given time to say that an object or individual has them. A way out is to abandon the time-slice approach and take a historical approach:

HISTORICAL: An appropriate know-how attribution at a time t may require information about the state of the subject and environment at times prior to t .

For example, we may think that we can attribute a disposition to an individual on the basis of their previous performances. This is in effect what Ryle (1949) suggests about the kinds of ability that bear on someone being attributable with knowing how to do something, and also about mental terms in general. What is important for us to notice here is that the historical approach does not entail the possession of a state either currently or at any of the relevant times. This was important in the Rylean framework because he wanted to reject the idea that knowing how was associated with any kind of inner mental state—he wanted to *dissolve* the *POSSESSION* problem by solving the *ATTRIBUTION* problem.⁵ While Ryle's methodological and metaphysical qualms are not shared by many philosophers nowadays, we cannot say that this kind of position has been decisively ruled out. What is specially interesting for us is what this suggests in terms of the options we can take concerning the relation between the *ATTRIBUTION* and *POSSESSION* problems: by separating them, and then taking a historical approach to the former, it is possible to have views according to which knowing how is correlated to the possession of some particular kind of mental state, but where that is not entirely decisive of the attribution problem (call a view of this kind a *hybrid* account), as well as views according to which knowing how is attributable without the possession of some kind of mental state or disposition (call a view of this kind a *dissolutionist* account).⁶ Accepting *LINK* has had the unwanted consequence that a whole range of potential solutions to the *POSSESSION* and *ATTRIBUTION* problems has remained relatively unexplored.⁷

The *POSSESSION* and *ATTRIBUTION* problems also come apart in the opposite direction. Consider:

INVERSE-LINK: If S possesses know-how-relevant attitudes or dispositions, then S is attributable with know-how

In some cases it could be possible for a collective entity to possess the relevant kinds of attitudes or abilities when they are attributable only with epistemic statuses other than know-how. For example, in some contexts it could be appropriate to say that

a collective entity knows that *p* (for example, that ACME Corp. knows that the price of petrol is lower than the day before), inappropriate to say that they know how to do something with regard to *p* (for example, that ACME Corp. knows how to judge that the price of petrol is lower than the day before), and yet possess know-how about how to do something with regard to *p* (ACME Corp could have collective intentional states about how to make judgments about the price of petrol, or the abilities to make those judgments).⁸ More generally, the kind of relevant attitudes or dispositions could be weak enough that only in certain conditions a subject who possessed them would be attributable with know-how. To see this, consider the individual case: a person who goes through the process of learning how to do something (take cooking a specific dish, for example) could be described as going through different states, but only after they meet certain conditions do we say that they know how to do it. It is not necessary to say that there is a difference in kind between that states in which the subject is attributable with know-how and those in which he is not. Furthermore, an adequate account of learning-how should give an account of those preliminary states. The same holds at the collective level.

Once we pick the *POSSESSION* and *ATTRIBUTION* problems apart, we can see that we can also modularize the construction of theories of know-how in the following way. Different views can share the same solution to one of these problems without having to share the same solution to the other problem. For example, both intellectualism and anti-intellectualism about know-how can be developed in different ways. On the intellectualist side, among others, there are approaches that reduce know-how to propositional knowledge (Stanley & Williamson 2001), and others that reduce it to true belief (Cath 2011). On the anti-intellectualist side, there are approaches that reduce it to abilities of different kinds. Each of these accounts needs to decide on some answer to the *ATTRIBUTION* problem, and this is a different question as to why we should adopt their proposal concerning the metaphysics of know-how. Similarly, you can advance towards a solution to the *POSSESSION* problem without advancing towards a complete solution of the *ATTRIBUTION* problem, and viceversa.

The methodological upshot of distinguishing the *POSSESSION* and *ATTRIBUTION* problems is that significantly less weight should be put on the idea that we can draw substantive metaphysical conclusions about the nature of collective know-how merely from linguistic analysis (on the basis of samples of know-how attributions to collective entities) and the explanation of the patterns of attribution found in that way; in other words, one cannot read a metaphysics of know-how off the patterns of know-how attributions – we are not obliged to follow the strategy of taking a solution to the *ATTRIBUTION* problem as a solution to the *POSSESSION* problem. Ultimately, we should expect the postulation of mental states and dispositions underlying instances of know-how, and in turn potential solutions to the *POSSESSION* problem, to be under the same standards and constraints as theorizing in psychology and cognitive science. This does not mean that armchair work is not useful here or in the broader project of developing a theory of know-how; at the very least, it is needed to examine the theoretical possibilities and for understanding the nature and scope of the problems the project faces.⁹

3 RECONSIDERING THE DESIDERATA

Habgood-Coote (2022) has argued that any viable account of collective know how must respect a series of desiderata. Two of them are most relevant to the issues we

have examined so far, namely:

DIVERGENCE: An account of collective know-how must be able to explain how a collective entity can know how to do something that none of its members knows how to do.

CONNECTION: An account of collective know-how must be able to explain the importance of individual know-how for collective know how.

These desiderata can serve as constraints for putative solutions to both the *POSSESSION* and *ATTRIBUTION* problems. If we distinguish between these problems, as I suggested above that we should, we need to reconsider what is the target of these desiderata. Habgood-Coote motivates *DIVERGENCE* and *CONNECTION* appealing to examples—but what are these examples *about*? Are they about *POSSESSION*, *ATTRIBUTION*, or both?

Consider a typical case in favour of *DIVERGENCE*:

ENSEMBLE: A quintet has decided to perform Philip Glass's 'Amazon River'.¹⁰ The piece consists in parts for percussion, wind instruments and keyboard, and when played by a quintet under the selected arrangement the musicians need to change instruments at several points in the piece. While none of the musicians in the quintet knows how to perform every part of the piece, the quintet performs the piece successfully.¹¹

We are compelled to think that in this case it is true that the quintet knows how to play the piece even though not every musician in the quintet knows how to do all that requires on their own.¹² If we keep the distinction between the *POSSESSION* and *ATTRIBUTION* problems in mind, however, we will need to distinguish between at least the following possibilities:

DIVERGENTPOSSESSION (DP): The quintet possesses know-how-relevant states about how to perform the piece even though no member of the quintet possesses on their own know-how-relevant states about how to perform the piece.

DIVERGENTATTRIBUTION (DA): The quintet is attributable with know how about how to perform the piece even though no member of the quintet is attributable on their own with know-how about how to perform the piece.

DIVERGENCEFROMPOSSESSION (DFP): The quintet is attributable with know how about how to perform the piece even though no member of the quintet possesses on their own know-how-relevant states about how to perform the piece.

DIVERGENCEFROMATTRIBUTION (DFA): The quintet possesses know-how-relevant states about how to perform the piece even though no member of the quintet is attributable on their own with know-how about how to perform the piece.

ENSEMBLE should be an instance of at least one of these variants of *DIVERGENCE*. However, *which*? One possibility is that the weaker claim should be preferred; in that case, our intuitions about *ENSEMBLE* would be explained by our recognition of it as an instance of *DIVERGENTATTRIBUTION*, which is the weakest of the bunch. The claim that the quintet can be *said* to know how to perform 'Amazon River' is weaker than the claim that the quintet can be *known* to possess know-how relevant states or dispositions, in the same way that the claim that the members of the quintet can be said to not be attributable with the relevant know-how is weaker than the claim that they do not possess the appropriate know-how relevant states or dispositions. Accordingly, one should hold more credence on *ENSEMBLE* being an instance of DA

than on it being an instance of DP, DFP or DFA, and hold (slightly) more credence on *ENSEMBLE* being an instance of DFP or DFA than on it being an instance of DP. To make things more concrete, suppose that counterfactual success can be taken as an indication that know-how attributions are appropriate (cf. Hawley (2003)). Then, we could describe *ENSEMBLE* as a case where the quintet would succeed in playing the piece if it tried even though none of the members on their own would succeed if they tried (we could call this *COUNTERFACTUAL DIVERGENCE*). However, we might not know all the facts underlying the truth of the counterfactual, so assent to the counterfactual description does not necessarily entail an endorsement of *DIVERGENT POSSESSION*. None of this means that DP, DFP, DFA couldn't be true, but it suggests that we should be careful with how to assess *DIVERGENCE*.

Still, there are additional issues with some of these variants of *DIVERGENCE*. Suppose that there was a way for a collectives and individuals to possess know-how relevant states or dispositions. Then in principle it would be possible for the collective to possess know-how. But how plausible is it that in this case no member would possess the relevant know-how states or dispositions? A lot will depend on how we describe what it takes for a subject to possess these states or dispositions; the issue has to do with the granularity of the relevant states or dispositions. Suppose that the relevant attitude is propositional knowledge that *p*, where

p = there is a way for the quintet to play the piece, and it consists in *X*.

It is not plausible that any member of the quintet needs to possess *this* piece of knowledge, but presumably they need to know at least the first conjunct of *p*, namely that there is a way for the quintet to play the piece. They besides might have to know that there is a way for them to contribute to the execution of the piece, that is, that something that they could do is part of a plausible description of how the quintet could perform the piece. Suppose, alternatively, that the relevant disposition is the ability to perform the piece. What does it take for a subject to have this ability? If it requires the close possibility of success, that is, that the subject succeeds in relatively similar worlds (for example, it might entail playing the piece following the arrangement given for the instrumental ensemble, holding the capacities of the players fixed), then it is plausible that no member of the quintet has this ability. But if we relax the sense of possibility involved (for example, by allowing different arrangements, or by considering potential changes in the players' capacities), it might turn out plausible that the members of the quintet do have the relevant abilities after all. We would need to know how to specify the relevant sense of ability.

These observations suggest that we should also reconsider the *CONNECTION* constraint. Is individual know-how important for collective know-how at the level of *POSSESSION* or *ATTRIBUTION*, or both? Once again, we would need to disambiguate the constraint between different versions. To keep things short, we only need to worry about the contrast between the case where individual attributability matters for collective possession and the case where individual possession matters for collective attributability (the cases where individual possession matters to collective possession and where individual attributability matters to collective attributability seem to be in good order). Whether members of a collective entity possess certain know-how relevant states or dispositions seems to be a contributing factor to whether the collective entity is attributable with know-how, but the other way around is less clear: how is attributability at the individual level a contributing factor to the possession of the relevant states and dispositions at the collective level? Remember that attributability does not entail possession, so the case does not collapse into possession mattering to possession or

attributability mattering to attributability.

4 HOW SOME EXISTING VIEWS FARE

Now that we have a better understanding of the *POSSESSION* and *ATTRIBUTION* problems and how handling them shapes an account of know-how, we can move on to examining how we can begin to tackle them. It will be useful to see how existing accounts deal with these issues, and in particular how certain accounts presented at the individual level can be extended to deal with these problems at the collective level. This overview is not meant to be exhaustive, but merely illustrative.

Let's begin by considering Birch's (2019) account of joint know-how. In this model, a group of individuals can be said to jointly know-how to do something if they are able to coordinate actions that they each separately know how to do. Importantly, Birch specifies the conditions of joint know-how *purely* in terms of the propositional states of the members of the group; for the case where the group is composed by two members only, these conditions are each of these members of the group: (1) know how to perform a part of the task that is coordination-enabling, and (2) they know how to predict, monitor and adjust in response to each other (as long as their performance is coordination-enabling). Thus, joint know how builds up on individual know-how. The view does not scale up well for groups of many members, but this is not important for our purposes. It readily handles the naive versions of the *DIVERGENCE* and *CONNECTION* constraints (as Habgood-Cooté (2022) points out). The *POSSESSION* and *ATTRIBUTION* problems are seemingly dealt with together, since no distinction is made between having the relevant states and being attributable with know-how. This generates some tension. Note that the view is neutral in regard to the question of how individuals possess know-how. Birch himself seems to favour reconstructing the view along intellectualist lines—thus, joint know-how ends up being a form of joint propositional knowledge. That is, according to this construal of the position, we should say that the collective entity possesses know-how relevant states because its members possess individual know-how understood along intellectualist lines. If we take this approach, the overall account of know-how would have a disjunctive answer to the *POSSESSION* problem, since possession would consist in different things in the collective and individual cases. However, given the distinction we should make between the *POSSESSION* and *ATTRIBUTION* problems, the view should be in principle compatible with the case where the collective entity does *not* possess know-how relevant states or dispositions of their own even though its members *do* possess them *and* even though it is attributable with know-how because it satisfies the requisite conditions. In that case, we should treat the view as giving a positive answer to the *ATTRIBUTION* problem, but rejecting the *POSSESSION* problem. As it stands, the solution to the *POSSESSION* problem remains somewhat indeterminate.

Even if an anti-intellectualist account of individual know-how could be plugged into Birch's account, it is not initially clear how that would lead to a proper solution to the *POSSESSION* problem at the collective level. Would the idea be that by its members having certain dispositions, the collective entity would have the relevant dispositions too? Palermos & Tollefsen (2018) sketch an account of group know-how that tries to make sense of collective possession along anti-intellectualist lines. In their proposal, collective possession of the relevant dispositions and abilities seems to emerge from the interaction of the components of the system; to account for this they appeal to dynamical systems theory. For them, it is particularly important that groups are able to

perform *reliably* in order for know-how attributions to be appropriate. This pushes them towards a historical treatment of attribution conditions: since occasional success is not by itself a display of reliable performance, they require that groups possess at least standing dispositions to act in the appropriate ways, for which the evidence will often be a history of past successes. However, it is clear that for them the possession and attribution problems are linked: instead of rejecting the need to deal with the possession problem as you would do in a dissolutionist approach, they rather try to make sense of the existence of the group as an entity above and beyond its members and of their cognitive properties. However, the account of attributability itself does not require this commitment; in principle, someone could endorse the account from a dissolutionist perspective (the point is not that if we accepted Palermos & Tollefsen's account we should endorse a dissolutionist account of collective know-how attributions, but that accepting their account of attributions does not force us to reject dissolutionism).

There may be something missing as well. The metaphysics that Palermos & Tollefsen put to work gives an answer to the question of how a group can have *patternsofbehaviour* that cannot be decomposed into patterns of behaviour of its members, but from an anti-intellectualist perspective we also need to be able to say that the group's *abilities* do not decompose into the abilities of the individuals that compose the group. So while their account seems able to account for cases where the group manifests their know-how in certain performances, it needs to handle cases where the group possesses know-how without manifesting it in some performances. We can suppose that this could be accounted in terms of the ongoing coordination of the members of the group as an enabling condition for certain patterns of behaviour that could or not be manifested, but the details need to be filled out.¹⁴

Habgood-Coote (2022) claims that the fact that Birch and Palermos & Tollefsen rely on metaphysical explanations of *DIVERGENCE* and *CONNECTION* counts against these proposals compared to their own interrogative account, which accounts for them at the semantics level (thus, as part of its solution to the *ATTRIBUTION* problem). However, since once we properly distinguish the *ATTRIBUTION* and *POSSESSION* layers at play we can arguably treat both accounts as compatible with dissolutionist accounts, this seems incorrect. Further, this assessment betrays the underlying assumption that the *ATTRIBUTION* and *POSSESSION* problems are essentially linked, which is not necessarily the case.

The upshot of these observations is that more work is needed to account for collective know-how, since at least some existing accounts are underdetermined because they fail to distinguish between the *POSSESSION* and *ATTRIBUTION* problems. I don't think these worries undermine the *ultima facie* viability of these accounts; but I think they suggest that we should look for alternatives.

5 GOING NON-PROPOSITIONAL

Existing accounts of collective know-how seem to fail to properly distinguish between the *POSSESSION* and *ATTRIBUTION* problems, and this generates some tension when it comes to solving the *POSSESSION* problem in particular. Here I want to sketch a way to deal with the problem from a perspective that is somewhat different to those we have seen in the literature, which combines anti-intellectualist and intellectualist ideas, while dropping the tendency to dissolutionism of the former and the assumption that know-how is a kind of propositional attitude from the latter. Note that I will not attempt a full defence of the position here nor give too many details;

rather, I will: (a) make some brief remarks about what could motivate it, and (b) preempt the objection that there is no way to deal with the *POSSESSION* problem from a perspective of this sort.

The view will have two components:

- 1) An account of how a group can possess cognitive relations with certain non-propositional structures X, call this the *P-STORY*,
- 2) An account of the conditions under which group know-how attributions are appropriate, call this the *A-STORY*.

In principle, this architecture allows the view to handle the *POSSESSION* and *ATTRIBUTION* problems separately. It also allows treating evidence that a group possesses relations of the sort accounted in the *P-STORY* as an input for the *A-STORY*; in other words, that a group has these relations can be a requisite for the appropriateness of know-how attributions (effectively, this would restore *LINK* to some extent, while keeping the *POSSESSION* and *ATTRIBUTION* problems distinct).¹⁵ As I already pointed out above, it is not necessary that the view makes it true that a group knows-how to do something by possessing the relevant relations at a given time. In fact, my preferred way to deal with the *A-STORY* is historical and context-sensitive; then, that a group has been in certain relations with the relevant structures can be an input for the appropriateness of attributions, but precisely what relations are relevant and how much they weigh can vary from context to context.

For simplicity, rather than developing this in full, I want to illustrate how the approach would work using a toy model of the *A-STORY* that does not handle all these complications (importantly, it omits contextual factors):

TOY: A group G can be said to know-how to ϕ iff G possesses a cognitive state S of the kind that is relevant to the *P-STORY* and is able to ϕ using S.¹⁶

State S is intended to be a contentful non-propositional cognitive state—a point I will return to. Because S is intended to be contentful, this solution to the *ATTRIBUTION* problem incorporates intellectualist ideas. Because ability is needed, it also has an anti-intellectualist component.¹⁷

What makes the kind of view under consideration distinctive is its appeal to non-propositional cognitive states. I won't rehearse the argument in favour of the possibility of non-propositional intentionality here (for that, refer to Grzankowski (2014)), but it is worth noticing that even if we allow them to exist, there are still questions about what kind of contents they might have – do they concern objects, questions, actions, etc.?¹⁸ In the case of know-how, the natural way to go from a non-propositional perspective is to argue that know-how is directed towards *ways to act* or *actions*. Bengson & Moffett (2011) adopt the first idea: according to them, know-how is a cognitive relation to a way. Farkas (2018) adopts the second: according to her, know-how is directed to actions.¹⁹ A different take would be to say that know-how is directed towards a question about how to do something.²⁰ The appeal of these views can vary; for example, some think that they offer better ways to understand know-how as an instance of the broader phenomenon of knowledge-wh, while others argue that they are in a better position to deal with the link between know-how and action.²¹

These non-propositionalist accounts are intended as general accounts of know-how, but do not deal with the collective case specifically. Perhaps the most straightforward way to extend them to handle the collective case is to say that in these

cases groups have the relevant non-propositional attitudes, be them oriented to ways, actions or questions. Giving an account about how this could be possible would amount to giving an answer to the *POSSESSION* problem for these accounts. However, it is not immediately clear how to proceed, since this theoretical space has been less explored and it is not obvious that existing account should be of much help. By going non-propositional, we make the *POSSESSION* problem harder.

We could backtrack from non-propositionalism on the grounds that it does not seem to have the resources to deal with *POSSESSION* in the collective case. This would surely be premature. If non-propositionalism is independently attractive as an account of individual case, we should expect the account of know-how in the collective case to fall along similar lines. No need to throw the baby out with the bathwater.

A different response could be to propose some kind of disjunctive account, where we endorsed non-propositionalism as a reply to the *POSSESSION* problem at the individual level, but limited ourselves to give a solution to the *ATTRIBUTION* problem at the collective level—the view could be, roughly, that while groups do not possess attitudes of the sort that individuals who know how to do something have, it is nonetheless appropriate to say that they are attributable with know-how since groups seem to share some of the relevant properties (for example, that they can be attributable with successes in achieving goals). This is still somewhat of an unhappy compromise. We might prefer to deal with both levels purely in terms of the *ATTRIBUTION* problem (as in more thoroughgoing dissolutionist approaches, although taking this approach undermines our prior acceptance of the availability of some kind of non-propositionalist solution to the *POSSESSION* problem at the individual level),²² or we might want to give a substantive answer to the *POSSESSION* problem at the collective level. To do this, we can appeal to existing work on collective intentionality.

To do the latter, we could take a hint from propositionalist accounts such as Birch's (2019) and give an account of the relevant collective attitudes at least partially in terms of the attitudes of the members of the groups. For a group to possess the relevant attitudes could require that its members have these attitudes as well. For example, it could be that for a quintet to know-how to play a piece, as in *ENSEMBLE*, each of its members has to have the relevant non-propositional attitudes towards at least part of the non-propositional targets of the ascribed attitude (for example, to parts of the relevant ways to act, or to the relevant ways to answer pertinent questions). A minor problem with this is that it does not seem necessary that the attitudes of the members of groups who are attributable with know-how are homogeneous in kind (namely, that they all have the same kinds of propositional or non-propositional attitudes). This matters for large groups where the members have vastly different roles that require different cognitive competences. Consider a clothing company trying to organize next season's line of clothes – suppose that they have done this before and that it is appropriate to say that the company knows how to organize a seasonal line of clothes. The company will involve designers, engineers, accountants, assistants of all sorts, business people, etc. Is it plausible that all of them know how to do their part by holding the same kinds of attitudes? The worry could be alleviated if it was shown that they all share the same attitudes regardless of appearances – for example, by showing that all the relevant attitudes can be described in terms of some common format.²³ Alternatively, one would like an account of attitude combination that made sense of how the attitudes of a collective entity could be supported by individual attitudes of different kinds.

Finally, we could opt for a dispositionalist account of collective non-propositional attitudes, reducing these to complex dispositions that emerge from the interaction of the members of the relevant groups. In this case, for a group to hold a

non-propositional attitude towards, for example, a question, the group would have to have certain abilities – for example, the ability to act in ways that are sensitive to the question because acting in those ways would not succeed unless the question had certain answers.²⁴ At this point we reach difficulties that are similar to those we identified when assessing Palermos & Tollefsen (2018): how, exactly, is it that the group has these abilities, and what kind of relation do they bear with individual abilities?

Regardless of how one prefers to pursue the approach, more work needs to be done to show that it does better than existing views. Here I have merely shown that the approach cannot be ruled out in principle.

5 CONCLUSION

In this paper, I have examined the nature and scope of what I have called the *POSSESSION* and *ATTRIBUTION* problems with regard to collective know-how. I have argued that we should treat them as distinct problems, even though many mainstream approaches fail to distinguish them. I have shown how doing so leads to important questions about how to approach the general issue of the nature of know-how, and that many existing accounts fail to address these issues sufficiently. Finally, I have raised a worry for those (such as myself) who would like to adopt a non-propositional account of knowing-how: going non-propositional makes the *POSSESSION* problem significantly harder. I have sketched several ways how such a non-propositional view could deal with the problem, but more work needs to be done. At least, it seems to me, everybody shares this problem. Furthermore, even if you disagree with the need to adopt non-propositionalism about know-how, the distinction between the *POSSESSION* and *ATTRIBUTION* problems is something that you need to pay attention to.

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REFERENCES

- BENGSON, J.; MOFFETT, M. Nonpropositional intellectualism. In: BENGSON, J.; MOFFETT, M. (Eds.) *Knowing how*. Oxford: Oxford University Press, 2011. p. 161-195.
- BIRCH, J. Joint know-how. *Philosophical Studies*, v. 176, p. 3329-3352, 2019.
- BIRD, A. Social knowing: the social sense of 'scientific knowledge'. *Philosophical Perspectives*, v. 24, p. 23-56, 2010.
- CATH, Y. Knowing how without knowing that. In: BENGSON, J.; MOFFETT, M. (Eds.) *Knowing how*. Oxford: Oxford University Press, 2011. p. 113-135.
- DENNETT, D. The unimagined preposterousness of zombies. *Journal of Consciousness Studies*, v. 2, p. 322-326, 1995.
- DI PAOLO, E.; CUFFARI, E.; DE JAEGHER, H. *Linguistic bodies: the continuity between life and language*. Cambridge, MA: The MIT Press, 2018.

- FARKAS, K. Know-how and non-propositional intentionality. In: GRZANKOWSKI A.; MONTAGUE, M. (Eds.) *Non-propositional intentionality*. New York: Oxford University Press, 2018. p. 95-113.
- GRZANKOWSKI, A. Attitudes towards objects. *Noûs*, v. 48, p. 314-328, 2014.
- GRZANKOWSKI, A. Non-propositional contents and how to find them. *Journal of Consciousness Studies*, v. 25, p. 233-241, 2018.
- HABGOOD-COOTE, J. Knowledge-how, abilities, and questions. *Australasian Journal of Philosophy*, v. 97, p. 86-104, 2019.
- HABGOOD-COOTE, J. Collective practical knowledge is a fragmented interrogative capacity. *Philosophical Issues*, v. 32, p. 180-199, 2022.
- HAUGELAND, J. Two dogmas of rationalism. In: ADAMS, Z.; BROWNING, J. (Eds.) *Giving a damn: essays in dialogue with John Haugeland*. Cambridge, MA: The MIT Press, 2017. p. 293-310.
- HAWLEY, K. Success and knowledge-how. *American Philosophical Quarterly*, v. 40, p. 19-31, 2003.
- JENKINS, A.; DODELL-FEDER, D.; SAXE, R.; KNOBE, J. The neural bases of directed and spontaneous mental state attributions to group agents. *PLoS ONE*, v. 9, e105341, p. 01-11, 2014.
- MASTO, M. Knowledge-the and knowledge-wh. *American Philosophical Quarterly*, v. 53, p. 295-306, 2016.
- MENDELOVICI, A. Propositionalism without propositions, Objectualism without objects. In: GRZANKOWSKI A.; MONTAGUE, M. (Eds.) *Non-propositional intentionality*. New York: Oxford University Press, 2018. p. 214-233.
- MÖLDER, B. *Mind ascribed: an elaboration and defence of interpretivism*. Amsterdam: John Benjamins, 2010.
- MORALES CARBONELL, F. Individual and collective know-how are understanding-like. *Unpublished manuscript*.
- MOREIRA DE CARVALHO, E. The shared know-how in *Linguistic Bodies*. *Unisinos Journal of Philosophy*, v. 22, p. 94-101, 2021.
- PALERMOS, S. O.; TOLLEFSEN, D. P. Group know-how. In: CARTER J. A.; CLARK, A.; KALLESTRUP, J.; PALERMOS, S. O.; PRITCHARD, D. (Eds.) *Socially extended epistemology*. New York: Oxford University Press, 2018. p. 112-131.
- RYLE, G. *The concept of mind* (60th anniversary Edition). London: Routledge, 2009.
- SAINSBURY, M. Attitudes on display. In: GRZANKOWSKI A.; MONTAGUE, M. (Eds.) *Non-propositional intentionality*. New York: Oxford University Press, 2018. p. 234-258.
- STANLEY, J.; WILLIAMSON, T. Knowing how. *Journal of Philosophy*, v. 98, p. 411-444, 2001.
- TOLLEFSEN, D. *Groups as agents*. New York: Polity, 2015.
- WITTEGENSTEIN, L. *Philosophical investigations* (4th edition). London: Wiley-Blackwell, 2009.

NOTAS

1 I realized I needed to distinguish between these problems while I developed a new account of individual and collective know-how, both anti-intellectualist and non-propositionalist, which I present in Morales Carbonell (ms). In particular, it became clear that offering a metaphysical account of the mental states that are relevant to know-how is insufficient for providing an account of when we can say that someone knows how to do something. Here I want to elaborate on this point without having to present a full account of know-how.

- 2 I thank a reviewer for pressing me on how to characterise these problems.
- 3 In principle, we could ask similar questions for every kind of propositional attitude (and later, disposition) that could be relevant for know-how.
- 4 I will adopt the policy to treat dispositions as a kind of state, to further distinguish between views where a subject having a disposition at a time is thought to be understood as the subject having some kind of *property* at that time, and views where this is rejected. In my view, know-how as ability accounts are of the first type, while Ryle (1949) takes the latter approach.
- 5 Wittgenstein (1953) takes a similar position with regard to, for example, understanding.
- 6 As an aside: perhaps it is not unexpected that this last option is structurally similar to the possibility of philosophical zombies; whereas in that case we have subjects who are indistinguishable in behaviour despite lacking any underlying mental states, here we are considering subjects who show the signs of knowing how to do something and are thus attributable with know-how despite not having any relevant mental states or dispositions. No wonder that Dennett (1995), who after all in many respects follows on Ryle's steps, is drawn to the idea that it makes no sense to distinguish philosophical zombies from ordinary humans with respect to the question whether they are conscious. Ryle similarly tried to dissolve the idea that there is anything to say about the *POSSESSION* problem about know-how that could not be addressed by sorting out the *ATTRIBUTION* problem. Ryle's point, as I understand him, wasn't to show that we had a wrong metaphysical view of the nature of know-how (namely, intellectualism) that could be replaced by a better metaphysical view (some version of the know-how as ability view), but that we should abandon the metaphysical question altogether, replacing it with a question concerning the patterns of use of the concept of know-how.
- 7 My goal here is not to defend dissolutionism about collective know-how, but to show that it could have been unfairly ruled out because of a failure to recognize it as an option. I have no metaphysical scruples with saying that collective entities, attitudes or abilities are real; but I think this deserves stronger arguments than failing to see or acknowledge that in some sense one could dispense with them.
- 8 The idea could be that it is pragmatically inappropriate to attribute know-how to the corporation even though it would be true and informative, because the attribution of propositional knowledge is more relevant.
- 9 Farkas (2018) similarly suggests that we should not necessarily follow the issue of attributions too closely in order to grasp what is at stake in discussions about the nature of know how. Her argument relies on the divergence of verdicts about the attributability of know how in different cases. My argument is more similar to views taken in the debate on non-propositional intentionality, where it is argued that surface observations on the conditions of attribution do not necessarily need to match the underlying facts; consider, for example, Mendelovici's (2018) distinction between 'deep nature' and 'superficial character', and Sainsbury's (2018) argument that in many cases attitudes and ascriptions come apart.
- 10 As performed by Uakti in their album *Águas da Amazônia* (1999). The piece is based on Glass's *Étude no 2* for piano (1994).
- 11 Habgood-Coote discusses a case where NASA is said to know how to build a space shuttle even though nobody in NASA knows how to make a space shuttle on their own, which is itself based on an example used by Bird (2010).
- 12 Habgood-Coote indicates that there is empirical evidence that this is a common response among the folk, citing a study from Jenkins et al. (2014).

- 13 Of course, this point has to be made against the background that the *POSSESSION* and *ATTRIBUTION* problems are distinct, so that we can treat the possibility as open that there is no know-how relevant kind of state or disposition, and that accordingly if there is a solution to the *ATTRIBUTION* problem it does not require a solution to the *POSSESSION* problem. We should expect those who disagree on this point (who do not distinguish between the *ATTRIBUTION* and *POSSESSION* problems) to respond more or less indifferently to these possibilities.
- 14 For another view on the role of abilities in collective know-how, see Di Paolo et al (2018) and Moreira de Carvalho (2021).
- 15 Given the ample room of maneuver given to dissolutionism in the previous sections, one may legitimately ask why we should take this relatively ‘inflationist’ move here (thanks to a reviewer for pressing me on this). There is not enough room here to provide a full answer, but, briefly put, the reason is that dissolutionism seems to leave the success of attributions unexplained: how could know-how attributions be successful if there were no underlying states? Note, however, that this does not mean that we are entitled to hipostasize the attribution story into an account of how subjects possess know-how. The proposal given here avoids this by making the P-STORY merely a contributory part of the A-STORY.
- 16 If you think this does not separate the *POSSESSION* and *ATTRIBUTION* problems sufficiently, consider this proposal, which is slightly more complicated but which departs from time-slice assumptions more clearly:
*TOY**: A group *G* can be said to know-how to ϕ iff *G* possesses or has possessed cognitive states *S* of the kind that is relevant to the *P-STORY* and has ϕ -ed using their cognitive states *S* or is disposed to ϕ using *S*.
For our purposes here the details do not matter, although I should mention that in both toy conditions possession of the relevant kind of states is a constraint on the admissible abilities.
- 17 Compare with Bengson & Moffett’s (2011) non-propositional intellectualism. My preferred version of the approach is anti-intellectualist, in that it emphasizes the importance of abilities over the possession of attitudes (ultimately, the attribution of attitudes is explained by the possession of certain abilities). Those additional assumptions are not relevant here.
- 18 Cf. Grzankowski (2018). Strictly speaking, these structures could also have partially propositional components, but what matters is that the overall structure is not propositional (in the same way in which it is not necessary for all the components of propositions to be propositions themselves).
- 19 My own preferred view is that know-how is a non-propositional attitude directed towards what I call a procedural graph, which is a structure that can represent a procedure or a way to do something. Cf. AUTHOR (ms). An advantage of this approach is that graphical contents can be distributed over a collection of subjects without any of the subjects having a copy of the complete graph in a relatively straightforward way (whereas it is not clear how having a propositional content could be distributed over a collection of subjects without each subject having a copy of the full proposition).
- 20 A general issue with this option is that most accounts of questions construct them out of propositional structures. Mastro (2016) proposes a view along these lines, although in her case questions are conceived in propositional terms. Likewise, Habgood-Coote (2019) proposes that know-how is a kind of ability-to-answer relation to a question of how-to-do something. In principle, however, we could

treat questions as a *suigeneris* type of content.

- 21 Bengson & Moffett (2011) adduce linguistic evidence in favour of non-propositionalism, but this could be taken as evidence concerning the fine-grained conditions that the view should offer at the level of the *ATTRIBUTION* problem rather than in terms of *POSSESSION*. In their proposal the solutions to these problems come in tandem.
- 22 Cf. Mölder (2010) and Tollefsen (2015) on interpretivism about individual and collective mental states (it is important to note that interpretivism is less radical than dissolutionism). If we have to account for collective intentional states through interpretations, we could do the same to account for individual intentional states.
- 23 Indeed, my own preferred solution (cf. Morales Carbonell, ms.) is to say that the relevant states have a common format and that the relevant abilities involve the manipulation of contents in that format.
- 24Cf. Haugeland (2017) on the dependence of the abilities constituting (scientific) know-how on the ways to succeed that the world affords (or fails to afford). Know-how is a form of ‘knowing’ because it is vulnerable to error.