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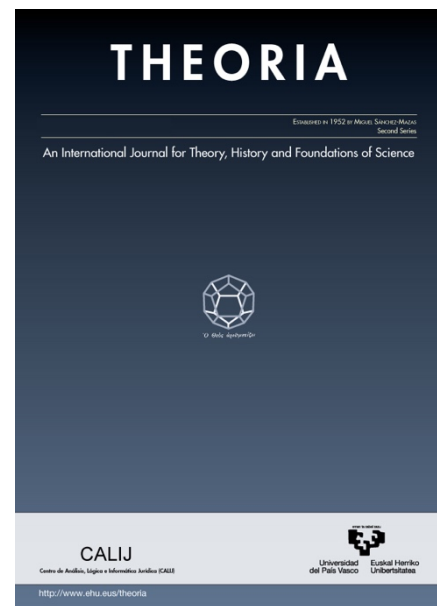
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Carlota Serrahima

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SELF-CONSCIOUSNESS, Ψ AND Φ

(*Autoconsciencia, ψ y φ*)

Carlota Serrahima*

University of Valencia

<https://orcid.org/0000-0001-9525-6508>

ABSTRACT: This paper contributes to, and underpins, the project of an integrative account of psychological and bodily self-consciousness. Following a trend in the literature that uses the notion of “ownership” to discuss self-consciousness, and adapting José Luis Bermúdez’s terminology, I refer to psychological self-consciousness as “ ψ -ownership” and to bodily self-consciousness as “ φ -ownership.” The paper has two main aims. First, it presents a methodological framework for the study of ψ - and φ -ownership based on the framework that Bermúdez has put forward for this purpose. My framework involves three desiderata that apply *mutatis mutandis* to both the ψ and the φ domains. By laying out this framework, I clarify the relationship between ownership and the epistemic phenomenon of immunity to error through misidentification (both in the ψ and the φ domains), and I highlight the appeal of the notion of a phenomenology of ψ - and φ -ownership. Hence, this methodological discussion helps disclose deep similarities between the very explananda of the inquiries into ψ - and φ -ownership. Second, the paper critically examines one aspect of Bermúdez’s approach to self-consciousness, namely his explanation of bodily immunity to error in view of his defense of the phenomenology of bodily ownership. In order to articulate this criticism, I leverage the conclusions of the first half of the paper about ownership and immunity. I suggest that, despite Bermúdez’s explicit advocacy for the integrative project, his strategy at this specific point prevents him from seeing this project to completion.

KEYWORDS: Self-consciousness, psychological ownership, bodily ownership, immunity to error through misidentification

RESUMEN: Este artículo respalda y contribuye a una explicación integradora de la autoconsciencia psicológica y corporal. Siguiendo una tendencia en la literatura que emplea la noción de “pertenencia” (*ownership*) para analizar la autoconsciencia —y adaptando la terminología de José Luis Bermúdez—, en este artículo me refiero a la autoconsciencia psicológica como “ ψ -pertenencia” y a la autoconsciencia corporal como “ φ -pertenencia”. El artículo tiene dos objetivos principales. En primer lugar, presenta un marco metodológico para el estudio de la ψ - y la φ -pertenencia, basado en el marco ya propuesto con anterioridad por Bermúdez. Mi marco incluye tres desiderata que se aplican *mutatis mutandis* a ambos dominios. Al exponer este marco, aclaro la relación entre esa noción de pertenencia y el fenómeno epistémico de la inmunidad al error por identificación errónea (tanto en el ámbito ψ como en el φ), y subrayo el atractivo de la postura según la cual existe una *fenomenología* de la ψ - y la φ -pertenencia. Esta discusión metodológica, por tanto, ayuda a revelar similitudes profundas entre

* **Correspondence to:** Carlota Serrahima. Departament de Filosofia, Facultat de Filosofia i Ciències de l’Educació, Universitat de València. Avinguda Blasco Ibáñez, 30, El Pla del Real, 46010, València, Spain – carlota.serrahima@uv.es – <https://orcid.org/0000-0001-9525-6508>

nuestros dos explananda (esto es, la autoconsciencia psicológica y la corporal). En segundo lugar, el artículo examina críticamente un aspecto del enfoque de Bermúdez sobre la autoconsciencia: su explicación de la inmunidad al error en el caso corporal, en vista de su defensa de la fenomenología de la φ -pertenencia. Para articular esta crítica, retomo las conclusiones de la primera parte del artículo sobre la relación entre pertenencia e inmunidad. Sostengo que, a pesar del apoyo explícito de Bermúdez al proyecto integrador, la estrategia que adopta en este punto específico le impide llevar dicho proyecto a su plena realización.

PALABRAS CLAVE: Autoconsciencia, pertenencia psicológica, pertenencia corporal, inmunidad al error por identificación errónea

Short summary. This paper contributes to an integrative account of psychological and bodily self-consciousness (respectively, “ ψ -ownership” and “ φ -ownership”). It presents, first, a framework for the study of ψ - and φ -ownership based on José Luis Bermúdez’s. Second, it critically examines one aspect of Bermúdez’s approach to self-consciousness, namely his explanation of bodily IEM, on the grounds that it undermines the integrative project.

1. Introduction: integrating ψ - and φ -ownership

In recent years, debates about self-consciousness in philosophy of mind have introduced the concept of ownership to help articulate otherwise traditional debates in this domain. Ownership talk has been found useful because, when subjects express self-consciousness, they often *self-attribute* certain entities widely taken to be essential to their nature as subjects: among such things, importantly, psychological states and properties on the one hand, and bodily states and properties on the other. Indeed, the shape that the debate on self-consciousness has traditionally taken is one in which we inquire into how subjects see themselves as bearers of psychological states and properties, and they also see themselves as embodied. José Luis Bermúdez (2018a) refers to these two sorts of ownership as *ψ -ownership* and *φ -ownership*, respectively. I assume his terminology in this essay.

Bermúdez is one of the voices in contemporary analytic philosophy of mind that has most clearly advocated for an integrative account of ψ - and φ -ownership. He has explicitly distanced himself from the tendency to make “[d]ebates about bodily ownership and psychological ownership [proceed] independently of each other” (ibid., p. 233), and he has strived to develop explanations in each domain that mesh well with explanations in the other. The overarching aim of this paper is to contribute to, and to underpin, the project of an integrative account of ψ - and φ -ownership. On the one hand, the paper presents a methodological framework for the study of both ψ - and φ -ownership that refines the framework that Bermúdez himself (ibid.) has put forward for this purpose. On the other hand, the paper discusses one aspect of Bermúdez’s approach to self-consciousness that, I suggest, actually prevents him from seeing the integrative project to completion.

Current discussions on ψ - and φ -ownership have often revolved around the question of whether there is a *sense* of ownership: respectively, a *sense* that the experiences that we have are our own; or a

sense that the body that we feel somatosensorily is our own.¹ But what *sense* means is rather unclear in this context. As it has been used, it sometimes points to some sort of *phenomenology*: respectively, a phenomenal mark that the mental states that we undergo are our own; or a phenomenal mark that the body that we feel is our own. Bermúdez, however, has rightfully pointed out that presenting the discussion on ownership as if it is *the phenomenology* of ownership that needs to be accounted for “seems unwise” (ibid., p. 237) —if only because it requires that participants in the debate take on, from the very outset, substantial commitments as to the existence of such phenomenological traits.

Another strategy for the study of ψ - and φ -ownership seems wiser. Even those who would rather not commit to the existence of a phenomenology of ownership will presumably agree that there is an interesting debate to be held around the fact that subjects often make *judgments* of ownership, both ψ - and φ -. Indeed, when subjects have conscious mental states or experiences, they typically report them by using the first-person pronoun “I” in the subject position, and attributing the mental state or experience to the subject. Examples of this are “I am sad” or “I am thinking about the storm” when declared on the grounds of the relevant experiences, namely, respectively, my feeling sad and my occurrent thought about the storm. In turn, when subjects feel sensations in a body, they typically report the sensations by using the first person pronoun “my” to refer to the body that they are feeling, thereby self-attributing it. This happens, for instance, in “my chin itches” or “my finger hurts” when declared, respectively, on the grounds of feeling the relevant sensations, namely an itch in the chin or a pain in the finger.²

A basic tenet of Bermúdez’s framework is that, when we inquire into ψ - and φ -ownership, it is *judgments* that need to be explained (respectively, judgments of ψ -ownership and judgments of φ -ownership, such as “I am sad” or “my chin itches”): judgments of ψ - and φ -ownership are our basic data. In this paper, I assume this tenet.

According to Bermúdez, the inquiry into ownership then consists in answering two questions, which apply to both types of judgments. On the one hand, a “descriptive-causal question about the source or origins of those judgments” (ibid.) —that is, a question about the mechanisms that underlie the production of the self-attributions, given the relevant grounds. On the other hand, “a normative question about the reasons for which those judgments are made” (ibid.) —a question about how judgments of ψ - and φ -ownership are justified by their respective grounds. Views on psychological

¹ Debates on bodily ownership in philosophy have essentially focused on somatosensation as grounds for judgments. Somatosensation includes pain, proprioception, kinaesthesia, interoception, sensations related to balance, tactile sensations, and feelings of bodily temperature. In this paper I too focus on bodily ownership in somatosensation. Throughout the paper, I use “bodily sensation,” “bodily experience” and “somatosensation” interchangeably.

² Alternative, natural expressions of what these two statements express would be “I can feel than my chin itches” and “I feel pain in my finger.” In these statements, the first-person concept is used, not only to refer to the subject of a body (part), but also to the subject of the sensations by which it is felt (through the italicised pronoun “I”). In other words, in judgments of φ -ownership, ψ -ownership is typically also present, even if sometimes only implicitly. I have argued in Serrahima (2024) that this is a very important feature of φ -ownership —one that speaks in favour of an integrative approach to ψ - and φ -ownership at that. Bermúdez (2018a, pp. 246–7) also appeals to the significance of this feature for the integrative approach. In this paper I want to provide other reasons in favour of the integrative approach, and hence I will leave this feature aside.

ownership are then views that address these questions for judgments in which subjects self-attribute psychological states and properties on experiential grounds; and views on bodily ownership are views that address these questions for judgments in which subjects self-attribute bodily states and properties on somatosensory grounds. In turn, an *integrative* approach to ψ - and φ -ownership strives to address these questions in each of the domains, while making sure that the answers in one domain mesh well with the answers in the other.

In **Section 2** of this paper, I take up the task of outlining the research agenda into ψ - and φ -ownership in a way that assumes, but also refines, Bermúdez’s normative and causal-descriptive questions. My agenda is based on the three desiderata for views on φ -ownership that I laid out in Serrahima (2023), and which I succinctly recount in 2.1. Those desiderata, I submit, can be extended *mutatis mutandis* to views on ψ -ownership (as I detail in 2.2). On the basis of these desiderata, I make various things explicit. First, how the landscapes of existing views on, respectively, ψ - and φ -ownership, map onto each other. Second, how answers to Bermúdez’s normative and causal-descriptive questions need to be constrained, both in the ψ and φ domains, by parallel philosophical intuitions on the one hand, and by structurally similar empirical cases on the other. And third, how discussions on ψ - and φ -ownership relate to discussions about the epistemic properties of judgments of ownership in both the ψ and φ domains; in particular, to immunity to error through misidentification.

Hence, although Section 2 puts forward an essentially methodological point, my point there is not *merely* methodological: the methodological discussion —i.e. the definition of desiderata for views on ψ - and φ -ownership— helps disclose deep similarities between the very explananda of the inquiries into ψ - and φ -ownership. When inquiring into ψ - and φ -ownership, we follow similar explanatory routes, guided by similar intuitions and empirical cases, simply because we are dealing with two aspects of the same phenomenon, i.e. how subjects experience and think of themselves as such. In this sense, my discussion in Section 2 contributes to reinforcing the integrative approach to ψ - and φ -ownership.

In **Section 3** I move on to discussing one aspect of Bermúdez’s treatment of self-consciousness specially developed in his “The Elusiveness Thesis, Immunity to Error through Misidentification, and Privileged Access” (2018b). As it turns out, Bermúdez’s views on the nature of ψ - and φ -ownership are significantly different: while he defends that there is, indeed, a *phenomenology* of bodily ownership in bodily sensations (Bermúdez 2018c, 2018d, 2018e, 2020), he advocates for the so-called “Elusiveness Thesis” in the psychological domain. In brief this is the thesis that, leaving aside bodily sensations, in conscious mental states “the self cannot be an object of introspective awareness” (Bermúdez, 2018b, p. 97).

Section 3 examines this difference in Bermúdez’s approach to ownership *vis à vis* his account of immunity to error through misidentification (IEM). IEM is an epistemic phenomenon that philosophers have identified both in the ψ and the φ domains: with some variations, psychological self-attributions on experiential grounds, and bodily self-attributions on somatosensory grounds, have both been found to be immune to error through misidentification. In his 2018b, Bermúdez offers an account of bodily IEM. He models this account on his view about psychological IEM, by proposing

what he calls a *simple theory* in both the ψ and the φ domains (even if his view about psychological IEM, as we will see, is based on the Elusiveness Thesis). I will argue that Bermúdez could, much more convincingly, resort directly to his own commitment to the phenomenology of bodily ownership in his explanation of bodily IEM, especially given the explanatory relationship between IEM and the phenomenology of ownership as will be disclosed in Section 2. Not doing so, I will suggest, has the undesirable consequence that the phenomenology of bodily ownership appears as an epiphenomenon, explanatorily and causally inert.³ I will conclude the paper with a tentative diagnosis of the source of Bermúdez’s strategy and a note on the prospects of the integrative project under the light of this diagnosis.

2. Senses of ownership

2.1 Explaining φ -ownership

I will start to lay out the agenda for an integrative approach to ownership by focusing, first, on φ -ownership. Consider judgments of φ -ownership, such as “my chin itches” or “my finger hurts,” in which one singles out a somatosensorily felt body (part) of which one judges that it is one’s own. Let us say that judgments of this sort express *awareness that the felt body is one’s own*.⁴ An interesting question now is what this awareness consists in: what does it mean, exactly, to be aware of the body that one is feeling *as one’s own*?

Two broad routes are explored on this count. The first says that all there is to this awareness is judgments of φ -ownership: bodily ownership is, so to speak, mainly a cognitive achievement, grounded on otherwise “self-less” bodily experiences (Alsmith, 2015; Chadha, 2018). The second route, in contrast, says that there is a phenomenology of bodily ownership, namely that being aware of the body as one’s own consists in *experiencing* the body as one’s own. As we noted above with Bermúdez, the phenomenology of bodily ownership clearly plays the role of an explanans here, rather than being an assumption to make at the very outset of the discussion.

Most authors writing about φ -ownership take the phenomenological route—including Bermúdez. Their debate then revolves around how the phenomenology of bodily ownership should be specified. Together with Martin (1995), Bermúdez (2018c, 2018d, 2018e, 2020) has argued that the

³ I am indebted to Aarón Álvarez-González for this formulation of the problem.

⁴ This *awareness that the felt body is one’s own* need not be factive. On the one hand, the body (part) in question may not exist, but subjects may *be aware of it as their own body (part)* in the relevant sense. This is often the case in phantom limb experiences. On the other hand, it is customary to assume that, in some science-fictional scenarios where one would be wired up to another body, one could be somatosensorily aware of a body (part) that does exist, but that is someone else’s. Here too, as these science-fictional scenarios go, one would *be aware of the relevant body (part) as one’s own* (Wright, 2012; de Vignemont, 2012; García-Carpintero, 2018. But Salje (2017) disputes the customary description of these science-fictional scenarios). I will briefly come back to this point in 2.3, in discussion of immunity to error through misidentification (see fn. 13).

phenomenology of bodily ownership consists in the peculiar spatial content, and the corresponding spatial phenomenology, of bodily experiences. Others have appealed to affective phenomenology (de Vignemont, 2018; Bradley, 2021); agential phenomenology (Gallese & Sinigaglia, 2010; Peacocke, 2017; Gallagher, 2019); the peculiar presentation of bodily properties when they are somatosensorily felt (Dokic, 2003; Serrahima, 2024); the character of bodily sensations as Husserlian double-sensations (Lotan, 2022); or an irreducible mineness quale (Billon, 2017).⁵

In any case, Bermúdez’s descriptive-causal and normative questions have warned us about a basic constraint one must bear in mind when opting for one route or the other. We ultimately need to explain why, in typical judgments about somatosensory states, one refers to the felt body first-personally. Hence, when inquiring into φ -ownership, we must see to characterise the contents and phenomenology of somatosensation, as well as the mechanisms by which one transitions from the sensations to the judgments, in a way that, on the one hand, makes it plausible that judgments with this specific structure are formed (as per the descriptive-causal question), and on the other hand, warrants the judgments (as per the normative question).

We can summarise this first part of our research agenda into φ -ownership in the following

Judgment Formation Goal (φ): accounts of φ -ownership need to explain judgments of bodily self-attribution made on somatosensory grounds. That is, they need to detail the mechanisms underlying the judgments’ production, including the contents and phenomenology of the sensations; and they need to explain how the grounds justify the judgments.

Our research agenda, however, does not end here. The inquiry into φ -ownership, as dictated by the Judgment Formation Goal, needs some tailoring to the specific character of the transitions that we are dealing with, namely those from somatosensations to judgments grounded on them. There is one intuition about these transitions that has been crucial in debates on φ -ownership: the intuition that there is a *uniquely compelling link* between actually having bodily sensations, and the fact that, when we judge on them, we describe the felt body as *mine*. On some occasions, this intuition has even brought authors to claim that the link in question is (perhaps conceptually) necessary: indeed, some have claimed that it is just impossible that one feels sensations in a body, and yet one does not feel this body as one’s own (Martin, 1995; Dokic, 2003; Bradley, 2021).

The role that this intuition of compellingness should play in the debate on φ -ownership is, I believe, an urgent matter of discussion in its own right.⁶ While the compellingness of the link has

⁵ Note that the question that gives structure to the debate (what does it mean, exactly, to be aware of the body that one is feeling *as one’s own*?) can in principle be replied by characterising the *contents* of bodily sensations in first-personal terms, but also by seeing the phenomenology of ownership as contributed by the *mode of awareness*. Besides, to the extent that the non-phenomenological route is feasible, the question could also be replied by relying on the mode of awareness, but without committing to the mode having a phenomenological impact on the experiences.

⁶ The considerations that I make in the rest of this subsection about the intuition of compellingness nuance those in Serrahima (2023), which, after reading Jeppsson (2025), seem to me to overstate the importance of the intuition.

been a decisive background assumption in discussions on bodily self-consciousness, it is the case that some subjects have experiences in which the link between the instantiation of bodily sensation, and reports thereof that self-attribute the body, is broken, or at the very least tenuous. De Vignemont (2013) brought the case of somatoparaphrenic patients to bear specifically on this issue. Somatoparaphrenic patients have delusional beliefs about the contralesional side of their bodies according to which it does not belong to them (Invernizzi et al., 2013). Yet, some of them are able to feel sensations in their “disowned” limbs. Furthermore, people who suffer from depersonalisation describe their experiences, for instance, as follows: “sometimes, I experience myself as much smaller; a little homunculus residing in the head of the full-sized body. I can still move it around with great mastery and ease, but I am now more comparable to an expert car driver or wheelchair user” (Jeppsson, 2025, p. 86). These kinds of bodily awareness do not neatly fit into the mould of full-blown ownership, and they call into question the intuition of compellingness.⁷

This dialectic shows that, when accounting for φ -ownership, we need to reach an equilibrium. On the one hand, we need to respond to what arguably lies behind the intuition of compellingness: that somatosensory experiences *typically* involve φ -ownership. In other words, that presumably for most subjects, most of the time, the body that they experience somatosensorily is presented to them as their own body. It might even be that, typically, the subjects who are prone to form judgments of φ -ownership when they have sensations, are prone to do so compellingly: this might explain why the alternative seems unconceivable to some, as often expressed in philosophical theorising. Note that, in this context, the notion of a phenomenology of bodily ownership has some plausibility. In general, one straightforward way to explain the formation of, and to justify, a subject’s belief that p , is by appeal to her experience that p . If a subject *experiences* the body as her own when she perceives it from the inside, then this explains and justifies the subject’s self-attributive judgments, and it constitutes a good explanation of their compellingness, since judging just involves taking experiences at face value.

However, on the other hand, views on φ -ownership also need to be empirically adequate. To the extent that the link between having a bodily sensation and self-attributing the felt body is not necessary, we must characterise bodily ownership in a way that makes it possible that bodily self-attributions be missing and the sensations still be there. This requirement is in place even if one subscribes to the thesis of a phenomenology of bodily ownership: it must be possible that the relevant phenomenal component be missing —i.e. the phenomenal component standing for bodily ownership— in some subjects’ bodily sensations.

The upshot is that our research agenda into φ -ownership needs to be guided by two further goals, which we can express succinctly thus:

⁷ Bradley (2021) objects to de Vignemont’s (2013) diagnosis about somatoparaphrenia and φ -ownership. He thematises specifically the intuition of compellingness, and he interprets somatoparaphrenia, as well as depersonalisation, as compatible with it. Jeppsson (2024), in turn, is critical with how philosophers interpret reports of psychopathological patients for their theoretical purposes, taking Bradley (2021) as a case in point.

Typicality Goal (φ): accounts of φ -ownership need to explain the fact that for most subjects, most of the time, bodily sensations yield judgments of bodily self-attribution.

Empirical Goal (φ): accounts of φ -ownership need to be compatible with reports of bodily sensation in which the subject does not self-attribute the felt body.

These two goals are auxiliary to the Judgment Formation Goal. With Bermúdez, we started claiming that judgments of φ -ownership are the basic data to be explained. In these judgments we express awareness that the felt body is our own; and we need to explain the nature of this awareness in a way that covers the causal-descriptive and normative aspects of judgment formation. The Typicality and Empirical Goals say that all of this needs to be extensionally adequate.

This concludes my agenda for the study of φ -ownership. This agenda covers Bermúdez’s normative and causal-descriptive questions, but it also fixes some constraints on their possible answers. I will now move on to showing that the agenda guiding the study of φ -ownership is also suitable to guide (and actually guides, *mutatis mutandis*) research on ψ -ownership.

2.2 Explaining ψ -ownership

When we discuss ψ -ownership, the relevant data to be explained are judgments in which subjects self-attribute phenomenally conscious experiences. To recall, examples of this would be, for instance, “I am sad” or “I am thinking about the storm” when judged on the grounds of, respectively, my feeling sad and my occurrent thought about the storm. Let us say that, when subjects make this kind of judgment, they express *awareness that the experiences they have are their own*.⁸ We can now wonder, as we did

⁸ The question whether the awareness expressed in self-attributions of experiences can be non-factive is more complicated than the question about the non-factivity of awareness in bodily self-attributions. In the bodily case, the non-factivity of the awareness could come, as it were, from two places (see fn. 4). On the one hand, from the inexistence of the self-attributed object, i.e. the body (part). Phantom limbs are an example of this. A parallel case in the psychological domain might be possible: it might be true that one can seem to have an experience E that one does not actually have, where these seeming experience E is taken to be one’s own (say: it seems to me that I have a pain in the collar bone, E, of which I think and talk about as *my* collar bone pain. But, as it turns out, I don’t have a pain in the collar bone, but what I actually have is a toothache). We may want to describe this situation as one in which one has non-factive awareness of E as one’s own: E doesn’t actually exist, but one is aware of it as existing and being one’s own. On the other hand, in the bodily case, the non-factivity of the awareness may also come from the ownership side: it is customary to assume that, in some science-fictional scenarios, subjects could be somatosensorily aware of someone else’s (existing) body as one’s own (Evans, 1982, p. 221); in which case one’s awareness of the body as one’s own would be non-factive because, even if the body in question exists, it would not be one’s own. It is unclear that we can have a case that parallels this in the psychological domain. This would be a case in which I am aware of a phenomenally conscious experience E *as my own*, and the non-factivity consists in that, although the experience in question does exist, *it is in fact not my own*. The reason why it is unclear that this can happen is that, when it comes to experiences, phenomenal access to them arguably implies that one is in fact their owner, at least in a minimal sense (Coliva, 2002). This is so even if, in some cases, one has phenomenal access to thoughts that one is not straightforwardly inclined to self-attribute. Reports of patients with thought-insertion question the idea that, given a phenomenally conscious thought, one necessarily has a *sense* that the thought is theirs. This has indeed brought theorists to refine the analysis of self-consciousness in conscious thought, paradigmatically by introducing a distinction

with φ -ownership, what this awareness consists in: what exactly is implied in *being aware of conscious experiences as one's own*. Our question now does not concern ownership over the body as is presented in a subclass of conscious experiences, as was the case when discussing φ -ownership. Rather, it is more general: we are concerned with ownership over conscious experiences themselves.

Broadly speaking, two routes can be followed on this count, which draw a taxonomy of views very similar to that of views on φ -ownership. The first is the route of those who believe that the first person that figures in judgments of ψ -ownership does not have a phenomenal counterpart at the level of conscious experiences themselves. Some authors within this trend present arguments to the effect that our explananda, i.e. judgments of ψ -ownership, simply do not require that we posit such phenomenal counterpart (Praetorius, 2009; Schear, 2009; McClelland, 2023; Salje & Geddes, 2023; Howell, 2023; Soldati, 2023; Wu, 2023; Kang, 2025). For others, Humean intuitions that the self is not introspectable, or relatedly, metaphysical claims about the nature of the non-introspectable self, also speak against the phenomenology of ψ -ownership (Dainton, 2008; Prinz, 2011; Siderits, 2011; Chadha, 2018). In particular, Bermúdez himself takes in the Humean intuition that the self cannot be introspected, hence subscribing to the so-called *Elusiveness Thesis* (meaning that the self is introspectively elusive). Bermúdez's version of the Elusiveness Thesis is based on Shoemaker's (1986). On Shoemaker's construal, in introspection we do not gather "information that allows [us] to pick out one object among a range of objects in virtue of its perceived properties" (Bermúdez, 2018b, p. 101)—more specifically, introspection does not involve picking out information whereby we individuate *ourselves* from other objects. I will come back to examining Bermúdez's commitment to the Elusiveness Thesis in the broader context of some of his other commitments about self-consciousness in Section 3 below.

Opposite to this approach to the nature of ψ -ownership are those who do advocate for a phenomenology of ψ -ownership. On their view, the awareness that conscious experiences are our own partly consists in *experiencing* that they are. Authors within this trend have worked on characterising the phenomenology of ψ -ownership, e.g. in terms of a first-personal "mode of givenness" of all conscious experiences (Zahavi, 2005; Fasching, 2009; Zahavi & Kriegel, 2015; Gallagher, 2015), in agentive terms (Duncan, 2019), in affective terms (Dub, 2023), or as a phenomenal mark jointly constituted by various phenomenal dimensions (Lane, 2012). Besides, this sort of position has often been defended by means of inferences to the best explanation, arguing that the best way to explain judgments of ψ -ownership and their features is by appealing to a phenomenology of ψ -ownership involved in their grounds (Grünbaum, 2012; Guillot, 2023; Nida-Rümelin, 2023).

between the sense of ownership and the sense of agency over thoughts, which then allows to say that the sense of agency, but not the sense of ownership, is impaired in thought insertion (Stephens & Graham, 2000; Campbell, 1999; Campbell, 2002). To be clear, this concerns the phenomenological and epistemic side of things. On the factual side, however, there is less discussion: thought-insertion does not call into question (or at least not so clearly) that the phenomenally accessed thoughts *are in fact the subject's own thoughts*, at least in the sense of being in the subject's "own head," even when it does not seem to the subject that they are (the experiences related in Jeppsson (2025), sections 3.2–3.5, for instance, appear to be in line with this). I will say a bit more about thought-insertion immediately in this section, when introducing the Empirical Goal (Ψ).

Indeed, the choice of one view or another regarding the nature of ψ -ownership must be informed by the view's capacity to respond to Bermúdez's questions, now applied to judgments of ψ -ownership. We need to explain why, in typical judgments about experiences, one self-ascribes the experiences, using "I" in the subject position: what it is about conscious experiences themselves, or about the mechanisms by which one transitions from the experiences to the judgments, that makes it the case that judgments with this specific structure are formed (as per the descriptive-causal question); and warrants the judgments (as per the normative question). In this sense, inferences to the best explanation in defence of the phenomenology of ψ -ownership rely on the fact that, if there is such phenomenology, then the phenomenology motivates and justifies the judgments, which subjects just form by taking their experiences at face value.

It should be clear at this point that, in a nutshell, the agenda into ψ -ownership is guided by a desideratum that is essentially a twin of our first desideratum about bodily ownership:

Judgment Formation Goal (ψ): accounts of ψ -ownership need to explain judgments of self-attribution of experiences made on phenomenal grounds. That is, they must describe the mechanisms underlying the judgments' production, including the contents and phenomenology of conscious experiences; and they need to explain how the grounds justify the judgments.

The agenda into ψ -ownership does not end here, and neither does the parallel with bodily ownership. When we approach psychological ownership, our inquiry is, in some fundamental way, different from just any inquiry into how and why subjects claim some object or other to be their own; and it is different from that, in the same sense in which the inquiry into bodily ownership is different from that. Here too, the discussion is very much shaped by an intuition of compellingness: the intuition that there is a *uniquely compelling link* between phenomenal states, and judgments in which we self-attribute such states.

Again, the role that this intuition of compellingness must play in our theorizing about ψ -ownership is an urgent matter of discussion in its own right. That the intuition itself has been present in, and indeed has shaped, discussions on ψ -ownership is hardly disputable. One prime historical example of the influence of this intuition is Descartes' first item of knowledge, specially in his *Meditations on First Philosophy* (1641/ 2008). After arriving at a certainty about the occurrence of one type of mental activity, namely thought, Descartes famously claims that the proposition "I am, I exist" is true (Med. 2, AT 7:25). From this first item of knowledge then follows a reasoning about the nature of the I "that now necessarily exists" (ibid.). Within the Cartesian framework, the claim "I am, I exist" rests on arguments about the need for a substance that bears the attributes we become aware of—in this case, thoughts (Bermúdez, 2018e, pp. 99–100). But this is not an explicit part of the reasoning at this point of the *Meditations*. In the *Meditations*, the dialectic strategy consists in walking the reader from intuitive opinions to indubitable principles, the first of which is "I am, I exist." The connection

between being phenomenally aware of mental states, and attributing the mental states to *me*, which is the precursor to his existence claim,⁹ is presented by Descartes as a natural step arguably relying on an intuition that he assumes will be shared by his readers.¹⁰

Despite the force of this intuition, however, we now know that views on ψ -ownership need to reach an equilibrium, just as happened with views on φ -ownership. On the one hand, they need to answer to what arguably underlies the intuition of compellingness: that undergoing phenomenally conscious experiences *typically* involves ψ -ownership. Most subjects, most of the time, feel compelled to self-attribute the experiences they live through; or, in other words, are aware that the experiences they live through are their own. On the other hand, however, views on ψ -ownership also need to be empirically adequate. As a matter of fact, the link between the occurrence of conscious experiences and the self-attribution of these experiences by their subject is not in place in all cases. As Campbell (1999; 2002) points out, thought insertion bears directly on the discussion on ψ -ownership. In thought insertion, subjects have experiences that are not straightforwardly presented to themselves as their own: they might claim that certain thoughts they are conscious of are not theirs, or that they are someone else's (see Frith, 1992). Hence, in the domain of ψ -ownership too, however we choose to explain the first person figuring in judgments of ownership, we need to appeal to something that still makes it possible that, at least in some cases, self-attributions be missing and the experiences still be there, even if maybe altered.

Two further desiderata for our research agenda into ψ -ownership capture this dialectic. They qualify the first desideratum, calling attention to the fact that our explanations of psychological self-attributions need to be extensionally adequate. In turn, these desiderata are parallel to the second and third desiderata for φ -ownership:

Typicality Goal (ψ): accounts of ψ -ownership need to explain the fact that for most subjects, most of the time, phenomenally conscious experiences yield self-attributions of these experiences.

Empirical Goal (ψ): accounts of ψ -ownership need to be compatible with reports of phenomenally conscious experiences in which the subject does not self-attribute the experiences.

⁹ The text of the *Meditations* reads thus: “[C]ertainly I did exist, if I convinced myself of something. —But there is some deceiver or other, supremely powerful and cunning, who is deliberately deceiving me all the time.— Beyond doubt then, I also exist, if he is deceiving me; and he can deceive me all he likes, but he will never bring it about that I should be nothing as long as *I think* I am something” (Med. 2, AT 7:25. The translation is from 1641/ 2008. The emphasis is mine). The “*I think*” italicised in this passage is the self-attributive precursor I am alluding to in the body of the text. This precursor is actually more explicit in Descartes’ *Discourse on the Method*, in which the formulation of the first item of knowledge is his famous “*I think, therefore I am.*”

¹⁰ Classical discussions of this move are Lichtenberg’s notes in his *Waste Books* (2012, p. 152) and Russell (1945).

In sum, throughout 2.1 and 2.2 I have outlined a research agenda into ψ - and φ -ownership that not only spells out Bermúdez’s normative and causal-descriptive questions, but also shows how research into both ψ - and φ -ownership has been guided by parallel intuitions, and must be sensitive to structurally similar cases that countervail the significance of these intuitions.

In the remainder of this section (2.3), I will focus on immunity to error through misidentification (IEM). I am particularly interested in a relatively high-level aspect of the discussion on IEM, and I will not engage in depth with the intricacies of any particular, ground-level view on the phenomenon. I am interested in the fact that the discussion on IEM is articulated, at least partly, around the intuitions of compellingness about ψ - and φ -ownership mentioned in the foregoing sections. This fact helps illuminate how ψ - and φ -ownership relate to IEM; and more specifically, it helps see why the notion of a phenomenology of ownership, both in the ψ and φ domains, is a *prima facie* good candidate to explain, respectively, psychological and bodily IEM. Relative to the overall objectives of the paper, the next subsection serves two purposes. First, it is the last piece of my not-merely-methodological point: it rounds up my case for the integrative approach to ψ - and φ -ownership, by pointing out that the parallelisms between the two domains extend to the epistemology of judgments of ownership. Second, it is an important building block for my critical comment on Bermúdez in the last part of the paper.

2.3. Explaining immunity

Shoemaker (1968) introduced the notion of immunity to error through misidentification in order to capture a specific kind of epistemic security of some of our singular judgments of the form “a is F.”¹¹ A judgment “a is F” is immune to error through misidentification (IEM) when it cannot be the case that the judgment is mistaken in the specific sense that the subject knows of *some* individual that they are F, but is wrong in predicating F of *the particular individual* picked out with “a.” Judgments that have this property are IEM relative to the use of “a.”

In this domain, one of the most discussed types of judgments is judgments in which one predicates something of oneself, namely judgments of the form “I am F.” Following the scheme just mentioned, a first-personal judgment “I am F” is IEM relative to “I” if it cannot be the case that the judgment is wrong because, although one *knows* that *someone* is F, one is mistaken in judging that the individual that one knows to be F is *oneself*.

What is most interesting about IEM is that it is a feature of judgments relative to their grounds. Consider the judgment “I am sad,” in which one predicates of oneself the psychological property of being sad; and suppose that one judges so on the grounds of having, phenomenologically, a feeling of sadness. In other words, consider the situation in which “I am sad” is a judgment of ψ -ownership—one made on the grounds of experiencing sadness, conveying awareness that the sadness is one’s

¹¹ Strictly speaking, Shoemaker talked about statements. Following the convention in the literature, I will talk about judgments, on the assumption that statements express judgments.

own. This judgment is IEM, on Shoemaker’s view: phenomenal awareness¹² of psychological properties is such that, if one judges on its grounds that one is F, then the judgment won’t be wrong in the specific sense that, indeed, someone is F, and one *knows* that someone is F, but one is wrong in believing that it is oneself who is F.

This implies a substantive claim about phenomenal awareness as a way of accessing psychological properties; in particular, a claim about phenomenal awareness relative to the epistemic status of the judgments it yields. For contrast this with a case in which one judges “I am sad” on different grounds: suppose, for instance, that I judge “I am sad,” not because I feel sadness, but because I see an individual that looks very much like me, and who indeed looks sad, in what I think is a mirror. I then conclude “I am sad” on the grounds of reflecting about what I think are my looks. Unlike phenomenal awareness, these grounds —i.e. reflection on someone’s looks— leave open the possibility that the judgment is mistaken through misidentification. For suppose that, unbeknownst to me, it is not a mirror I am looking at. Rather, I just saw my identical twin sister, who is indeed very sad, through a glass wall; and then I, who was otherwise happy, have mistaken her for my own reflection and have concluded that I am actually sad. In this situation, my judgment is wrong exactly in the sense that, although someone is indeed sad, it is not me who is sad.

After Shoemaker, Evans (1982) famously pointed out that IEM relative to the first person is not limited to self-attributions of psychological properties on phenomenal grounds. Rather, Evans argued, bodily self-attributions are also IEM *if made on somatosensory grounds*. To put it in our terms, Evans’ point is that judgments of φ -ownership, in which subjects use the first person to refer to the body they are feeling from the inside, are also IEM.¹³ For an example, take the judgment we would express as “My chin itches,” and suppose the subject judges so on the grounds of feeling an itch in the chin. In this situation, it is not possible that the subject knows that someone’s chin itches, but yet she is wrong in that the individual whose chin itches is in fact not herself. As Shoemaker’s view, Evans’ implies a substantive claim about grounds —somatosensory grounds in this case—, relative to the epistemic status of the judgments they yield: somatosensations are such that, if one accesses the body

¹² Or “introspection,” as participants in this discussion most often call it. I will use both terms interchangeably. I will also talk interchangeably about awareness and self-ascription of psychological properties, of psychological states, and of experiences.

¹³ As noted in fn. 4 (and also fn. 8), it is customary in the literature about bodily IEM to discuss cases in which subjects are wired up to someone else’s body that they feel is their own. On the grounds of these possible cases, it has been argued that bodily self-attributions on somatosensory grounds are only *de facto* IEM (Wright (2012, p. 272), de Vignemont (2012, p. 226), Guillot (2014, fn.7, 8 & 19), García-Carpintero (2018, pp. 19–20)): in these scenarios, the idea goes, the subject would know that some bodily property is instantiated, but she would be wrong that *she herself* instantiates it. But these scenarios are not usual in our world. In Serrahima (2025) I have discussed the *de facto* proviso on bodily IEM in comparison with psychological IEM, which is said to be logical. I have argued that this contrast has to do with differences in the metaphysics of bodily ownership *vis à vis* the metaphysics of psychological ownership. That discussion goes beyond the scope of the current paper. Here, the fact that intuitions about bodily IEM hold despite the possibility that bodily IEM be only *de facto* is grist for my mill. As I will suggest in this section, part of what lies behind IEM are the intuitions of compellingness about ownership. These intuitions are in place both in the psychological and bodily domains even if, in the bodily case, there may be worlds in which they do not track facts about ownership. The way I present IEM in the following paragraphs as “prescribing a condition on grounds” is essentially the same as in Serrahima (2025).

and its properties through them, and one judges e.g. “My chin itches,” then this judgment will not be wrong in the specific sense that someone’s chin itches but it is not mine.

The IEM feature of judgments of ψ - and φ -ownership thus point to a similarity between phenomenal awareness as grounds for judgments for ψ -ownership, and somatosensations as grounds for judgments of φ -ownership. One obvious similarity is that both capacities typically inform us about properties and states (psychological or bodily) that are *in fact* our own properties and states—which then makes it the case that, if we self-attribute these properties and states, we are typically not wrong. But this is not the similarity I am interested in here. The similarity I am interested in brings us back to the intuitions of compellingness highlighted in the previous subsections.

The IEM feature of judgments of ψ - and φ -ownership prescribes a condition on grounds, relative to the kind of knowledge they afford: if the subject knows on grounds G that someone has property F, then she *eo ipso* knows on the same grounds that she herself has property F. For the sake of clarity, let me spell out explicitly how this condition looks when applied, first, to phenomenal awareness and psychological properties:

If the subject knows on phenomenal grounds that someone has psychological property P, then she *eo ipso* knows on the same grounds that she herself has psychological property P.

And second, how the condition looks when applied to somatosensation and bodily properties:

If the subject knows on somatosensory grounds that someone has bodily property B, then she *eo ipso* knows on the same grounds that she herself has bodily property B.

What I want to highlight here is the importance of the “*eo ipso*” involved in (the two versions of) this condition. The interest of IEM as an epistemic phenomenon does not lie only on the factual side of things—i.e. on how my *knowledge* that the picked-up properties are mine depends on these properties actually being mine. The interest of IEM as an epistemic phenomenon also lies on how the link between picking out certain properties, psychological or bodily, on certain grounds, and being aware of these properties as my own, appears to be a very tight link. This is what the “*eo ipso*” above means: it highlights the unique compellingness of, on the one hand, taking psychological properties (or experiences) to be mine when I am aware of them phenomenally; and on the other hand, taking bodily properties to be mine when I pick them out somatosensorily. I contend that our epistemic intuitions about the IEM of judgments of ψ - and φ -ownership are driven by these intuitions of compellingness, and part of the point of the inquiry into the IEM of judgments of ψ - and φ -ownership is to figure out the extent to which this intuited compellingness makes a contribution to the privileged epistemic status of the judgments.

I believe that one possible way of seeing Shoemaker’s and Evans’ (otherwise diverse) approaches to IEM—respectively, psychological and bodily IEM—is as an implementation of this idea. On their

view, part of the explanation of IEM relative to the first person lies on the fact that certain uses of “I” *do not rest on an identification*, in the sense of a recognition, of oneself as the individual of whom one predicates the relevant property. According to Shoemaker, in introspection there is no gap between having information about the instantiation of a given psychological property, and it appearing to one that one is the subject of this property (Shoemaker, 1968, pp. 563-5). In this framework, this is constitutively linked to the Elusiveness Thesis (for encountering the self in introspection could only have the function of identifying the self as the owner of introspectable mental states, which is not required; Bermúdez, 2018b, p. 102). In turn, when it comes to bodily properties and somatosensory grounds, Evans writes that “for [one] to have, or appear to have, the information that the [bodily] property [F] is instantiated just is for it to appear to [one] that [one] is F” (1982, p. 221). That is to say, there is also no gap between being somatosensorily aware of the instantiation of a given bodily property, and being aware that one is the subject of this property. The no-identification route in these seminal approaches to IEM thus seems to articulate the intuitions of compellingness at the level of grounds—and to actually do so in the strongest way possible: it is not just that one compellingly self-attributes the properties picked out on certain grounds; it is rather that, whenever one picks out a given (psychological or bodily) property on the relevant grounds, one is *by the same token* aware of this property as one’s own property.

Unsurprisingly then, the empirical cases that question the tightness of the link between picking out properties and self-attributing them have been analysed in the literature as putative threats to the IEM thesis, both in the psy and phy domains.¹⁴ To recall, in thought insertion subjects have thoughts that are not presented to themselves straightforwardly as their own thoughts. In turn, patients with somatoparaphrenia deny ownership of bodily parts that they can feel somatosensorily. As explained in the previous subsections, these cases urge to nuance the intuitions that seem to have guided the debates: for most subjects, most of the time, given the grounds for the self-attributions, the self-attributions follow compellingly; but things are otherwise in thought insertion and somatoparaphrenia. These cases are more challenging to the IEM thesis, the more we find IEM to depend on the compellingness of the link between the awareness of properties on certain grounds, and the self-attribution of these properties.

Against this backdrop, we can now see two things about the relationship between the theoretical debates on ownership and immunity. The first is that explaining IEM partly relies on offering a view on ownership. More specifically, explaining psychological IEM partly relies on explaining the workings of ψ -ownership, and in particular the typical compellingness of judgments of ψ -ownership given conscious experiences; and in turn, explaining bodily IEM partly relies on explaining the workings of φ -ownership, and in particular the typical compellingness of judgments of φ -ownership given somatosensations. In this sense, the parallelisms between the ψ and φ domains extend from ownership

¹⁴ See e.g. Campbell (2002); Coliva (2002); Hu (2017); Palmira (2020) for discussion of thought insertion and ψ -IEM; and Liang & Lane (2009); Rosenthal (2010); Kang (2016); de Vignemont (2012) for discussion of somatoparaphrenia and φ -IEM.

to the epistemology of first-personal judgments. We can express this in a compressed way by slightly revising our Judgment Formation Goals, expressed jointly here:

Judgment Formation Goal (ψ & φ): accounts of ψ - and φ -ownership need to explain judgments of self-attribution (respectively, of experiences and of the body) made on the relevant grounds. That is, they must describe the mechanisms underlying the judgments' production, including the contents and phenomenology of the relevant experiences; and they need to explain how the experiences justify the judgments, as well as other epistemic features of the judgments such as IEM.

Hence, the capacity of any given view of ownership, ψ - or φ -, to contribute to explaining IEM, is abductive reason in its favor.

The second thing to note about the relationship between ownership and immunity is that, to the extent that the existence of a *phenomenology* of ownership (ψ - or φ -) constitutes a good explanation of ownership, then the existence of a phenomenology of ownership (ψ - or φ -) is a *prima facie* good candidate to explain IEM (respectively, psychological or bodily). As said above, if there is a phenomenology of ownership, then subjects arguably make self-attributive judgments just by taking their experiences at face value, and this easily explains why they do so compellingly.

Of course, the notion of a phenomenology of ownership will be more plausible if we can adduce independent reasons in its favour, beyond explanatory capacity. Importantly, in this sense, things are not equally straightforward in the ψ and the φ domains. As the taxonomy of views sketched above reflects, while it is relatively common to defend that there is a phenomenology of *bodily* ownership, it is more controversial to take the phenomenological route in the psychological domain. It is not difficult to see why. Indeed, it is quite uncontroversial that in somatosensation subjects perceive a particular object, the body, as physically bounded, delimited with respect to other physical objects (Bermúdez 2018c, 2018d, 2018e). We may then argue that subjects perceive this particular object first-personally. But for introspection in general, the Elusiveness Thesis is popular, according to which we do not even get to individuating ourselves in introspection.

José Luis Bermúdez is an author who takes opposite routes on that count. While he has extensively advocated for the phenomenology of bodily ownership (*ibid.*), he defends the Elusiveness Thesis in the psychological domain. In the upcoming Section 3, I will focus on Bermúdez's approach to bodily IEM. Despite taking the opposite routes just mentioned, Bermúdez seems inclined to model his explanation of bodily IEM on his account of psychological IEM, even if the latter is based on the Elusiveness Thesis. More specifically, Bermúdez shies away from resorting to the phenomenology of bodily ownership, which is readily available in his own framework, to explain bodily IEM. The risk of this move is that the phenomenology of bodily ownership then appears as causally and explanatorily idle, given the relationship between ownership and immunity as described in this section. I will close Section 3, and the paper, with a tentative diagnosis of the sources of Bermúdez's move, followed by

a note on certain theoretical choices we need to make if we want to fully honour the integrative project.

3. A Bermúdez-inspired commentary on Bermúdez

In his 2018b, Bermúdez offers a very insightful analysis of the relationship between the Elusiveness Thesis and IEM. Bermúdez highlights how the elusiveness of the self and the epistemic privilege of judgments of ψ -ownership may be “two sides of the same coin:” the epistemic privilege that we enjoy with respect to certain claims about our own psychological properties plausibly derives from the fact that our introspective self-awareness is awareness of a fundamentally different type than our awareness of other objects and people (ibid., p. 97). In particular, in the Shoemakerian framework that Bermúdez adopts, IEM derives from the fact, explained above, that we do not pick out the self in introspection, and hence that introspection does not involve an identification of oneself. Things being thus, Bermúdez notes, one should then explain the fact that there are other forms of self-awareness that are also epistemically privileged, but yet not introspective. One of these is, of course, bodily sensation. Bodily sensation does involve perception of ourselves, but it also offers us privileged, indeed IEM, information about the body. Bermúdez concludes that, in this case, IEM requires an explanation “in which the elusiveness thesis has no part to play” (ibid., p. 98). Here I want to focus precisely on how Bermúdez details this explanation. Although the Elusiveness Thesis has “no part to play” in it, Bermúdez borrows for this explanation some elements from his treatment of ψ -ownership and psychological IEM, in a way that, I contend, is not innocuous.

In discussion of ψ -ownership, once one subscribes to the Elusiveness Thesis, a fair question arises about how subjects actually make judgments of the form “I am ψ -ing” in the absence of any awareness, in experience, that they are *themselves* ψ -ing (Bermúdez, 2018b, p. 115). Bermúdez proposes that this transition results from the fact that subjects have “some level of mastery” of the link between being introspectively aware of a thought, and the fact that the thought is their own thought (ibid.).¹⁵ This is what he calls a *simple theory of introspection* (Bermúdez, 2018f). This mastery relies on the subjects’ *appreciation* of the actual connection between the psychological properties they are aware of, and the fact that they are instantiated by themselves (ibid., p. 92; 2018b, p. 115).

Note that the question just mentioned, concerning the transitions from experiences to judgments of the form “I am ψ -ing,” sums up the causal-descriptive and normative questions involved in our Judgment Formation Goal (ψ). The simple theory of introspection aims to respond to these questions. A preliminary point that I want to make here is that I don’t find the simple theory of introspection satisfactory. Subjects are supposed to master the existing link between the instantiation of the psychological property and the fact that it is their own property, because they *appreciate* this existing

¹⁵ Bermúdez notes that the link between a subject being introspectively aware of a thought, and the fact that the thought is in fact the subject’s own, is an *a priori* link (see also Peacocke, 1999), for reasons along the lines of those discussed in fn. 8.

link. But the notion of appreciation at stake here is evasive. It cannot mean that subjects are sensitive to the link in the sense that the link is somehow part of the phenomenology of their experiences — for this is in principle precluded by the Elusiveness Thesis. But still, the proposal that subjects appreciate the link should add something to the basic statement that, indeed, subjects respond to the link, finding the transition from their experiences to judgments of ψ -ownership compelling — for this is exactly what we aim at explaining. If the simple theory of introspection does not add something to this basic statement, it appears dangerously close to a redescription of our explanandum, and falls short of a causal explanation. It is unclear what the midway between these two undesirable options is.

Let us now turn to somatosensation. As mentioned, it is central to Bermúdez’s argumentation that the Elusiveness Thesis does not apply to somatosensation, for we do perceive ourselves by perceiving the body. Furthermore, in normal circumstances, the properties one feels from the inside are properties of one’s own body, and in this sense we can talk about an existing *link* between being aware of a bodily property in bodily sensation, and this property being a property of one’s own body.¹⁶ Because this link exists in normal circumstances, Bermúdez suggests, it is then plausible to defend a *simple theory of somatosensation*. To be clear, this is a theory about how subjects predicate of themselves the bodily properties they perceive: in particular, a theory partly modelled on the simple theory of introspection. According to the simple theory of somatosensation, then, subjects presumably have *some level of mastery* of the link between feeling a body and the fact that the felt body is theirs, because they *appreciate* this existing link.

It is however surprising that, at this particular point in his theorising, Bermúdez resorts to the simple theory, which in its original formulation for introspection relied on a notion of appreciation that, I have argued, is evasive. Bermúdez admits that “[o]ne would expect this simple theory [of somatosensation] to be more complicated than that implicated in ordinary psychological introspection, given the ... role of [somatosensation] in underwriting an awareness of one’s body as a bounded physical object uniquely responsive to the will” (2018b, p. 116). Indeed, in several of his writings Bermúdez has developed a detailed view about the peculiar spatial contents of bodily sensations: in bodily sensations, bodily properties are experienced within a bounded, body-shaped volume; and they are suitably connected to one another, as nodes of a network of further bodily locations.¹⁷ Besides, he has argued, these spatial contents have an impact on the phenomenology of somatosensation: there is a *phenomenology* of bodily ownership consisting precisely in spatial phenomenology (Bermúdez, 2018d).

What is then surprising is that, once we have this picture of the content and phenomenology of bodily sensations, which Bermúdez motivates independently, we have the tools available for more than just a “more complicated,” yet “simple” theory of somatosensation. I have argued above that, if there

¹⁶ In the somatosensory case, the link between being aware of (bodily) properties, and the properties being properties of one’s own body, is only a *de facto* link, for the reasons discussed throughout fns. 4, 8, and 13.

¹⁷ For various formulations and elaborations of these ideas, see e.g. Bermúdez (1998), Bermúdez (2018c), Bermúdez (2018d), Bermúdez (2018e), and Bermúdez (2020).

is a phenomenology of bodily ownership, then this constitutes a very good explanation of how subjects make judgments of φ -ownership compellingly, as well as a *prima facie* good explanation of bodily IEM. Bermúdez admits that there is such phenomenology. But if there is such phenomenology, and we confer to it its due explanatory and causal role, then the mechanism involved in judgment formation is unambiguous: the subject just takes her bodily experiences at face value given their phenomenology. This is a kind of theory quite different from the simple theory of introspection — and a better kind of theory for that matter.

It could be said that I am picking up on a merely verbal issue here: the proposal might be that, in introspection, subjects *appreciate* the link between (ψ) properties and themselves in one way; and in somatosensation, they *appreciate* the link between (φ) properties and themselves in another way, i.e. phenomenologically. I think the issue is significant, however. If there is a phenomenology of φ -ownership, but this phenomenology is not clearly embraced as an explanatory touchstone with respect to judgments of φ -ownership and bodily IEM, then it is explanatorily and causally idle; and resorting to the notion of a *simple theory* of somatosensation can indeed be read as shying away from clearly conceding a fundamental explanatory role to the phenomenology. Populating mental ontology with phenomenal ingredients that have explanatory potential but which do not actually explain what they could explain is to that extent unsatisfactory.

It is quite possible that Bermúdez can readily respond to the worry just expressed. However, I still think that it is fruitful to reflect on the possible reasons for the apparent disconnect, in his framework, between the phenomenology of bodily ownership and the explanation of bodily IEM. My speculation is this. Suppose one has found the Elusiveness Thesis convincing, and linked to the explanation of the IEM of judgments of ψ -ownership in terms of the absence of a recognition of the subject, as Bermúdez does. Then, one might feel a tension in accepting the exact opposite idea for φ -ownership: namely, that somatosensation involves a phenomenology of φ -ownership, and that this helps explain the IEM of judgments of φ -ownership in terms of the absence of a recognition of the subject. By accepting the latter idea, one would be simultaneously defending the elusiveness of the self, and first-person phenomenology, as accounting for the same phenomenon, *mutatis mutandis*, in different domains. These two explanatory routes are in principle not jointly incoherent, but they are in tension. This tension is specially pressing if we take into account the broader project we started with, namely that of explaining ψ - and φ -ownership integratively.

In the last sections of his 2018b, Bermúdez gives some further details about his understanding of the integrative project. He offers reasons to think that ψ - and φ -ownership are interdependent, and he suggests that the common thread running between them ultimately has to do with practical reasoning, since practical reasoning is reasoning about what one can do as an embodied subject, in which thought deliverances are constrained by the body's structure.¹⁸ However, the integrative project we aspired to is not satisfied solely by pointing to how ψ - and φ -ownership are closely interlinked, nor

¹⁸ See also Bermúdez (2020) for a development of this idea.

by identifying one paradigmatic area of interaction between them (such as practical reasoning). As uncovered throughout the paper, our integrative ambitions concerned causal-descriptive and normative aspects of the relationship between experiences and judgments of ψ - and φ -ownership, and the possibility of structural commonalities between ψ - and φ -ownership at the explanatory level. At this point we should wonder whether fulfilling these ambitions is really compatible with defending both that there is a phenomenology of bodily ownership, and that the self is elusive in introspection; and we should be ready to evaluate which one of these two commitments it would be less costly to drop.¹⁹

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¹⁹ I myself have defended that there is a phenomenology of bodily ownership and lean towards dropping the Elusiveness Thesis in introspection, but developing this is a matter for another paper.

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CARLOTA SERRAHIMA is a teaching and research fellow ('professora ajudant doctora') at the Department of Philosophy of the Faculty of Philosophy and Sciences of Education at the University of Valencia. Her main research interests involve issues related to the philosophy of mind and phenomenology.

ADDRESS: Departament de Filosofia, Facultat de Filosofia i Ciències de l'Educació, Universitat de València. Avinguda Blasco Ibáñez, 30, El Pla del Real, 46010, València, Spain — carlota.serrahima@uv.es—<https://orcid.org/0000-0001-9525-6508>