

# INTROSPECTIVE KNOWLEDGE BY ACQUAINTANCE

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Forthcoming in *Synthese*

## Abstract

Introspective knowledge by acquaintance is (roughly) knowledge we have by being *directly aware* of our phenomenally conscious states. In this paper, I argue that introspective knowledge by acquaintance is a *sui generis* kind of knowledge: it is irreducible to any sort of propositional knowledge and is *wholly constituted* (rather than merely *enabled*) by a relationship of introspective acquaintance. My main argument is that this is the best explanation of some epistemic facts about phenomenal consciousness and introspection. In particular, it best explains the epistemic asymmetry between a subject who has never had a certain phenomenal state and one who has. I also consider two theoretical objections to my claim: an objection from *disunity* and an objection from *mysteriousness*. I show that these objections can be answered and that introspective knowledge by acquaintance being *sui generis* remains a live option on the table.

## 1. Introduction

Knowledge by acquaintance is (roughly) knowledge we have of that which we are *directly aware* of. *Introspective* knowledge by acquaintance is knowledge of that which we are directly aware of in introspection. For the purposes of the present discussion, we may suppose that what we are directly aware of in introspection is our current phenomenally conscious states (i.e., conscious mental states there is something *it is like* to be in). So, introspective knowledge by acquaintance is knowledge of our current phenomenally conscious states which we have by being introspectively aware of them. Bertrand Russell, who made the notion of knowledge by acquaintance popular, maintained that knowledge by acquaintance is irreducible to propositional knowledge—knowing that  $x$  is  $F$ . The latter is the kind of knowledge intimately connected with justified true belief, and belief is a paradigmatic propositional attitude. Though debates around different epistemic phenomena (knowledge-how, understanding) have recently flourished, propositional knowledge remains the focus of most of the epistemological literature. The Russellian idea that there is non-propositional knowledge by acquaintance, though not utterly absent, is a minority and certainly unorthodox position. Importantly, acquaintance theorists of *introspection*, in line with the orthodoxy, typically reject this Russellian idea and understand introspective knowledge by acquaintance as a special kind of *propositional* knowledge, namely, propositional knowledge which is *caused* or *produced* by the relationship of introspective acquaintance.

Differently from them, and similarly to Russell, I understand the notion of “knowledge by acquaintance” not as knowledge *caused* by acquaintance, but as knowledge *constituted* by acquaintance: the kind of knowledge *of*  $x$  that consists in one’s suitably direct awareness of  $x$ .

Against the orthodoxy, I argue that introspective knowledge by acquaintance is *sui generis*: it is a kind of knowledge that is irreducible to propositional knowledge.

Note well: I assume, here, that propositional knowledge entails belief, and that the content of belief is a proposition that is *structured* and made up of *concepts*, where a concept enables one to (i) distinguish Cs from non-Cs and (ii) recognize Cs as instances of the type C. So, my claim that knowledge by acquaintance is non-propositional amounts to the claim that knowledge by acquaintance does not entail having a mental state whose content is a structured proposition that has concepts among its constituents. On some other conceptions of propositions—e.g., on a Stalnakerian conception in terms of sets of possible worlds (Stalnaker 1976)—knowledge by acquaintance may count as propositional. Contributing to the debate around the nature of propositions is not the purpose of this paper, nor does my argument need to take a stance on the ultimate nature of propositions. The point I want to make is that knowledge by acquaintance is irreducible to a kind of knowledge that entails *belief*, i.e., a mental attitude directed toward a structured proposition in the sense just described, such that in order for one to have an occurrent belief, one must possess and deploy the concepts featuring in the proposition that constitutes its content.

The paper is structured as follows. First, I spell out the notion of *knowledge by acquaintance*, partly by appeal to Russell’s (1912) seminal characterization (§2); I also illustrate what it means for introspective knowledge by acquaintance to be *sui generis* (§3). Secondly, I present an argument from inference to the best explanation for the thesis that introspective knowledge by acquaintance is a real and *sui generis* kind of knowledge and I defend it from some challenges (§4). Thirdly, I respond to two more theoretical objections: an objection from *disunity* (knowledge is a unified rather than scattered notion) and an objection from *mysteriousness* (the notion of knowledge by acquaintance is unintelligible unless reduced to some other kind of knowledge) (§5). Finally, I briefly explain why we should care whether there is such a thing as *sui generis* knowledge by acquaintance (§6).

## 2. Knowledge by acquaintance

The notion of *knowledge by acquaintance* was introduced by Bertrand Russell in his 1910 article ‘Knowledge by Acquaintance and Knowledge by Description’ and more fully developed two years later in chapter 5 of *The Problems of Philosophy*.<sup>1,2</sup> Knowledge by acquaintance is one kind of what Russell calls “knowledge of things,” which he contrasts with “knowledge of *truths*.” Knowledge of truths is the sort of knowledge one has when one “know[s] *that* something is the case” (1912: 69): it is *propositional knowledge*—knowledge partly consisting in the subject forming a *judgment* about what is known. Knowledge of things, on the other hand, comes in two kinds: knowledge of things *by acquaintance* and knowledge of things *by description*. Knowledge by acquaintance is “essentially

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<sup>1</sup> It is mentioned in passing already in his (1905) ‘On Denoting,’ but without real development.

<sup>2</sup> In fact, the idea that direct apprehension constitutes a kind of knowledge which is not only distinct from, but also more basic than, propositional knowledge was introduced much earlier. The idea is present in Plato and Aristotle as well as in later authors such as Aquinas and Spinoza (Hayner 1969; Peterson 2008: 92-93). Thanks to Ben Koons and Kara Richardson for pointing this out to me.

simpler than any knowledge of truths, and logically independent of knowledge of truths [whereas knowledge by description] always involves [...] some knowledge of truths as its source and ground” (Russell 1912: 72-73). Knowledge by acquaintance is then spelled out in terms of *direct awareness*: “we have *acquaintance* with anything of which we are directly aware, without the intermediary of any process of inference or any knowledge of truths” (1912: 73). Knowledge by acquaintance is a kind of knowledge whose object is known *immediately*, and that does not depend on the subject’s forming *any judgment* about what is known.

Russell illustrates the difference in *kind* between knowledge by acquaintance and knowledge by description as follows. By perceiving a table, Russell argues, you are acquainted with a color sense datum. In virtue of being acquainted with it, you *know* that color sense datum: you know it *by acquaintance* (we might say: you know it *acquaintance-wise*). Now, you may subsequently learn many truths about the sense datum: that it is crimson, that it is bright, that it is light, etc. But your knowing all these facts does not improve, or affect in any way, your knowledge by acquaintance *of the color sense datum* itself. So, no matter how many truths you know about a given sense datum, that will not make you know *it* (acquaintance-wise) any better.

More generally, knowledge by acquaintance is “objectual” knowledge, in the sense that what is known by acquaintance is an *item*, rather than a proposition.<sup>3</sup> It consists in a *direct awareness* of its “object,” where the relevant awareness is *direct* epistemically and metaphysically. It is *epistemically* direct in that, by being acquainted with  $x$ , a subject  $S$  gets *non-inferential* access to  $x$ , hence access which does not depend on epistemic access to anything else (importantly, it does not depend on the subject’s forming *any judgment* about the relevant “object,” nor does it imply applying any concept to it). It is *metaphysically* direct in that, when  $S$  is acquainted with  $x$ , no state or process (including causal) mediates between  $x$  and  $S$ ’s awareness of  $x$  (Gertler 2011).<sup>4</sup>

What are the *objects* of acquaintance? It was Russell’s view that only *sense data* and *universals* can be known by acquaintance (1912: 81).<sup>5</sup> However, this aspect of his view can be detached from his core idea about knowledge by acquaintance. Potential objects of acquaintance may be things around us and their properties (perceptual acquaintance), phenomenally conscious states (introspective acquaintance), and perhaps abstract objects (intuitional acquaintance). For each of these, it is of course controversial whether the relevant kind of acquaintance really exists. The focus of this paper is restricted, however, to *introspective* acquaintance: direct awareness of phenomenally conscious states yielded by having them and attending to their phenomenology.

The notion of *acquaintance* has been increasingly regaining momentum throughout the last couple of decades, in both philosophy of mind and epistemology. Some philosophers of mind have appealed to it to explain introspection and its alleged epistemic specialness (Gertler 2001, 2012; Chalmers 2003; Horgan and Kriegel 2007). Others have sought in it a physicalist answer to

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<sup>3</sup> I leave the question open here whether the relevant item is an object, a property, a trope, an event, or something else. “Objectual” should therefore be read as a broader notion than “object-directed,” possibly including “property-directed,” “trope-directed,” and so on. *Mutatis mutandis*, the same applies to “object” in the next two sentences.

<sup>4</sup> The metaphysically direct relationship is often spelled out by acquaintance theorists in terms of *constitution*. I will come back to this in §5.

<sup>5</sup> Russell also explores the hypothesis that we are acquainted with our *selves* (Russell 1912). Although he attributes a fairly high credence to that hypothesis, he is very careful not to commit to it.

Frank Jackson's (1982) knowledge argument (Conee 1994; Balog 2012). Some epistemologists have used it as the grounding element for a foundationalist theory of justification (Fales 1996; BonJour 2000, 2003; Fumerton 1996, 2001, 2009; Hasan 2013).<sup>6</sup> However, most of these authors seem to have in mind a notion of *knowledge by acquaintance* which is importantly different from how Russell conceived it, and not just due to disagreement about the potential *objects* of acquaintance.<sup>7</sup>

What most contemporary philosophers (though not all of them—more on this momentarily) call “knowledge by acquaintance” is *propositional* knowledge which is *based on* acquaintance. Thus both the *Internet Encyclopedia of Philosophy* and *Stanford Encyclopedia of Philosophy* entries on the distinction between knowledge by acquaintance and knowledge by description understand it as a distinction between two bases for propositional knowledge. Accordingly, they attribute the idea of non-propositional, *sui generis* knowledge by acquaintance to confusion or equivocation:

The traditional account of knowledge by acquaintance is susceptible to being misunderstood or conflated with merely being directly acquainted with something [...] For a subject to be directly acquainted with something only requires for the subject to have unmediated access to the object of awareness. Knowledge by acquaintance that something is the case, however, [...] is a kind of *knowledge*, which requires the subject to hold a belief under the right conditions. (DePoe 2018: §1, emphasis in original)

It is tempting to suppose that Russell equivocates between the relation of acquaintance and the special kind of knowledge of truth (foundational knowledge) whose sole source is acquaintance. [...] In order to guard against confusing *acquaintance* on the one hand with *foundational knowledge of truths acquired by acquaintance* on the other [...] we should be more careful than Russell and restrict *knowledge by acquaintance* to foundational knowledge of *truths*. By contrast, one can have *acquaintance* with items that are not truths, items that cannot be said to be true or false. (Hasan and Fumerton 2020: §1, emphasis in original)

Importantly, contemporary acquaintance theorists of *introspection* often explicitly reject Russell's “idiosyncratic” idea that acquaintance suffices by itself for knowledge:

The epistemic features of Russell's view are questionable as well. [...] [H]e appears to take acquaintance with sense data to suffice for knowledge of those sense data. [...] It is hard to understand how one could *know* one's sense data simply by being aware of them in the minimal way required for ordinary perception. Knowledge of an object seems to require thinking *about* the object, which in turn involves some *way* of thinking of it. (Gertler 2011: 92)

The idea that Russell's conception of knowledge by acquaintance comes from equivocation is perhaps due to the expression “knowledge by acquaintance” being ambiguous as between a causal and a constitutive reading.<sup>8</sup> On the first reading, “knowledge by acquaintance” means “knowledge which is caused, or produced, by acquaintance.” We may call the resulting view the *causal view*. On

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<sup>6</sup> Raleigh (2019) and Duncan (2021) offer excellent and very useful introductions to the notion of acquaintance. See also Knowles and Raleigh (2019) for a recent collection devoted to acquaintance.

<sup>7</sup> Of those in the list above, Earl Conee (1994) is an exception: he explicitly endorses the Russellian notion of knowledge by acquaintance, though he does little argumentative work in defense of its epistemic significance.

<sup>8</sup> Uriah Kriegel, personal communication.

the causal view, knowledge by acquaintance is propositional knowledge with a special etiology—it is produced by the relation of acquaintance. On the second reading, it means “knowledge which is constituted by acquaintance.” Although the constitutive reading *could* be the result of equivocation, it may also be a well-aware commitment to a substantial thesis: that regardless of whether there is knowledge *caused* by acquaintance, there is knowledge *constituted* by acquaintance. Call this the *constitutive* view. On the constitutive view, acquaintance *is* knowledge. Accordingly, knowledge by acquaintance is *not* propositional: it is a *sui generis* kind of knowledge—irreducible to propositional knowledge. The constitutive view, rather than the causal view, was Russell’s take on acquaintance.

Though still minority and unorthodox, the Russellian *constitutive* view of knowledge by acquaintance has recently attracted increasing interest (McGinn 2008; Tye 2008; Fiocco 2017; Duncan 2018; Coleman 2019). These authors have argued for the existence of a kind of knowledge that is object-directed, non-propositional and non-conceptual. Though this has engendered substantial progress in the epistemological legitimization of the notion (Duncan’s 2018 arguments stand out as particularly thorough and convincing), I think there is still room for contribution to this emerging literature. For one thing, the latter has mainly focused on knowledge by *perceptual* acquaintance: non-propositional knowledge of objects in our surroundings and their properties, acquired via perception (and/or perceptual attention).<sup>9</sup> More work remains to be done in defense of *sui generis* knowledge by *introspective* acquaintance.<sup>10</sup> Furthermore, my own suspicion—for which I will not argue here, though—is that, if there is knowledge by acquaintance at all, introspective acquaintance is a more plausible candidate to constitute it than perceptual acquaintance. The latter, unlike the former, seems to imply a commitment to theories of perceptual experience widely considered controversial (notably naïve realism). Another reason to focus on introspective knowledge by acquaintance is that, as noted, the constitutive view of knowledge by acquaintance has been underexplored by philosophers of mind sympathetic to the acquaintance theory of introspection.

### 3. Kinds of knowledge

As noted, the central concern of contemporary epistemology has been *propositional knowledge*. Although propositional knowledge is typically analyzed in terms of more basic notions (e.g., belief, justification, and truth), and although some of those notions (e.g., justification) are certainly *epistemic*, propositional knowledge is usually *not* analyzed in terms of any other *kind of knowledge*.<sup>11</sup>

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<sup>9</sup> In fact, Duncan’s (2018) arguments purport to generalize both to perceptual and introspective acquaintance. However, they seem to me to be mostly tailored to the perceptual case.

<sup>10</sup> And, perhaps, also in defense of knowledge by *intuitive* acquaintance, though I am not going to explore this here.

<sup>11</sup> Williamson (2000) rejects the idea that propositional knowledge is analyzable. The debate on “knowledge first” is orthogonal to the question I am outlining here, however.

In this sense, propositional knowledge is a *sui generis* kind of knowledge.<sup>12</sup> A kind of knowledge is *sui generis* just if it is *irreducible* to any other kind of knowledge.

Some philosophers have argued that there is at least one other *sui generis* kind of knowledge, namely *knowledge-how*: knowing how to ride a bike, knowing how to play Leonard Cohen's *Suzanne* on the guitar, knowing how to make a proper pizza, and so on. The notion of knowing-how was introduced to contemporary epistemology by Gilbert Ryle (1949),<sup>13</sup> who defended the view that knowledge-how is irreducible to knowledge-that.<sup>14</sup>

Non-reductivists' positive view usually analyzes knowledge-how in terms of *abilities*: knowing how to  $\alpha$  is possessing the ability to  $\alpha$ . For instance, knowing how to play Leonard Cohen's *Suzanne* on the guitar is possessing the ability to play *Suzanne* on the guitar. The ability account has been challenged, though, on the grounds that having an ability is neither necessary nor sufficient for knowing-how. A guitarist who lost both hands still knows how to play Leonard Cohen's *Suzanne*, but has no ability to do so (Stanley and Williamson 2001: 416). Conversely, a novice trampolinist may accidentally perform a difficult somersault at the very first attempt; arguably, she was able to perform the somersault, but she does *not* know how to perform it (Carr 1981: 53).

These challenges have led some philosophers to adopt a *reductivist* approach to knowledge-how.<sup>15</sup> Stanley and Williamson's (2001) is perhaps the most influential reductivist argument in the recent literature. Their strategy hinges on the idea that, despite the superficial linguistic dissimilarities, attributions of knowledge-how are in fact syntactically and semantically similar to attributions of *de re* propositional knowledge: I know how to play *Suzanne* iff I know, of some way  $w$ , that  $w$  is for me a way to play *Suzanne*. Stanley and Williamson take these considerations as evidence that knowledge-how attributions are attributions of propositional knowledge. They conclude that knowledge-how is a species of knowledge-that: it consists in the relationship between a subject and a proposition involving ways of doing something.

It is not my present purpose to adjudicate this debate. I discuss it only to help us get a better grasp of what is at stake when we claim that some kind of knowledge is *sui generis*.

To sum up: besides knowledge by acquaintance, at least two other kinds of knowledge may be distinguished: propositional knowledge and knowledge-how. For each, at least two opposite stances are available: on one view, the relevant kind of knowledge can be reduced to one or more other kinds of knowledge; on the alternative view, the relevant kind of knowledge is *sui generis*. The

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<sup>12</sup> However, there is no universal consensus on this. Some philosophers (e.g. Hartland-Swann 1956), for example, attempt to show that propositional knowledge is a species of, or reducible to, knowledge-how. (On the notion of *knowledge-how* see next paragraph.)

<sup>13</sup> Although notions in the vicinity can be found throughout the history of thought, e.g. *techné* vs. *episteme*, practical vs. theoretical knowledge, and procedural vs. declarative knowledge (Fantl 2017).

<sup>14</sup> This approach is often also called *anti-intellectualist*, to underline the idea that knowledge-how does not require prior judgment formation or running through a series of previously known propositions.

<sup>15</sup> These challenges have also led other philosophers to develop alternative or more sophisticated non-reductivist accounts. Reviewing those, though, falls out of the scope of this paper.

question that concerns us here is which of these two views is more plausible for introspective knowledge by acquaintance.

#### 4. Propositional knowledge does not exhaust introspective knowledge by acquaintance

The main motivation for thinking that introspective knowledge by acquaintance is *sui generis* is that this is the best explanation of cases where, intuitively, there is an epistemic asymmetry which does not seem to be exhausted by a difference in possessed *propositional* knowledge: cases where two subjects differ epistemically even though they have exactly the same propositional knowledge.<sup>16</sup>

Before diving into the main argument, and just to get a preliminary understanding of the kind of reasoning we will appeal to, consider the following example.

*End*

You are going through a particularly tough period because of an ill-ended relationship. I am your friend, so you come to me to find comfort. I have never gone through such a crushing situation, but another close friend of mine did, and I stood by him when that happened. He kept telling me about his vicissitudes and despair, and he did that in such detail, that I now sincerely say that I know (almost) everything about what he experienced through that tough period of his life. When you tell me about your vicissitudes and despair, I may try to console you by saying “I know how you feel...”. I am sincere—I have heard so much about this kind of situation that I believe I know almost everything one can know about what it is like to go through it. You appreciate my support. But, deep down, you believe I cannot *really* know how you feel. Although I know a lot of facts about how people may feel in this sort of situation, there is something—arguably, something quite important—I miss until I myself undergo a similar experience—until I am myself *acquainted* with it.

I am offering *End* as a sort of dialectical “warm up”, rather than as an *argument* for *sui generis* knowledge by acquaintance. For whether the relationship at play in *End* is genuine acquaintance may be a matter of debate. For one thing, it seems that the notion of *experience* is used here in a looser sense than in the introspective acquaintance literature. Acquaintance theorists typically think of experiences in terms of *events*: they are instantiations of phenomenal properties by a subject at a time (Kim 1993). Now, although the ending of a relationship is an event, it is not itself an experience, because it does not consist in the instantiation of a *phenomenal* property. What in our example is referred to by your end-of-relationship “*experience*” is, arguably, a much more complex phenomenon than the instantiation of a phenomenal property. It very likely involves the instantiation of *many* phenomenal properties at the same time and at *different* times, along with thoughts and desires with different contents, following and interlacing with one another in a complex mental *process* that takes place through a fairly *long span*.

Still, *End* may help us understand the kind of reasoning underlying the intuition of acquaintance’s epistemic significance. Propositional knowledge is such that the information it

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<sup>16</sup> Recall, I am assuming that propositional knowledge is knowledge that entails belief, whose content is a proposition that is *structured* and made up of *concepts*.

conveys can be *transmitted* to others. What *End* highlights is that the information my friend can transmit to me by expressing a bunch of propositions about how he feels is not sufficient for me to have all the knowledge I need to truly claim that I know *what you are experiencing* (although it may be sufficient for me to truly claim that I know a lot of things *about* what you are experiencing). For me to truly claim *that*, I need to *have* the experience: I need to go firsthand through all the vicissitudes it implies.

With this warm-up in place, let me introduce my main case, which does directly invoke our target phenomenon—introspective acquaintance with an individual phenomenal state.

### *Pain*

You are conversing with someone who has never had a pain sensation and you want to try to explain to them what it is like to feel pain.<sup>17</sup> Such a hard task! How to describe the phenomenology of a pain sensation if not by saying that it is, well, *painful*? You gather up ideas to try and formulate a non-trivial description of a sample pain sensation. You may come up with something like “unpleasant sensation associated with the feel of an urge to complain, cry, scream, or otherwise express discomfort”. This, perhaps, may help your interlocutor to know *something* (some facts) about pain sensations: that they are unpleasant, that they make you feel like expressing discomfort, etc. However, someone who has never felt pain can hardly get a full grasp of the notions of unpleasantness and discomfort. Moreover, even admitting your interlocutor can grasp these notions, your description is very far from exhausting what pain feels like. You may attempt alternative descriptions. Arguably, however, you will never be able to find a non-trivial description which can convey the information your interlocutor would acquire if only they got acquainted with a pain sensation.

*Pain* involves a genuine case of introspective acquaintance. It suggests that one can only fully grasp what pain feels like if one experiences it firsthand—i.e., only if one *has* and is *directly aware* of a pain sensation.<sup>18</sup> To know the feel of pain, one must be *acquainted* with it.

The reasoning from *End* applies here. The idea is that direct acquaintance with a pain sensation provides one with information about its phenomenology, information that cannot be acquired by merely learning a(n even very large) number of propositions about pain sensations. More generally, for any phenomenal property  $\varphi$  which you now have but I have never had in my life, no amount of propositional knowledge you may convey to me can fill the gap between my epistemic position and your epistemic position with respect to  $\varphi$ . You may describe  $\varphi$  to me in the finest detail, transmitting to me all the propositional knowledge you have about  $\varphi$ . Yet, although now—arguably—we both know the same propositions about  $\varphi$ , there still is an important

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<sup>17</sup> There is a rare condition, *congenital analgesia*, where the patient does not experience physical pain. Imagine, then, that you are conversing with a congenital analgesic.

<sup>18</sup> Having a “full grasp” of  $x$  implies having the maximal amount of information that can be acquired about  $x$ . Accordingly, having a full grasp of a phenomenal state  $\varphi$ ’s phenomenology implies having the maximal amount of information that can be acquired about  $\varphi$ ’s phenomenology: one gets a full grasp of  $\varphi$ ’s phenomenology when one acquires all the information generated by  $\varphi$ ’s phenomenology that can be acquired via introspection. More on the notion of information in a few paragraphs.



epistemic asymmetry between us with respect to  $\varphi$ : you *know*  $\varphi$ , whereas I do not.<sup>19</sup> When I myself experience  $\varphi$ , and am acquainted with my experience, I come to know something I did not know before, something on top of the propositional knowledge about  $\varphi$  I acquired from you: I come to know  $\varphi$  itself.

It thus seems that no amount of testimony-acquired propositional knowledge about  $\varphi$  can overcome the epistemic asymmetry between the person who is acquainted with  $\varphi$  and the person who is not. On my view, the best explanation of this is that no piece of propositional knowledge *at all* (not just testimony-acquired) can even out such an epistemic asymmetry. This points directly to what I called the *constitutive view*: knowledge by acquaintance is *irreducible to* propositional knowledge; it is a *sui generis* kind of knowledge which is *constituted* by acquaintance.

I have spelled out the relevant epistemic asymmetry in terms of information: being introspectively acquainted with  $\varphi$  provides one with information that cannot be conveyed by any piece of propositional knowledge—“non-propositional” information. What is “non-propositional” information? Fred Dretske’s (1981) well-developed notion is particularly helpful here. Following Shannon (1948), Dretske characterizes information in terms of reduction of uncertainty, or exclusion of possibilities: one acquires information about a certain state of affairs  $s$  if one can rule out at least some possible worlds in which  $\neg s$ . The amount of information associated with a given state of affairs is a function of the possibilities excluded by that state of affairs. The amount of information *acquired* about a certain state of affairs is a function of the number of possibilities about that state of affairs that one can exclude in virtue of possessing the relevant piece of information. By coming to know that the number 3 was drawn from a box containing eight numbered balls, you get more information than by coming to know that an *odd number* was drawn from that box—in the former case you can rule out seven possibilities about which number was drawn, whereas in the latter you can rule out only four.

Information so understood *may* be carried by a structured proposition; however, importantly, *it does not need to*. You may receive the information that your kitchen window was smashed via a text message with the structured-propositional content “Your kitchen window was smashed,” but you may also receive the same piece of information via a *picture* of your smashed window—whose content is *not* a structured proposition.<sup>20</sup> Following Dretske (1981), we may say that whereas the former carries information in *digital* format, the latter carries information in *analog* format, where

[A] signal [...] carries the information that  $s$  is  $F$  in *digital* form if and only if the signal carries no additional information about  $s$ , no information that is not already nested in  $s$ ’s being  $F$ . If the signal *does* carry additional information about  $s$ , no information that is *not* nested in  $s$ ’s being  $F$ , then I shall say that the signal carries this information in analog form. When a signal carries the information that  $s$  is  $F$

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<sup>19</sup> As noted, this is partly because you have *experienced*  $\varphi$ , and thereby have become acquainted with  $\varphi$ , whereas I have not. I say “*partly*” because experiencing  $\varphi$ , although necessary, may not be sufficient for knowing  $\varphi$ —something more (e.g., *attending to*  $\varphi$ ) may be required.

<sup>20</sup> Of course, on a Stalnakerian conception of propositions, information so defined is always propositional, for it implies the ruling out of some possible worlds. However, as noted, this is not the notion of proposition that is relevant to my present purpose—whose scope is limited to an understanding of “proposition” as a structured entity made up of concepts.

in analog form, the signal always carries more specific, more determinate information about  $s$  than it is  $F$ . (Dretske 1981: 137)<sup>21</sup>

The text message carries *only* the information that your kitchen window was smashed, whereas the picture also carries additional information, say, about the magnitude of the damage, the part of the window that was smashed, etc. Information in analog format is maximally determinate and fine-grained; information in digital format is less determinate and more coarse-grained.

By having *propositional knowledge* about the phenomenology of an experience, one possesses information that is in *digital* format: concept deployment involved in propositional knowledge implies that the information carried by it is *not* maximally determinate. By being *introspectively acquainted* with an experience, instead, one acquires information about its phenomenology that is in *analog* format: being acquainted with an experience does not imply deploying any concept and allows for acquisition of maximally determinate information. Through introspective acquaintance, then, the subject gets additional information with respect to what they get by acquiring propositional knowledge about the experience.<sup>22</sup> Introspective acquaintance is both necessary and sufficient to acquire such additional information; or so I argue.

The idea, then, is that there is some information about the phenomenology of experience that can only be acquired by being introspectively acquainted with it: no amount of testimonial propositional knowledge can convey such information. Accordingly, a subject who has been introspectively acquainted with a certain experience differs epistemically from a subject who has not. Therefore, introspective knowledge by acquaintance has an epistemic significance that is not reducible to possession of propositional knowledge.

It may be objected that although no piece of *testimony-acquired* propositional knowledge can even out the asymmetry, *some* piece of propositional knowledge can: propositional knowledge which requires acquaintance for its formation. The idea is that where propositional knowledge causally based on testimony failed, propositional knowledge causally based on acquaintance will succeed. If this is right, then the *causal* view can provide an equally good or better explanation of the epistemic asymmetry captured in *Pain* than the constitutive view. On the causal view, acquaintance does not itself constitute knowledge: it just *enables* one to acquire some knowledge—knowledge by acquaintance—that cannot be acquired by testimony, but is still propositional (not *sui generis*). The remainder of this section will be devoted to defending the constitutive view. My argument runs as follows:

(P1) For any phenomenal state  $\varphi$ , there is some knowledge about  $\varphi$  that can only be acquired by being introspectively acquainted with  $\varphi$  (it cannot be acquired by testimony).

(P2) If (P1), then this is explained either by the causal view or by the constitutive view.

(P3) The constitutive view provides a better explanation of (P1) than the causal view.

Therefore, by inference to the best explanation:

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<sup>21</sup> The information that  $s$  is  $G$  is *nested* in  $s$ 's being  $F$  iff  $s$ 's being  $F$  carries the information that  $s$  is  $G$  (Dretske 1981: 71).

<sup>22</sup> See Giustina (2019) for a more thorough discussion of information acquisition in introspective acquaintance.

(C) (There are good reasons to think that) the constitutive view is true.

Here I am going to take (P2) for granted: the causal view and the constitutive view are, as noted, the only available understandings of knowledge by acquaintance (see our discussion of the two possible readings of “by”). The real question is how plausible (P1) and (P3) are.

Against (P1), it may be objected that a subject *S* *could* indeed get a grasp of a certain phenomenal property  $\varphi$  with which she has never been acquainted, if she were only provided with the *right* pieces of propositional knowledge. If you, who (suppose) have been acquainted with  $\varphi$ , described it to *S* by highlighting the differences and similarities between  $\varphi$  and other experiences she has had, she would be able to narrow in on  $\varphi$  and thereby know it. For instance, you could tell her that  $\varphi$  is unpleasant, but different from pain; it has something in common with itch, but it is not quite an itch—for one thing, it does not pull you to scratch; it is somewhat similar to tickle, but it is not a tickle sensation either, and so on. If you tell *S* enough about how  $\varphi$  resembles and differs from other phenomenal properties, the objection goes, *S* will ultimately come to know  $\varphi$  itself even though she has not experienced it. Call this the *missing shade of blue* objection.

In response, we should distinguish two cases: one where (a) the possession of the right propositional knowledge enables *S* to *simulate* the experience, and then be acquainted with it, and one where (b) *all* *S* has is the relevant propositional knowledge. If (a), it is clear that part of the new knowledge *S* would acquire as a result of being given the right propositional knowledge would be knowledge by acquaintance, i.e., knowledge she gets by being directly aware of  $\varphi$ . If (b), then although—of course—there is a sense in which *S* knows  $\varphi$  better than before upon being told what it resembles and what it differs from, such additional knowledge does not exhaust what she would know if she herself *had* the experience—if she were *acquainted with it*. Although knowledge about differences and similarities between  $\varphi$  and other phenomenal properties *S* has had may help her get a *better* grasp of  $\varphi$ , it will not help her get a *full* grasp of  $\varphi$ —information about the way having  $\varphi$  feels, subjectively (“what it is like” to be in  $\varphi$ ), will still be missing. For all *S* can get by testimony from you is a *description* of  $\varphi$ . No matter how sophisticated your phenomenal vocabulary may be, unless *S* has already encountered  $\varphi$ , or unless your description enables *S* to *simulate*  $\varphi$  by interpolation plus imagination, the description of  $\varphi$  you can communicate to *S* will never be fine-grained enough to convey the information about *what it is like*, subjectively, to *experience*  $\varphi$ : for *S* to get such information, she needs to *have*—and thereby be acquainted with— $\varphi$ .

The objector may insist that, even if, in fact, you are unable to convey to *S* a full grasp of  $\varphi$ , you *could* at least in principle. The idea is that if there are some propositions about  $\varphi$  which *S* cannot come to know by testimony, this is simply because you are not able to *express* them. If you *were* able to express the relevant proposition(s), the objection goes, *S* would have full knowledge of  $\varphi$ .

However, the point here is really not about proposition *expressibility*.<sup>23</sup> Consider again your conversation with the person who has never felt physical pain. Even if we granted that knowledge by acquaintance is just a matter of propositional knowledge, and that the relevant propositions can

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<sup>23</sup> My reflection on this point benefitted from discussion with Luca Gasparri.

be put in words, the pain-deprived person could not yet entertain the propositions conveyed by your utterances about pain sensations, because they lack the right *concepts*, possession of which would enable them to understand what you are talking about. More specifically, the pain-deprived person lacks the *phenomenal concepts* associated with pain experiences (phenomenal concepts such as PAIN, UNPLEASANTNESS, DISCOMFORT, and so on), possession of which would enable them to understand or grasp the propositions you are trying to convey. Arguably, there *is* in fact something about pain sensations that that person *can* come to know by simple testimony, for example that pain sensations are typically provoked by bodily damage (burning, cutting, bumping, etc.), or that they typically cause people to behave in certain ways (crying, screaming, complaining, etc.). Arguably, the pain-deprived person can come to know all these facts independently of *having* any pain experience because coming to know these facts only requires deployment of *non-phenomenal* concepts (in particular, it does not require the deployment of any phenomenal concept associated with pain phenomenology). Accordingly, we may distinguish between the *phenomenal* concept PAIN<sub>e</sub>, associated with the *phenomenology* of pain sensations, and the *non-phenomenal* (functional) concept PAIN<sub>f</sub>, associated with pain sensations' functional role. The formation of both kinds of concept requires *acquiring information* about what they are associated with, but in the case of non-phenomenal concepts, one can acquire such information independently of one's being introspectively acquainted with any experience (e.g., by testimony), while to acquire the information involved in a *phenomenal* concept, i.e. information about the phenomenology of one's experience, one needs to *have* the relevant experience and be introspectively *acquainted* with it (which, arguably, implies devoting a certain amount of *attention* to the experience). Accordingly, the pain-deprived person *cannot* possess (hence deploy) the phenomenal concept PAIN<sub>e</sub>, and therefore cannot entertain the relevant proposition. The issue is not the *expressibility* of a proposition entertained, but the 'entertainability' of that proposition.

The following objection may be raised.<sup>24</sup> Plausibly, after having been acquainted with a pain sensation, one possesses the phenomenal concept PAIN<sub>e</sub>, and knows what pain sensations are like, even when one is not experiencing pain—by *remembering* what pain feels like. Now, an evil demon might instill a non-veridical apparent memory of pain into the pain-deprived person's mind, which would endow her with PAIN<sub>e</sub>. Accordingly, the objection goes, the pain-deprived person would come to know what pain feels like without ever having been acquainted with any pain sensation. However, if the apparent memory is to convey the information that is needed to form PAIN<sub>e</sub> (i.e., information about the *phenomenology* of pain sensations) then it must somehow involve *replication* of pain phenomenology; introspective acquaintance with the memory experience (and thereby with its pain phenomenology) would still be needed to form the relevant concept.

This concludes my defense of (P1): there is some knowledge about phenomenal states that cannot be acquired by testimony—it can only be acquired by being introspectively acquainted with them.

Against (P3), defenders of the causal view argue that, however, such knowledge need not be *sui generis*. Rather, it is just a new piece of good old-fashioned propositional knowledge—that  $\varphi$

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<sup>24</sup> I owe it to an anonymous referee.

is *so-and-so*, where *so-and-so* is a property one can only attribute to  $\varphi$  if one is acquainted with  $\varphi$ . True, this is a somewhat *special* piece of propositional knowledge (one can only know that  $\varphi$  is *so-and-so* if one is acquainted with  $\varphi$ ), but it is still propositional—and thereby not special in kind.

This line of thought may be spelled out in terms of what Chalmers (2003) calls ‘direct phenomenal concepts’: phenomenal concepts that are formed *upon* attending to the experience they are associated with, which experience partly constitutes their content. Direct phenomenal concepts, being constituted in part by the experiences they pick out, cannot be possessed *prior to* the act of introspective acquaintance directed at them, but are still deployed *during* the act of introspective acquaintance. The objector may argue that knowing  $\varphi$  by introspective acquaintance implies entertaining a propositional content involving a direct phenomenal concept, which is formed upon being introspectively acquainted with  $\varphi$ . The exact structure of such a propositional content may be accounted for in different ways. One view is that the content is ‘this is so-and-so’, i.e., a proposition featuring a pure demonstrative (THIS) and a direct phenomenal concept (SO-AND-SO).<sup>25</sup> On another view, the proposition is something like ‘so-and-so is occurring’, where SO-AND-SO is a direct phenomenal concept referring to the experience which is introspectively attended to. The idea would thus be that knowledge by introspective acquaintance is special propositional knowledge whose content is the proposition ‘this is so-and-so’ or ‘so-and-so is occurring’ (or something along these lines, as long as it involves a direct phenomenal concept). It requires acquaintance for its formation—it is *enabled* or *produced* by acquaintance—but, crucially, it is not *constituted* by acquaintance.

The objection then is that introspective acquaintance, though an enabler of knowledge, is not itself knowledge. To assess this objection, we need to pinpoint what is fundamentally responsible for the epistemic asymmetry we are trying to explain, the one between S, who has never had  $\varphi$  (and a fortiori has never been acquainted with  $\varphi$ ) and you, who have. I will argue that introspective acquaintance itself, rather than any propositional knowledge it might enable, explains the asymmetry. Since the asymmetry is *epistemic*, introspective acquaintance is a form of introspective *knowledge*. The idea is that introspective knowledge by acquaintance is what most fundamentally fills the epistemic gap brought out in the asymmetry.

To be sure, if it is assumed that, by definition, all knowledge is propositional, then the claim that introspective acquaintance, by itself, constitutes knowledge is a non-starter. Regardless of the terminological issue, however, the fundamental claim I want to make is the following: introspective acquaintance, by itself—that is, independently of its enabling acquisition of propositional knowledge via direct phenomenal concepts—is *epistemically significant*—constitutes an epistemic gain. This, on my view (and, arguably, on Russell’s, as well as on that of the contemporary defenders of *sui generis* knowledge by acquaintance cited in §2), is sufficient to call it “knowledge.” Those who think that it is not can still abstract away from the terminological dispute and focus on the substance of my fundamental claim.

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<sup>25</sup> A *pure demonstrative* is a demonstrative with no descriptive component. Whereas a *descriptive* demonstrative, besides demonstration, uses a description to pick out its reference (e.g., “that *dog*”), a *pure* demonstrative picks out its reference only via demonstration (e.g., “this”).

First, consider: assuming that there is special propositional knowledge involving direct phenomenal concepts (*direct phenomenal knowledge* for short), what is exactly the role played by introspective acquaintance in acquiring it? As noted, introspective acquaintance enables the acquisition of such knowledge via enabling the formation of the relevant direct phenomenal concept. Arguably, it does so by providing the subject with (analog) information about the experience’s phenomenology, information that is *personal-level available* to the subject and thereby poised to constitute the content of the direct phenomenal concept. *Personal-level available* information is information that is available to the *person as a whole*—rather than merely to one or more of its subsystems (sub-personal states and processes)—for *conscious* and *deliberate* cognizing, reasoning, and action-guiding. Acquisition of information that is personal-level available in this sense constitutes a *cognitive achievement* and is thereby epistemically significant. Now, introspective acquaintance with the experience is *prior* to the formation of the direct phenomenal concept because it is that in virtue of which the concept gets its content. However, it seems that acquiring (and having personal-level access to) information about the phenomenology of the relevant experience is itself what, at bottom, fills the epistemic gap. What you have and S lacks is information about what it is like to have  $\varphi$  and this is what S can get simply by being introspectively acquainted with  $\varphi$ . By using such information, she can *also*, perhaps, form a direct phenomenal concept and thereby acquire direct phenomenal (propositional) knowledge about  $\varphi$ . But this is not what, most fundamentally, evens out the epistemic asymmetry between you and her. Simply coming to be acquainted with  $\varphi$  itself fills the epistemic gap between you and S. S does not need *in addition* to grasp a proposition that incorporates a concept acquired through this acquaintance.<sup>26</sup>

An objector may argue that, rather than by *using* information about a phenomenal state acquired via introspective acquaintance, a direct phenomenal concept is formed by directly “harnessing” one’s introspective acquaintance with the state.<sup>27</sup> The idea would be that such acquaintance gets directly incorporated into the concept itself, as a constitutive aspect: it is incorporated into a singular phenomenal concept of the state, qua token; and it is incorporated into a predicative phenomenal concept of the state, qua type. Accordingly, the relevant knowledge by acquaintance would be constituted by a proposition of the kind “This [the token state] is like THIS [the state-type].” Such knowledge is propositional in nature, though entertaining the relevant propositional content involves actually deploying one’s acquaintance with the relevant phenomenal state.

The objector’s account, however, is still in need of an *explanation* of what it takes for introspective acquaintance to *constitute* a direct phenomenal concept. Absent such an explanation, what it means for introspective acquaintance to be “harnessed” by a concept remains somewhat mysterious. On the account I propose, what explains this is that *the information acquired via introspective acquaintance* constitutes the *content* of the relevant phenomenal concept: such information is “taken

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<sup>26</sup> It may be that, even when S becomes acquainted with  $\varphi$ , there remains an epistemic asymmetry between you and S, say, because you have reflected about  $\varphi$  more than S has. Still, *ceteris paribus* with respect to cognitive capacities and background knowledge, introspective acquaintance with  $\varphi$  obliterates the asymmetry in what you and S can *possibly* know about  $\varphi$ : once she becomes introspectively acquainted with  $\varphi$ , by reflecting more about  $\varphi$ , S can get the same amount of knowledge about it as you have.

<sup>27</sup> I owe this objection to an anonymous referee.

up” by the concept and gets to constitute its content. My account thus explains and thereby demystifies the constitutional relation between introspective acquaintance and direct phenomenal concept. Information acquired via introspective acquaintance may be incorporated both into a singular concept and into a predicative concept, thereby allowing for the propositional content “This [the token state] is like THIS [the state-type],” as proposed by the objector. However, the formation of such a propositional content is dependent on information being *first* acquired via introspective acquaintance.

The same point may be made from a slightly different angle. Imagine a community of phenomenally conscious creatures who can introspectively attend to their experiences but whose cognitive architecture is such that they cannot entertain any structured-propositional content—and thereby cannot have propositional knowledge.<sup>28</sup> For any two such creatures, X and Y, and phenomenal state  $\varphi$ , if X has had  $\varphi$  (and introspectively attended to it) but Y has not, then there is an epistemic asymmetry between X and Y which is akin to the epistemic asymmetry between you and S in the example above: there is something X knows which Y does not, i.e., what it is like to be in  $\varphi$ . However, what is responsible for the epistemic asymmetry between X and Y cannot be propositional knowledge because, by hypothesis, neither can have it. Plausibly, then, it must be some kind of *non-propositional* epistemic standing. On my view, what X has and Y lacks is introspective knowledge by acquaintance, which knowledge is *constituted* by introspective acquaintance with  $\varphi$ .

It may be objected that there would be very little genuinely epistemic to the mental lives of creatures who cannot entertain any structured-propositional content.<sup>29</sup> However, first, *very little* is still more than *nothing!* Second, and more substantially, if we take distance from the idea that entertaining a structured-propositional content is necessary to epistemic significance, there may indeed be *quite a bit* genuinely epistemic—not just *very little*—to the mental life of those creatures. Compare the phenomenally conscious creatures above with *zombie* creatures whose cognitive architecture lacks any structured-propositional content. Intuitively, there seems to be an epistemic difference between the two kinds of creature: the former have conscious information about phenomenology; the latter do not. If so, the former do have some genuine epistemic standing—an epistemic standing that is *not* propositional knowledge.

I conclude that the constitutive view provides the best explanation of cases of epistemic asymmetry of the kind presented above. This gives us a very good *prima facie*, defeasible reason to think that there is *sui generis* (introspective) knowledge by acquaintance. Could this defeasible reason be defeated? In the next section, I consider two objections against the claim that knowledge by acquaintance is *sui generis*: the *objection from disunity* and the *objection from mysteriousness*.

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<sup>28</sup> An argument along these lines was suggested to me by Uriah Kriegel.

<sup>29</sup> I owe this objection to an anonymous referee.

## 5. Knowledge by acquaintance is *sui generis*: rebutting *disunity* and *mysteriousness*

### 5.1. The objection from *disunity*

It may be urged that there are independent theoretical reasons for believing that knowledge by acquaintance must be reducible to propositional knowledge. For one thing, it may be argued, other things being equal, we should favor a *unified* account of knowledge over an account according to which knowledge is a disjunctive notion that may refer to different kinds of thing. The objection is that taking knowledge by acquaintance to be *sui generis* implies a *disunified* account of knowledge, one on which knowledge is unnecessarily treated as a disjunctive notion.

My response is twofold. *First*, and most importantly, I tried to show in §4 that positing a distinct kind of knowledge—knowledge by acquaintance—besides propositional knowledge is *not* unnecessary or superfluous, for it constitutes the *best explanation* of some epistemic facts about our relationship with our own experiences. If knowledge by acquaintance were just a kind of propositional knowledge, it would be hard to explain why the very occurrence of introspective acquaintance, regardless of whether it enables knowing (or even entertaining) any proposition, would obliterate the epistemic asymmetry between a person previously not acquainted with a certain phenomenal state and a person acquainted with it.

*Second*, an epistemological view widespread enough to be considered the “received” view entails that the notion of knowledge is *already* disunified (in the sense specified by the objection), hence is disunified independently of whether knowledge by acquaintance reduces to propositional knowledge or not. The relevant epistemological view is that *knowledge-how* is a *sui generis* kind of knowledge. To be sure, as noted in §3, the received view about knowledge-how has been challenged, most notably by Stanley and Williamson (2001). However, Stanley and Williamson’s stance is heterodox and minoritarian. It has been criticized, among others, by Rumfitt (2003) Cath (2011), Brown (2013), Carter and Pritchard (2015), and Carter and Navarro (2017). Arguably, the strongest objection is from looming circularity (Koethe 2002). According to Stanley and Williamson, *S* knows how to  $\alpha$  just in case *S* knows, of some way *w*, that *w* is for *S* a way to  $\alpha$ . Yet, suppose you are watching me playing *Suzanne* on the guitar. You can demonstratively refer to the way I play the song and thereby come to know that *that* is a way for you to play *Suzanne*. To avoid the result that you thereby come to know how to play the song, Stanley and Williamson introduce what they call “practical modes of presentation:” *S* knows how to  $\alpha$  just in case *S* knows, of some way *w*, that *w* is a way for *S* to  $\alpha$  and *S* thinks of *w* under a practical mode of presentation, where “[t]hinking of a way under a practical mode of presentation [...] entails the possession of certain complex dispositions.” (Stanley and Williamson 2001: 429). It is unclear, however, that the notion of practical mode of presentation can be understood independently of the notion of knowing how to instantiate *w* (Koethe 2002: 326-27).

Besides, it is perhaps not fully obvious that a reductive account would be genuinely more unified than the non-reductive account. On the reductive account, knowledge-how and knowledge-by-acquaintance are *special* kinds of propositional knowledge: the former involves practical modes of presentation, the latter direct phenomenal concepts (which can only be formed upon being acquainted with the relevant experience—see §4). They are two categorically distinct



kinds of propositional knowledge, irreducible to any other. Knowing an experience by acquaintance has nothing to do with knowing ways under practical modes of presentation, and knowing that  $w$  is a way for one to  $\alpha$  has nothing to do with being acquainted with any experience (a zombie might very well know how to play *Suzanne* on the guitar). Furthermore, neither knowledge-how nor knowledge-by-acquaintance reduces to ordinary propositional knowledge, for each requires something *on top of* justified true belief (plus anti-Gettier condition): the former requires that the belief deploy a practical mode of presentation, the latter that it deploy acquaintance-based concepts. The reductive view, therefore, itself implies an account of propositional knowledge which is, to a certain extent, itself *disunified*: one on which propositional knowledge is a disjunctive notion which may refer either to ordinary propositional knowledge, to knowledge-how, or to knowledge-by-acquaintance. On this view, knowledge-how and knowledge-by-acquaintance are species of the genus *propositional knowledge* (they are both kinds of propositional knowledge), but they are not reducible to *mere* propositional knowledge. It is unobvious that this is more unified than the view that *knowledge*, rather than *propositional knowledge*, is disunified. The reductive view may save the unity of knowledge, but on pain of committing to the disunity of propositional knowledge. Moreover, the non-reductive view (according to which knowledge-how and knowledge-by-acquaintance are *sui generis* kinds of knowledge) allows for there being a notion of *knowledge* such that, although irreducible to one another, propositional knowledge, knowledge-how and knowledge by acquaintance are distinct species of one and the same kind—i.e., *knowledge*. Thus, both views posit one genus with three species, the only disagreement being whether the relevant genus is propositional knowledge or knowledge more generically understood.

It may be objected that, still, an account whereby all  $x$ s are reducible to  $y$ s is more unified than an account whereby  $x$ s and  $y$ s belong to distinct *sui generis* categories. The fact that the  $y$ s may be divided into several sub-groupings does not impugn the account's unity. Therefore, the fact that at least two sub-groupings of propositional knowledge may be identified (knowledge-how and knowledge-by-acquaintance) does not make the reductive account of knowledge less unified. However, on the reductive account of knowledge, knowledge-by-acquaintance and knowledge-how are not mere sub-groups of propositional knowledge: there are fundamental differences between them. They are irreducible to each other and neither is reducible to *mere* justified true (Gettier-proof) belief.

Those who find the non-reductive view unconvincing could still at least agree on the following. If there is a difference in unity between the reductive and the non-reductive account, it is a difference in *degree*, rather than on/off. The reductive model is perhaps more unified than the non-reductive model, but the latter is not utterly disunified. For, as noted, propositional knowledge, knowledge-how, and knowledge by acquaintance can still be considered species of one and the same genus, *knowledge*.

At any rate, as noted, the main response to the objection from disunity is that, even if the non-reductive account is less unified than the reductive account, this would be a little cost compared to its greater explanatory advantage.

## 5.2. The objection from mysteriousness

The second objection is from *mysteriousness*. The objection may be articulated in two distinct worries. The first is that the notion of *acquaintance*, qua metaphysically direct relation, is mysterious. The idea is that, differently from the more familiar relation of causation, the metaphysically direct relation of acquaintance seems recalcitrant to naturalization, hence it is suspicious. However, for one thing, literature does feature some attempts to naturalize acquaintance (Balog 2012; Coleman 2019). Moreover, and more relevantly here, since this worry is directed to the very *existence* of the acquaintance relation, if it constitutes a problem, it does for *all* views that rely on the existence of acquaintance (qua metaphysically direct relation), not only for the view that knowledge by acquaintance is *sui generis*. Both the constitutive view and the causal view of introspective knowledge by acquaintance rely on the existence of such a metaphysically direct relation, so if the naturalization worry threatens the former, it equally threatens the latter. To be sure, in light of this worry, our thesis should be reframed as the conditional: if there is introspective acquaintance, then it constitutes a *sui generis* kind of knowledge—knowledge by acquaintance.

The second worry, more relevant because it specifically addresses the constitutive view of knowledge by acquaintance, is the following. With other putative *sui generis* kinds of knowledge, some potential analyses in terms of more basic elements are available. A non-reductive account does not analyze them in terms of more basic kinds of *knowledge*, but typically it does analyze them in terms of *some* more basic notions. Propositional knowledge, for instance, may be analyzable in terms of (Gettier-proof) justified true belief; knowledge-how, as we saw, may be analyzable in terms of abilities.<sup>30</sup> *Sui generis* knowledge by acquaintance is different: it does not seem to be analyzable. Therefore, it cannot be explained in terms of more basic elements. Its primitivity makes it mysterious and this renders suspicious its existence as a *sui generis* kind of knowledge, since all other *sui generis* kinds of knowledge *can* be analyzed in terms of something else.

Two kinds of response are possible. First, the unanalyzability of a kind of knowledge is not in general sufficient for believing that nothing substantial or interesting can be said about it (Raleigh 2019: 13). In Williamson's knowledge-first epistemology, for instance, propositional knowledge is treated as unanalyzable. Yet his theory aims to provide an interesting and substantial account of propositional knowledge.

My preferred response, however, is that introspective knowledge by acquaintance *can* be analyzed. One knows a phenomenal state  $\varphi$  by acquaintance iff one bears a relation of introspective acquaintance, i.e., *attentive direct awareness*, to  $\varphi$  (where the awareness is both epistemically and metaphysically direct in the sense described in §2). Having attentive direct awareness of  $\varphi$  is thus both necessary and sufficient for one to know  $\varphi$  by acquaintance.<sup>31</sup> Accordingly, at least two components can be distinguished in knowledge by acquaintance: *attention* and *direct awareness*.

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<sup>30</sup> I am clearly oversimplifying: the literatures on the analysis of propositional knowledge and knowledge-how are so huge that it makes no sense to summarize them here. The important point is simply that multiple potential analyses are available.

<sup>31</sup> Whether *non-attentive* direct awareness could be sufficient for knowledge by acquaintance is an interesting issue that unfortunately I do not have the space to address here. For some reflections on this see Duncan (2018) and Giustina (2019).

Arguably, the more attentional resources are devoted to a phenomenal state in introspective acquaintance, the larger amount of information about its phenomenology is acquired, for introspecting a phenomenal state more attentively implies having access to more determinate phenomenal properties.<sup>32</sup> If so, attention has a *normative* role in knowledge by acquaintance, and thereby works as the analog of *justification* in propositional knowledge: as a belief *ought to* be formed *justifiedly* in order for it to constitute propositional knowledge, direct awareness *ought to* occur *attentively*, in order for it to constitute knowledge by acquaintance.<sup>33</sup>

It could still be objected that the notion of *direct awareness* is itself unanalyzable, mysterious, and thereby problematic. However, considerable efforts have been made to explain what direct awareness is and to specify the metaphysical structure of the mental state that constitutes being acquainted with a phenomenal state. Brie Gertler (2001), for instance, proposes the following account: one is directly aware of one's current phenomenal state token  $\varphi$  iff one has an occurrent mental token  $\iota$  which is such that: (i)  $\varphi$  is *embedded* in  $\iota$  (i.e.,  $\iota$  cannot be present if  $\varphi$  is not also present and  $\varphi$  can be present even if  $\iota$  is not present); (ii)  $\iota$  *refers* to  $\varphi$ ; and (iii) it is the case that (ii) because it is the case that (i). On Gertler's view, then, the relationship of acquaintance is analyzed in terms of the more basic notions of *embedding* and *reference*. On Katalin Balog's (2012) *quotational* account, one is directly aware of one's current phenomenal state token  $\varphi$  iff one is in a phenomenal state  $\iota$  such that (i) the neural states that realize  $\iota$  are the same neural states that realize  $\varphi$ ; (ii)  $\iota$  refers to  $\varphi$ ; and (iii) it is the case that (ii) partly because it is the case that (i).<sup>34</sup> Here direct awareness is analyzed in terms of *identity of neural realizers* and *reference*.

Thus, analyses of direct awareness *are* available—and new ones may be developed.<sup>35</sup> Since introspective knowledge by acquaintance is analyzed in terms of attention and direct awareness, we thereby have several options for analyzing it. Therefore, no special mysteriousness attaches to introspective knowledge by acquaintance.

## 6. Conclusion

I have tried to show that there are good reasons for thinking that introspective knowledge by acquaintance is a *sui generis* kind of knowledge, irreducible to propositional knowledge. The main motivation for this is that the constitutive view (the view that introspective knowledge by acquaintance is *constituted* by the relation of introspective acquaintance and is thereby *sui generis* and irreducible to propositional knowledge) is the best explanation of the epistemic asymmetry between a person who has been acquainted with a certain phenomenal state  $\varphi$  and a person who

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<sup>32</sup> On the connection between attention and access to more determinate properties see Nanay (2010). On the connection between attention and information acquisition see, e.g., Campbell (2002) and Smithies (2011).

<sup>33</sup> This is admittedly sketchy and speculative. Unfortunately, I do not have the space here to draw a more complete analysis of introspective knowledge by acquaintance, which is, in fact, topic of further work.

<sup>34</sup> I am admittedly stretching a bit Balog's view. However, what I outline in the main text is a legitimate potential analysis of acquaintance—an analysis in terms of identity of neural realizers and reference. This is all that matters for my present purpose.

<sup>35</sup> I suggest an alternative analysis in Giustina (2021).

has never been acquainted with  $\varphi$ , which asymmetry neither can nor needs to be evened out by any piece of propositional knowledge.

What does it matter if knowledge by acquaintance is a *sui generis* kind of knowledge? First of all, as I pointed out, the idea that knowledge by acquaintance is *sui generis* is minoritarian and unorthodox, especially in the literature on introspection. Swimming against this tide, I believe that the Russellian thesis deserves deeper attention and should be taken more seriously within debates around introspection and self-knowledge.

Contemplating the idea that knowledge by acquaintance could be considered a full-fledged kind of knowledge may also help shed light on the concept of knowledge itself. Most of the debate on the nature of knowledge has focused on reductive analyses of *propositional* knowledge. Although exploring alternative analyses of propositional knowledge is undoubtedly valuable and useful for a better grasp of what knowledge may involve, it is not obvious that an account of propositional knowledge would ultimately tell us what *knowledge is*. For it may be that not all knowledge is *propositional* knowledge. Our epistemic relationship to reality may outstrip our propositional knowledge. If so, a reductive analysis of propositional knowledge would not exhaust the more general concept of knowledge. A more general and comprehensive account would be needed, perhaps one on which *knowledge* is a genus of which propositional knowledge, knowledge-how, and knowledge by acquaintance are species.

Besides its ‘instrumental’ (if you will) interest for the broader epistemological debate about the concept of knowledge, knowledge by acquaintance is also of epistemological interest in itself. For example, the following issues would deserve to be explored: how should knowledge by acquaintance be analyzed? Can the relationship of acquaintance constitute knowledge by itself, or may further conditions apply? For instance, what is, exactly, the role of *attention* in knowledge by acquaintance’s epistemic significance? Does introspective knowledge by acquaintance have special epistemic properties (e.g., incorrigibility)? Does knowledge by acquaintance also occur through direct perceptual awareness, direct intuitive awareness, or any other forms of awareness? These questions are interesting in their own right, but the deflationary approach I have argued against has encouraged a somewhat dismissive stance toward them. If I am right, however, this is a mistake: these questions speak directly the nature of knowledge.<sup>36</sup>

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<sup>36</sup> This work was supported by the French National Research Agency’s grants ANR-10-IDEX-0001-02 PSL and ANR-17-EURE-0017 FrontCog. For extensive and thorough comments to previous drafts, and for helping me develop this paper’s ideas, I am infinitely grateful to Uriah Kriegel. I am also grateful to Matt Duncan, Andrew Lee, François Récanati, and Charles Siewert for their comments on a previous draft, and to two anonymous referees for *Synthese*. This paper has benefitted from being presented at the Columbia University *Graduate Workshop*, at the *21st Annual CUNY Graduate Philosophy Conference*, at the IUSS *NeTS* epistemology and philosophy of mind seminar in Pavia, at *The 13th SIFA conference ‘Philosophical Perspectives’* in Novara, at the *Knowledge and Science* seminar in Hamburg, and at the *6th Diaphora workshop: Self-Knowledge* in Paris. I am grateful to the audiences there and particularly to Alberto Barbieri, Silvia Bianchi, Michel Croce, Michele di Francesco, Katalin Farkas, Manuel García-Carpintero, Marie Guillot, Matthew Heeney, Yarran Hominh, Ethan Jacobs, Matt Jope, Ben Koons, Uriah Kriegel, Thomas Kroedel, Yifan Li, Jorge Morales, Devin Morse, Michael Murez, Peter Pagin, Michele Palmira, David Papineau, Giulia Piredda, Nicolas Porot, Andrew Richmond, Andrea Sereni, Sergiu Spatan, Alfredo Tomasetta, and Helen Zhao.

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