The Functional and Embodied Nature of Pre-reflective Self-consciousness

Klaus Gärtner* kgartner@fc.ul.pt

ABSTRACT

Being conscious or experiencing the world with all its vivid qualities is something humans intimately cherish. The fact that consciousness provides us with a lively phenomenology is what makes life worth living. Yet, when it comes to understanding how consciousness fits into the natural world, we feel deeply puzzled. In this context, one important claim about consciousness consists in the idea that our awareness is not only about the world but also reveals an intimate subjectivity. This aspect of phenomenal consciousness is often referred to as pre-reflective self-consciousness. It is frequently held that this type of self-awareness is intrinsic and essential to any form of conscious experience, i.e. there is no conscious experience without also being implicitly self-conscious. Being of such importance to the nature of consciousness, the recent literature mainly discusses two ways of accounting for pre-reflective self-consciousness, its role for conscious experience and how it fits into the natural world. On the one hand, there are relational views; on the other hand, there are non-relational accounts. This paper will argue that both approaches are not sustainable as they stand, since either important aspects are lost or not sufficiently embedded in the natural world. Consequently, I will argue for an alternative that allows for both a functional and an embodied nature of pre-reflective self-consciousness.

Introduction

Being conscious or experiencing the world with all its vivid qualities is something that we, as humans, intimately cherish. The fact that consciousness provides us with a lively phenomenology is arguably what makes life worth living. Yet when it comes to understanding how consciousness fits into the natural

ISSN: 1972-1293

^{*} Departamento de História e Filosofia das Ciências, Faculdade de Ciências da Universidade de Lisboa; Centro de Filosofia das Ciências da Universidade de Lisboa, Portugal.

world, we feel deeply puzzled. In this context, one important claim about consciousness consists in the idea that our awareness¹ is not only about the world but also reveals an intimate subjectivity. This aspect of phenomenal consciousness is often referred to as pre-reflective self-consciousness.²

In recent years, we have seen many discussions about pre-reflective self-consciousness within the context of the philosophy of mind and psychology. These include debates about the origins of consciousness, the nature of the self and the constitution of mental disturbances such as schizophrenia. Characterizations of pre-reflective self-consciousness include, for instance: a sense of 'mine-ness', i.e. a sense of 'owning' an experience; or a sense of 'for-me-ness', i.e. being implicitly aware of myself, or an awareness of the experience itself (Guillot 2017). Most importantly, many argue that pre-reflective self-consciousness constitutes the most fundamental part of experience, i.e. it is the root of consciousness itself (Gallagher and Zahavi 2015; Gärtner 2018; Kriegel 2009a, b; Parnas and Sass 2011; Sass and Parnas 2003; Zahayi 1999, 2005. 2014; Zahavi and Kriegel 2015).3 According to Gallagher and Zahavi "(phenomenal) consciousness [...] entails a (minimal) form of self-consciousness. [...] [Ulnless a mental process is pre-reflectively self-conscious there will be nothing it is like to undergo the process, and it therefore cannot be a phenomenally conscious process" (Gallagher and Zahavi 2015, §1). I agree with this claim and I think naturalizing phenomenal consciousness means naturalizing pre-reflective self-consciousness. This is the main goal of this paper.

In order to naturalize pre-reflective self-consciousness this paper will dispute the two main contemporary approaches of spelling out the nature of pre-reflective self-consciousness. Further, it will introduce an alternative proposal

¹ I will use the terms consciousness and awareness as being synonymous.

² In the literature there are many ways in which subjectivity or the subjective character is characterized. For a detailed discussion on the issue see Guillot 2017. Usually, pre-reflective self-consciousness is primarily used in the phenomenological tradition. However, I will commit to the term "pre-reflective self-consciousness" here because, in my view, it is this kind of minimal, non-conceptual self-awareness that makes a mental state conscious to begin with. I want to thank an anonymous reviewer for pointing this out.

³ This claim is controversial. Many authors believe that pre-reflective self-consciousness is not special at all. For instance, Thomas Metzinger (2020) has recently argued that minimal phenomenal experiences (MPE) are a form of pure consciousness which entail "no self-location in time, no self-location in space, no quality of agency (either mental or bodily), no localized unit of identification (UI), i.e., MPE itself is not even characterized by MPS, the minimal phenomenal sense of selfhood;" (Metzinger 2020, pp. 10-11) Further critics include Block, 2002; Dainton 2008, 2016; Guillot 2017; Howell and Thompson 2017; Lane 2012.

that can account for this kind of self-consciousness and its place in nature more adequately. On the one hand, we have relational approaches to pre-reflective self-consciousness. Those views include higher-order or same-order theories, but also at least one acquaintance alternative. These theories usually conceptualise pre-reflective self-awareness in terms of being aware of experience itself. On the other hand, there are non-relational approaches characterizing this kind of self-awareness as being intrinsic to consciousness. Here pre-reflective self-consciousness mostly emphasizes the idea that experiences are tied to an intimate subjectivity. In my view, both approaches are seriously flawed. Relational views are apt to naturalize pre-reflective self-consciousness but ignore the phenomenology of subjectivity. Non-relational views explicitly consider this phenomenology, but cannot account for self-consciousness's place in nature. This seems hardly satisfactory. I will therefore propose a different way forward, namely by defending a hybrid position that assumes both a functional and an embodied nature of pre-reflective self-consciousness.

To do so, I will first briefly describe what the intended target of naturalization is. In the literature, pre-reflective self-consciousness has many different interpretations (Guillot 2017); however, to be essential to – or better the root of – consciousness, it needs to be characterized in a specific way: first, pre-reflective self-consciousness is an awareness of the experience itself and, secondly, it is presented to us in first-person mode of givenness.

In section 2, I will introduce the main ideas of relational accounts of pre-reflective self-consciousness and criticize their assumptions. In section 2.1 I will lay out what characterizes higher-order and same-order theories of pre-reflective self-consciousness and argue that both approaches may explain how pre-reflective self-consciousness – characterized as being aware of experience itself – fits into the natural world. However, these theories face serious trouble in explaining pre-reflective self-consciousness and, hence, consciousness. As an alternative solution, in section 2.2, I will consider a proposal based on acquaintance. I will show that despite faring better in accounting for pre-reflective self-consciousness, acquaintance has trouble in explaining naturalization.

In section 3, I will turn to non-relational ideas about pre-reflective self-consciousness. I will start by introducing the main intuitions, often discussed in phenomenology, about pre-reflective self-consciousness. Here pre-reflective self-awareness is commonly supplemented with a subjective first-person mode of givenness under which an experience is presented. This notion of pre-reflective self-consciousness seems phenomenologically more promising. However,

in the phenomenological tradition, this view entails the idea of being intrinsic to experience, an implication that is usually not properly clarified. At this juncture, I will articulate a few remarks about the notion of intrinsicness and prepare the ground for its much needed substitution.

Section 4 will engage with the relation between pre-reflective self-consciousness and phenomenal qualities in more detail. In my view, this is important because it opens up the possibility for a new interpretation of the nature of pre-reflective self-consciousness, allowing its naturalization. Consequently, I will argue in favour of an alternative view that is taking phenomenology very seriously, and is additionally in the position to provide a much needed explanation for the nature of pre-reflective self-consciousness and its place in nature.

In section 5, I will characterize in more detail what this alternative view consists in. I will argue that this approach is, on the one hand, functional and hence relational and, on the other hand, embodied and therefore non-relational. I will then show that pre-reflective self-consciousness is partially characterized by its functional (relational) role in our mental economy and partially instantiated by the body or embodied (non-relational).

Finally, I will conclude by briefly laying out how my approach substitutes the phenomenological view's mysterious claim that pre-reflective self-consciousness is intrinsic to conscious experience and why this constitutes the essential step to naturalizing pre-reflective self-consciousness.

1. Pre-reflective Self-Consciousness, or what is there to naturalize?

Before laying out the arguments, a preliminary clarification is in order. Since there are many different notions of pre-reflective self-consciousness available in the literature, I briefly want to argue how it should be understood here. It is largely accepted that consciousness – apart from being aware of the world – entails an awareness of the experience itself (Brentano 1874/1973; Goldman, 1970; Guillot 2017; Husserl 1984; Kriegel 2009a, b; Zahavi 1999). According to Guillot, "[i]t is extremely hard to imagine a case where this wouldn't be true; and it might be a conceptual truth, our main handle on the notion of phenomenal awareness consisting in spelling it out in terms of "there being something it is like *for me*" to have an experience." (Guillot 2017, p. 46) This idea entails, *prima facie*, no concept of a self and no reference to it. This is neither the case epistemically, i.e. we are not aware of the self by having experiences;

nor phenomenally, i.e. our access to self is not phenomenal in kind; and neither metaphysically, i.e. our experience of the self does not establish the existence of a self (Guillot 2017). Any metaphysical claim about the self has to be argued for separately, without solely relying on pre-reflective self-consciousness.

We will see that this may not be enough. It is true that we would go a long way in naturalizing consciousness if we were able to explain pre-reflective self-consciousness as an awareness of experience itself. It has, however, been pointed out that conscious experiences are had by subjects (Gärtner 2018; Duncan 2018; Husserl 1984; Merleau-Ponty 1962; Nagel 1974; Parnas and Sass 2011; Sartre 1943/1976; Sass and Parnas 2003; Schlicht 2018; Zahavi 2005, 2014). This means, phenomenal conscious experiences entail a subjective point of view, they are not floating around freely in space. Guillot (2017) thinks that the major problem here is that many supporters⁴ of this line of thought assume that pre-reflective self-consciousness somehow gives rise to the epistemic, phenomenal, and metaphysical dimension of the self concept. The reason, or so she argues, is that proponents conflate the various notions of prereflective self-consciousness. I think she has a point, but it is not necessary to defend Guillot's argument in the case of all three dimensions. Indeed, to account for subjectivity, we do neither need to postulate the epistemic nor the metaphysical dimension. Above all, we definitely do not have to assume a metaphysically independent self entity (Schlicht 2018). For my purposes, it is only necessary to assume that the phenomenal dimension, i.e. "being conscious of an experience in its first-personal mode of givenness" (Zahavi 2005, p. 106) is a viable or, better, solid position. To argue for this view, consider Metzinger's no-self account (2011), a view that is least of all interested in a self. Metzinger agrees with Guillot (2017) that pre-reflective self-consciousness does not amount to any kind of core or minimal self. For him, the reason is that there is a difference between metaphysical and phenomenal necessity. 5 This means that, from the fact that we are, phenomenologically speaking, not capable to imagine possible worlds where selves do not exist but conscious experiences do, it does not follow that they are metaphysically necessary. According to him, this is the case because, though we are not able to grasp the idea that it could be possible that no selves exist, the first-personal mode of givenness is still possible. This fact, however, is contingent. Just because our neuro-structural organization amounts to

⁴ Guillot mentions Zahavi (2005) explicitly.

⁵ Guillot's argument (2017) of conflating the epistemic, phenomenal and metaphysical dimensions of pre-reflective self-awareness takes a similar stance.

the phenomenological necessity of postulating a self, we cannot infer any metaphysical necessity for its existence. I agree with this argument and I think this is enough to establish that pre-reflective self-consciousness entails subjectivity. This idea amounts to an experiential subjective phenomenal dimension of experience – i.e. a first-personal mode of givenness (Zahavi 2005) or an EGO-mode (Metzinger 2011) – that grounds the necessity for experiences to be subjective without suggesting a self as such. In what follows, therefore, I will consider these two aspects of pre-reflective self-consciousness: a) awareness of the experience itself; and b) first-personal mode of givenness. I will defend that to naturalize consciousness, it is necessary to naturalize pre-reflective self-consciousness in both senses.

2. Relational Accounts of Pre-reflective Self-consciousness

As related in the introduction, in the philosophy of mind, it has often been claimed that pre-reflective self-consciousness is essential to the nature of any conscious experience. This claim is not novel and, moreover, is not only found in the phenomenological tradition. In the contemporary, analytic discussion, the notion of pre-reflective self-consciousness was discussed since the early seventies. For instance, Alvin Goldman (1970) characterizes pre-reflective or non-reflective self-awareness in the following way: "In the process of thinking about *x* there is already an implicit awareness that one is thinking about *x*. There is no need for reflection here, for taking a step back from thinking about *x* in order to examine it. [...] When we are thinking about *x*, the mind is focused on *x*, not on our *thinking* about *x*. Nevertheless, the process of thinking about *x* carries with it a non-reflective self-awareness." (Goldman 1970, p. 96). The main claim here is that by being aware of something, we are simultaneously aware of the fact that we are aware, i.e. phenomenal consciousness entails pre-reflective self-consciousness as an awareness of the experience itself.

2.1. Representational accounts

More recently, this idea has found its way into relational accounts of pre-reflective self-consciousness which constitute the dominant strain in the analytic tradition of philosophy. At the heart of these relational views are usually representational theories. Fre-reflective self-consciousness consists in some form of

⁶ However, as we will see, there is, at least, one alternative.

representation. This idea is important, since representationalism is a significant proposal for the naturalization of consciousness in general (Dretske 1995, Lycan 1998, Tye 1995, 2009). There are two dominating sub-categories of relational accounts, namely higher-order representational theories (HOR) - such as higher-order thought theory (HOT) (Carruthers 2000; Rosenthal 2005) or higher-order perception theory (HOP) (Lycan 1996, 2004) – and same-order theories (SOT) (Brentano 1874/1973) which are often spelled out in terms of self-representationalism (Kriegel 2009a, b, 2012; Levine 2006; Williford 2006). There are two main differences between those two types of representational theories. First, higher-order theories postulate higher-order mental states (which represent first-order mental states) in order to exhibit consciousness in general and self-consciousness in particular. Secondly, same-order accounts claim that a mental state possesses self-consciousness when it represents itself. Hence, there are no higher order states involved. To put this idea differently, consider Levine's very precise depiction of the difference between self-representationalism and HOR: "[...] what is special about the kind of [self-]representation involved in being aware of one's sensory states is that it is that very state that is representing itself, not a distinct state as in standard versions of higherorder theory." (Levine 2006, p. 178)

SOTs and HORs usually assume that experiences entail phenomenal or sensory qualities – or 'what it is like' qualities – and a subjective quality – or 'for-me-ness'. Further both theories canonically claim that the subject is *aware of* those qualities. The essential difference between SOTs and HOTs is how these views describe the underlying phenomenal reality. For instance, consider the case of an experience of red. By having a conscious experience of red, we experience the quality of something being red - or redness – and in addition we are aware of this experience itself. Usually, higher-order theories claim that both components are experiential objects of consciousness. Same-order accounts – and in particular self-representationalism – hold that a mental state is phenomenally conscious not only in virtue of representing the representational qualities determined by the experiential objects, but also by representing itself. It is exactly this latter self-representation that accounts for pre-reflective self-consciousness. So, while higher-order theories claim that there are two separate mental states involved to account for self-awareness, same-order accounts hold

⁷I mean 'for-me-ness' in the sense of Guillot (2017), i.e. as awareness of the experience itself.

that it is only one mental state that represents the object of experience and, simultaneously, itself.

Both models have attracted much criticism. In the case of HOR, most of the trouble stems from the fact that it deals with consciousness as an explicit extrinsic or relational feature. Any kind of consciousness – and this includes pre-reflective self-consciousness – can only be instantiated by the fact that there is a higher-order mental state representing a first-order mental state. Only when this kind of representational relation occurs, consciousness – or for our purposes pre-reflective self-consciousness - arises. Even though Goldman's (1970) description of non-reflective self-awareness allows for such a higher-order relation to explain the way in which pre-reflective self-consciousness manifests itself, this description may be phenomenologically inadequate. According to Goldman, the focus of conscious perception lies on experiencing a particular content. However, we are still pre-reflectively aware of the fact that we are experiencing. This second higher-order mental state about the conscious first-order state therefore constitutes our pre-reflective self-consciousness. However, phenomenologically speaking, pre-reflective self-consciousness seems something more intimate to us and omnipresent in any kind of conscious experience. It seems that HOR does not account for the fact that experiences include the subjective dimension of experience in the sense characterized in section 1. Consider, for instance, how Zahavi describes the situation: "the self-awareness in question [.i.e. pre-reflective self-consciousness] is *not* a new consciousness. It is not something added to the experience, it is not an additional mental state, but rather an intrinsic feature of the experience." (Zahavi 2004, p. 83) and consciousness entails that "there is necessarily something it is like for the subject to have or live through the experience" (Zahavi 2014, p. 88). Self-consciousness, as a non-reflective presence, exists therefore intuitively as an intrinsic and constitutive feature of consciousness and not, as HOR advocates, as being extrinsic and relational.

Self-representationalism construes pre-reflective self-consciousness in a more direct sense. Nevertheless, it seems to run into a similar problem. Just as HOR, this view takes pre-reflective self-consciousness to be a form of object consciousness where a mental state becomes self-conscious by taking itself as an object (Brentano 1874/1973). Pre-reflective self-consciousness is therefore not intrinsic to consciousness – as phenomenologists point out – but relational as well. Further, it does not account for the needed subjectivity, i.e. the first-person mode of givenness. One main critique against self-representationalism

stems from the problem of 'cognitive intimacy' (Levine 2006; Van Gulick 2012). Cognitive intimacy refers to the special, unmediated link between a self-conscious state and its apprehension. The problem is that it is not clear how the same-order physical structure of a mental state – i.e. a particular neurological instantiation of a self-representation in the brain – translates into cognitive intimacy. (For now, let me leave aside this critique against self-representationalism. In section 2.2. we will see how a version of this problem also applies to its alternative view based on acquaintance. I will discuss the issue in greater detail there.)

The more general issue for both relational views lies in the idea that they lead to a vicious infinite regress. To see this, consider two possible interpretations of what pre-reflective self-consciousness may turn out to be. According to Zahavi, pre-reflective self-consciousness can be construed either as "[...] (i) an extraordinary object-consciousness or (ii) not as an object-consciousness at all [...]" (Zahavi 2006, p. 1). The former notion follows closely the ideas of HORs and SOTs, and the latter claims that pre-reflective self-consciousness is an intrinsic feature (Husserl 1984). In the case of SOT and HOR, one needs to hold that consciousness has two intentional objects at once. One of those objects is what is perceived and the other one perception itself. SOTs hold that both intentional objects form part of a single mental state, while HORs require, of course, two separate mental states. However, the fact that same-order theories and higher-order theories share the assumption that there are two consciously present intentional objects engenders the critique of vicious regress (Carruthers 2020; Gurwitsch 1941; Zahavi 2006).

According to Gurwitsch and Zahavi, same-order relational accounts fail because experiences entail, first, the objects they are about and, second, themselves. This implies that, since experiences contain themselves in their entirety, they do not only contain consciousness of what they are about, but also consciousness of consciousness. Zahavi criticizes this idea by stating the following: "[...] [A]s Gurwitsch points out, this is not where it ends. For the very same reason every intentional consciousness of a primary object must in addition include itself as its own secondary object, every intentional consciousness of a secondary object must in addition include itself as its own tertiary object, and so forth." (Zahavi 2006, p. 3).

But this critique does not only apply to SOTs. In the case of higherorder theories, the regress arises from a similar problem. If consciousness of mental states stems from the fact that it is the object of a second-order mental state, then this second-order mental state must be the object of third-order state and so forth. This is the case, since a second-order state can only be conscious if it is itself the object of a further higher-order mental state. Usually, proponents of higher-order theory will respond that we do not have to assume that second-order mental states are conscious themselves – unless there is reason to assume a further third-order state that is unconscious (Rosenthal 1997). However, by employing this line of thought, higher-order theories fail to explain how consciousness arises from two mental states which, considered independently, would be regarded as unconscious (Gallagher and Zahavi 2015).

Therefore, it seems that both HORs and SOTs run into problems in explaining consciousness. Representing a second mental representation that forms part of the same experience – in either a second-order or first-order relation – seems simply not enough to instantiate pre-reflective self-consciousnesses. Consequently, representing a representation seems not to be the right kind of relation to constitute conscious experience. Let me, therefore, consider an alternative account.

2.2. An acquaintance alternative

In a recent paper, Giustina (2022) has argued that we should explore an alternative approach to pre-reflective self-consciousness based on acquaintance. The modern history of acquaintance goes back at least to Bertrand Russell. In his book 'The problems of Philosophy' (Russell 1967), he distinguishes the notions of knowledge by acquaintance and knowledge by description. For Russell "[...] knowledge by acquaintance, is essentially simpler than any knowledge of truths, and logically independent of knowledge of truths [...]", whereas "[k]nowledge of things by description, on the contrary, always involves [...] some knowledge of truths as its source and ground." (Russell 1967, p. 25) For Russell, knowledge by acquaintance constitutes direct, immediate knowledge without any mediation. The original scope of the Russellian acquaintance thesis was much broader than in contemporary philosophy. In contemporary philosophy of mind, it is often agreed that the best candidate for knowledge by acquaintance are phenomenal properties (Chalmers 2003, 2010; Fumerton 1995, 2005; Gertler 2001, 2012).

According to Giustina's approach (2022) acquaintance may also partially explain phenomenal consciousness itself. In her view, this explanation is based on two claims about phenomenal consciousness: (i) just as for SOTs or

HORs, phenomenal consciousness consists of a mental representation that represents some quality of the world. However, to make this mental state conscious, there is neither a second-order nor a first-order representation of that state involved. It is rather the case that (ii) we stand in an acquaintance relation to the first-order mental state. Here is how she describes this idea:

Acquaintance (Qualitative Character): For any conscious mental state M, M has qualitative character iff it represents something (in the right way).

Acquaintance (Subjective Character): For any conscious mental state M, M has subjective character iff its subject is acquainted with M. (Giustina 2022, p. 3849)

Now, Giustina only sketches how acquaintance could look like, but her main goal is to show that, if we accept certain requirements about phenomenal consciousness⁸, then an explanation involving acquaintance is very promising.

The main reason we should prefer acquaintance over self-representationalism, Giustina argues, is that, even though the latter account does most of the relevant structural work, it may imply some serious disadvantages. Consider, for instance, how SOT explains consciousness. 9 According to the theory we become conscious when a first-order mental state represents the world while simultaneously being self-represented. Giustina, however, claims that this leaves the first-order mental state explanatorily inert: "Self-Representationalism ultimately accounts for qualitative character *not* in terms of *first-order* representation, but in terms of *constituting meta*-(self-)representation. Accordingly, a mental state M has its qualitative character not in virtue of (suitably) representing something, but in virtue of being (self-)represented to (suitably) represent something. In this framework, first-order representation has no role in the constitution or determination of qualitative character: the latter is constituted and fully determined by the self-representation." (Giustina 2022, p. 3843). This means that whether a first-order representation represents something as being red or being blue, this representation plays no constitutive role in how one actually experiences the world. It is only when representing the first-order representation of red or blue that what is experienced is determined. According to

⁸ Giustina identifies these as *desiderata*. She argues for four: the *Subjective Character Desideratum*, the *Transitivity Desideratum*, the *Intimacy Desideratum* and the *Inner Awareness Desideratum*. According to her, these *desiderata* must be explained by any theory of phenomenal consciousness.

⁹ In her paper, Giustina (2022) discusses three further perks of her acquaintance approach. I will just consider the here described case.

Giustina, this seems unreasonable. The first-order representation should play a role in determining the phenomenology of an experience. Acquaintance, however, avoids this problem. In contrast to self-representationalism, Giustina argues, first-order representations are constitutive to the phenomenology of an experience. The reason is that, when we become acquainted with the first-order representation, we also become acquainted with what it represents. Consequently, it matters whether this representation represents something as being red or blue.

As mentioned above, it has been claimed on several occasions that acquaintance has its appeal. However, when it comes to explaining it, acquaintance is arguably rather mysterious and basic (Levine 2006). To make the acquaintance account viable, we would have to explain what acquaintance is and how it works. Now, it turns out that this has been tried before, but at a cost: either we lose the particular direct spirit of acquaintance – for instance by making it representational (Harman 1990, 1996) – or we pay the price and assume that consciousness is special and unexplainable (Block 1990, 1996; Chalmers 1996; Nida-Rümelin 2007, 2008). Consequently, the biggest problem acquaintance faces is that it is either mysterious and basic or that it turns pre-reflective self-consciousness into something mysteryous and basic.

According to Giustina, this is, however, only half of the story. It is not only acquaintance that is mysterious and basic. Indeed, self-representationalism also involves unusual, basic and mysterious representations. The reason, so Giustina argues, is that only conscious mental states involve representations which are not interpreted by further representations, i.e. "conscious states are intrinsically representational" (Giustina 2022 p. 3857). If right, then conscious representations are also basic and mysterious, i.e. they are of a special kind. ¹¹

Let us assume that Giustina is right. Would acquaintance be in a better position to be naturalized? My answer is no. To show why not, consider Balog's account of acquaintance (2012a, b), which is explicitly mentioned by Giustina.

 $^{^{10}}$ An interesting example is Duncan's account of self-acquaintance (2018) which holds that subjectivity is best characteized in terms of being acquainted with oneself.

¹¹ At this point I want to note that there might be a connection between this idea and why both HORs and SOTs seem to lead to a vicious infinite regress. If all the assumed representations within these theories are normal representations that need to be interpreted by further representations, then we will need always more representations of representations, hence the regress. Interestingly, the regress can be stopped by introducing intrinsic conscious representations. As we will see in the next section, making pre-reflective self-consciousness intrinsic is, however, exactly the problem of non-relational accounts.

This view is based on a constitutional account of the phenomenal concept strategy¹². According to Balog, this approach explains and naturalizes acquaintance by claiming that a given phenomenal property partly constitutes the corresponding phenomenal concept. The way this is spelled out is in linguistic style quotation. This means that the referent – here a particular phenomenal property – is a constituent of a concept – here a particular phenomenal concept – by being the quotational part '____' of the concept. The reason why we are in an immediate and direct acquaintance relation with phenomenal properties is because they are the quotational constituents of the corresponding phenomenal concepts. To make this account of acquaintance compatible with physicalism, Balog argues that, on the one hand, phenomenal concepts contain the particular instantiations of experiences physically, while, on the other hand, maintaining that a particular phenomenal concept presents a particular experience as a phenomenal property.

If the story were to end here, Giustina would be correct and we should explore the former mysterious and basic acquaintance account as a serious contender to explain pre-reflective self-consciousness. Unfortunately, there is a problem with Balog's attempt to naturalize acquaintance. In a version related to the argument in section 2.1., Levine (2006, 2007) argues that, even though Balog's view is able to explain the immediate and direct relation with the referent, it cannot explain how physical presence translates into cognitive presence, i.e. a substantial constitutional acquaintance account needs to hold that phenomenal concepts are acquainted with the corresponding phenomenal properties by entailing those properties. What matters here is that phenomenal properties are cognitively relevant for the corresponding phenomenal concepts. According to Levine, however, this cognitive relevance cannot be derived from the physical instantiation. In other words, what is cognitively relevant to phenomenal concepts are the corresponding phenomenal properties and not how those properties are instantiated. For instance, the phenomenal concept red needs to relate to the particular phenomenal property red-ish and not its physical instan-

¹² The phenomenal concept strategy is a way to account for *a posteriori* physicalism of phenomenal consciousness. According to Stoljar (2005) – its name giver – this strategy claims that phenomenal concepts are special. The reason they are special is that one can only have a phenomenal concept of, for instance, an experience of red, when one actually underwent an experience of red. This means, the referent of phenomenal concepts is the phenomenal property of an experience and not the world.

tiation. The reason, Levine argues, is that the physical instantiation only determines what is present as a phenomenal property. However, it does not explain how the relation between phenomenal concepts and phenomenal properties becomes cognitively relevant. I think that Levine has a point. It is not clear how entailing the physical instantiation of a phenomenal property gives rise to a cognitive relevant way of presenting an experience as a particular phenomenal property necessary for the respective phenomenal concept. There seems to be a gap between the physical relevance of determining what is physically instantiated and the cognitive relevance necessary for a substantial acquaintance relation. If true, Balog's account of naturalizing acquaintance fails and acquaintance stays as mysterious and basic as before.

In this section we have seen that HORs, SOTs and acquaintance accounts are highly contestable. Both representational views construe pre-reflective self-consciousness as object consciousness which leads to a vicious regress and acquaintance stays as mysterious and basic as ever. Additionally, all relational accounts only seem to be interested in explaining pre-reflective self-consciousness as an awareness of the experience itself. This clashes with the intuition that pre-reflective self-consciousness also presents itself in a first-person mode of givenness. We may wonder whether some explanatory problems of the relational views arise because the theories do not consider this intuition more carefully. Unfortunately, a discussion of this issue is beyond the scope of this paper, but since the views illustrated in this section fall short in accounting for pre-reflective self-consciousness, I will consider non-relational accounts next.

3. Non-Relational Pre-reflective Self-consciousness

Non-relational accounts of pre-reflective self-consciousness often argue for its intrinsic nature. This idea of intrinsicness is deeply embedded in the phenomenological tradition and can be found specifically in the works of Husserl (1984), Sartre (1943/1976) and Merleau-Ponty (1962). In more recent work, for instance, Zahavi (2004) states that "the self-awareness in question [pre-reflective self-consciousness] is *not* a new consciousness. It is not something added to the experience, it is not an additional mental state, but rather an intrinsic feature of the experience." (Zahavi, 2004 p. 83). Phenomenologists often add that pre-reflective self-consciousness somehow involves a phenomenal subject – or even a self. Sartre, for example, writes that "[...] pre-reflective consciousness is self-consciousness. It is this same notion of self which must be studied, for it defines

the very being of consciousness." (Sartre 1943/1976, p. 114) It is also important to point out that this notion of pre-reflective self-consciousness can be found in phenomenologically informed strands of psychology. For instance, Sass and Parnas (2003) contend that the phenomenological descriptions of patients' experiences play an essential role in the way we should interpret symptoms of psychological disorders such as schizophrenia. In their so called *Ipseity* Hypothesis of schizophrenia, Sass and Parnas stress the essentially subjective character of consciousness and its importance to the study of psychological disorders. For them, "[c]onsciousness [...] is the enabling or constitutive dimension, the "place" in which the world is allowed to reveal and articulate itself. If anything ever *appears* at all, it always appears in the medium of consciousness." (Sass and Parnas 2003, p. 429) The way Sass and Parnas interpret the structure of consciousness is in line with the phenomenological tradition. According to them, consciousness is directed towards the world, but it also entails an inherent pre-reflective self-consciousness or *ipseity*. In their view, schizophrenia is basically a disruption of the latter.

As the reader may have noticed, these notions of pre-reflective self-consciousness seem to involve the conflation of concepts pointed out by Guillot (2017). Pre-reflective self-consciousness here is somehow an awareness of the experience itself, it entails a first-person mode of givenness - which grounds subjectivity – and amounts to the constitution of a minimal self. Moreover, it is assumed that all these features are intrinsic to consciousness. We can see this more obviously in what Dan Zahavi – one of the most prominent proponents of the phenomenological approach to pre-reflective self-consciousness - claims (Zahavi 1999, 2005, 2014; Zahavi and Kriegel 2015). 13 In his view, pre-reflective self-consciousness entails at least three related features. First, it is intrinsic to any conscious experience. Being intrinsic makes it part of the nature of experience and, without it, there is no conscious experience. Second, pre-reflective self-consciousness is the root of subjectivity. Finally, since it is here that the self experientially comes into existence, pre-reflective self-consciousness constitutes the most basic form of self. I would argue that there are more claims about pre-reflective self-consciousness than necessary to account for consciousness. However, I think we can isolate the notions of pre-reflective self-awareness portrayed here in section 1, i.e. as an awareness of the experience itself, subjective in a first-person mode of givenness. I think many of the primary claims of the

¹³ In a co-authored paper, we laid out this view in more detail (Clowes and Gärtner 2020).

phenomenological tradition in relation to conscious experience – not the self – remain intact. The most problematic issue, I shall argue, is that pre-reflective self-awareness here is interpreted as being intrinsic to any phenomenal conscious experience and that no further explanation of what 'being intrinsic' means is needed. I understand that the intuition of being intrinsic fits very nicely with an account of pre-reflective self-consciousness. It leaves us, however, without any kind of explanation. This leaves us with a dilemma at best. On the one hand, non-relational accounts provide, in part, phenomenologically important considerations about the structure of pre-reflective self-consciousness that help us navigate the mysterious depths of conscious experiences. On the other hand, we are left without any explanation of intrinsic pre-reflective self-awareness which makes the project of naturalizing consciousness almost impossible.

But what if non-relational proposals could be fixed? What if we could give an account that resembles all the promising advantages of non-relational views but avoids their pitfalls? For the rest of this paper I will exactly try to develop such an account, starting by laying out why such a view depends on pre-reflective self-consciousness's place within the structure of experience.

4. Pre-reflective Self-consciousness and Its Place in Experience

How does pre-reflective self-consciousness fit into the structure of conscious experience? As some, I have assumed throughout this paper that being phenomenally conscious entails pre-reflective self-consciousness by definition (Gallagher and Zahavi 2015; Goldman 1970; Husserl 1984; Parnas and Sass 2011; Sartre 1957, 1943/1976; Sass and Parnas 2003; Zahavi 2005, 2014; Zahavi and Kriegel 2015). In his famous article 'What it is like to be a bat?', Thomas Nagel makes this idea explicit by stating the following:

Conscious experience is a widespread phenomenon. [...] No doubt it occurs in countless forms totally unimaginable to us, on other planets in other solar systems throughout the universe. But no matter how the form may vary, the fact that an organism has conscious experience *at all* means, basically, that there is something it is like to *be* that organism. There may be further implications about the form of the experience; there may even (though I doubt it) be implications about the behavior of the organism. But fundamentally an organism has conscious mental states if and only if there is something that it is to *be* that organism – something it is like *for* the organism. (Nagel 1974, p. 436)

Following Kriegel (2005), I take this passage to claim that phenomenal consciousness not only contains 'What it is like' properties or phenomenal qualities, but also a subjective character of experience. This character can be equated – as it has been done throughout the text – with pre-reflective self-consciousness.

4.1. What is the Structure of Experience?

The fact that phenomenal consciousness exhibits two distinctive features does not tell us anything about how those features relate, i.e. from this fact alone, we cannot deduce the structure of experience. However, there seem to be a few possibilities. In what follows, I will discuss what I think are the three most obvious ones.

A first possibility consists in assuming that pre-reflective self-consciousness and phenomenal qualities are complementary. One way of explicating this idea is to claim that both features are simply an addition to each other. According to Kriegel (2005), conscious experience consists of two aspects, namely the way it is like to undergo an experience – i.e. the phenomenal quality of experience – and our awareness of those phenomenal qualities – i.e. pre-reflective self-consciousness. In his view, the "compresence" (Kriegel 2005, p. 24) of both features add up to phenomenal consciousness – or, as Kriegel calls it, "phenomenal character". Kriegel goes on to argue that there is no ontological difference between both properties since both are essentially representational.

This idea is most plausibly explained in the terms of either higher-order or same-order theory. The previous sections showed, however, that HORs and SOTs have deep rooted problems in explaining the nature of pre-reflective self-consciousness. One reason may stem from the fact that pre-reflective self-consciousness is treated here as simply another component of experience. This means that pre-reflective self-consciousness is ontologically on par with phenomenal qualities, constituting just a further representational feature of experience. Therefore, spelling out the structure of experience in this sense stands and falls with the plausibility of HORs and SOTs.

A second option holds that pre-reflective self-consciousness and phenomenal qualities are essentially both phenomenal properties of what it is like to experience. Pre-reflective self-consciousness is therefore interpreted as another kind of 'What it is like' property or phenomenal quality – a special one maybe, since it is shared by all experiences, but nonetheless a phenomenal quality. ¹⁴ There is an important difference to the previous option. The main idea of copresence is that some features are shared - for instance, being representational or the fact that both are the intentional object of consciousness. This second option goes one step further. It claims that, even though pre-reflective self-consciousness is an invariant feature of every conscious experience, it is still a phenomenal quality. So, while other phenomenal properties such as redness and blueness are qualities that differentiate experiences, pre-reflective self-consciousness is a stable and unchanging quality that all experiences share. The important thought to take away here is that consciousness consists only of phenomenal qualities of which pre-reflective self-consciousness is an invariant one.

The downside of this view is that it does not recognize an important difference between pre-reflective self-consciousness and other phenomenal qualities. This can be found in the special role pre-reflective self-consciousness exhibits. According to Nida-Rümelin (2014), pre-reflective self-consciousness consists in the fact that we become unmediatedly aware of the metaphysical structure of experience – i.e. that something is phenomenally presented to us as subjects. Other phenomenal qualities do not possess this role. At least, it is not *prima facie* clear that they do. This is true for all experiences. Without being pre-reflectively self-conscious, therefore, there can be no experiencing to begin with. Pre-reflective self-consciousness is essential to experiencing and, without

¹⁴ This idea stems from my interpretation of what Nida-Rümelin (2014) says about pre-reflective self-consciousness and the phenomenal character: "In the preceding section, I argued that subjective character in the sense of definition 3 is indeed part of the phenomenal character of experiencing. It is a fact about phenomenology, about what it is like to experience. However, it is not a feature of experiencing that could be absent in any possible experience, or so I claim. Experiencing necessarily goes along with awareness of its basic intentionality. For that reason, awareness of basic intentionality can well go unnoticed. We cannot discover that phenomenal feature by contrasting what it is like to have one experience with what it is like to have another experience. In order to discover that feature, we have to abstract from all specific features of experiences, we have to abstract from what is phenomenally given in a particular experience. The intellectual activity one has to engage in to discover that feature is therefore quite different from other cases of phenomenological reflection. Nonetheless, or so I would like to insist, a complete description of what it is like to have a particular experience would have to mention pre-reflexive nonconceptual awareness of basic intentionality (which I take to be a form of self-awareness)." (Nida-Rümelin 2014, pp. 273-274). In a co-authored paper, we have discussed this view in more detail (Clowes and Gärtner 2020).

it, there is no experience at all. This means that, even if pre-reflective self-consciousness were a kind of phenomenal quality, it would be different from all the other phenomenal qualities, since it is the only essential one.

Now, to adequately account for this last insight, we may want to opt for the third option and claim that pre-reflective self-consciousness is ontologically more basic. Consider the phenomenological claim that pre-reflective self-consciousness is intrinsic to phenomenal consciousness again (Gallagher and Zahavi, 2015; Husserl, 1984; Merleau-Ponty, 1962; Sartre, 1943/1976; Zahavi, 2004). Even though there is no satisfactory explanation for this idea, it seems to be in the nature of any experience to possess pre-reflective self-consciousness as a most basic feature, i.e. if a mental state does not exhibit pre-reflective self-consciousness, it cannot exhibit what it is like to be in that state either (Gallagher and Zahavi, 2015). This phenomenological notion seems to be the only view that adequately describes the nature of pre-reflective self-consciousness. Since option one and two poorly engage with this intuition, I will focus, on developing an approach in the sense of option three.

4.2. Relating Phenomenal Qualities and Pre-reflective Self-consciousness

The way forward is by having a closer look at how phenomenal qualities and the ontologically more basic pre-reflective self-consciousness relate. To do this, we need to analyze in more detail what to make of the phenomenological description of experience. For a better understanding of the involved features, I will first examine what a phenomenal quality is. In my view, there are at least two options. First, phenomenal qualities can be referred to in an objective sense, for instance as something that can be measured or accounted for externally by considering the properties of the object in question (Tye 1995). Second, phenomenal qualities can also be thought of as being subjective, entailing a first-person point of view or a 'first-person mode of givenness'. The second notion is strictly speaking not a phenomenal quality per se, but a phenomenal quality accompanied by pre-reflective self-consciousness. However, when we speak of phenomenal qualities, the notion of subjective quality naturally comes to mind. The goal of explaining the difference between both notions of quality is to clarify what being a phenomenal quality means and how it relates to pre-reflective self-consciousness.

As stated in the last paragraph, phenomenal qualities can be described in either an objective or a subjective sense. But what does this mean? Objective qualities are usually something that can be quantified and compared to a standard. For instance, the quality of a diamond depends essentially on its clarity. If a diamond exhibits a high degree of clarity, the diamond is considered to be of high quality. In this respect, subjective impressions are of no importance, i.e. whether or not some particular subject likes or dislikes the diamond does not affect its quality. Either the diamond does well in comparison to its established standard or it does not. On the other hand, the notion of subjective quality explicitly entails a subject's first-person point of view. For instance, whether or not something tastes good to me depends on my view on what tastes good to me. It is not determined by an objective standard of good taste. Therefore, it is the first-person quality of taste which determines that something tastes good to me, i.e., at least phenomenally speaking, there is no objective standard against which my taste experience needs to be measured. It may be the case that different experiences imply different degrees of involvement of both notions of quality, but I shall claim that both ideas apply to experience.

To see this, consider for instance an experience of red. First, to have an experience of red means for me to be aware of the presence of some red quality. Second, it also implies that I sense this red quality in a subjective way. We can assume that we are capable of comparing red hues objectively. In particular, I am thinking here of common ways of contrasting color qualities, such as merlot or rose. By ascribing one of those qualities, we evoke a somewhat standardized scale of red. However, experiencing the color red also entails a subjective aspect. It involves the quality of being a very particular way for a subject. No objective scale can tell me how I experience a particular instance of the color red. It rather depends on my subjective first-person point of view how I phenomenally sense redness.

But what does the presence of both notions of quality mean for the structure of experience and hence the relation between phenomenal qualities and pre-reflective self-consciousness? To account for the objective sense of a red quality there are a few options. For instance, we could describe this notion in terms of a red representation, a phenomenal red appearance, or something similar. ¹⁶ The important thing to take away here is that an experience of red is partially determined by our connection to what we sense as red in the world. The idea of experiencing redness, however, also entails a subjective aspect, i.e. a

¹⁵ At least it does not have to be.

¹⁶ Arguably, being able to account for qualities in an objective sense as representations has the advantage to fit with the project of naturalizing consciousness in a straight forward manner.

presence in its 'first-person mode of givenness'. The way we can account for this notion of quality is by invoking the role of pre-reflective self-consciousness. To see what this means, consider unconscious mental states first. In my view, unconscious mental states can also exhibit objective qualities. The conditioned reflexes that we manifest when we are in a non-experiential mode of driving a car are a good example. Many of us have been in the situation where we drive a car for a long time – usually in a homogeneous environment – and our awareness of the fact that we are driving drifts off. However, we still seem to do a decent job in keeping the car on the road and we adapt, almost as programmed, to aspects in the environment. It seems that what is missing here is not so much that our mind processes qualitative appearances, but rather that we are not pre-reflectively self-conscious, i.e. it seems there is no 'first-person mode of givenness' present. The objective qualities provoked by our interaction with the world simply seem not to be subjectively conscious.

If this structural analysis is correct, then we can conclude that conscious experience entails two different kinds of qualities which are rooted partially in the relation between phenomenal qualities and pre-reflective self-consciousness. With this in mind, I am now in the position to provide an alternative view of the nature of pre-reflective self-consciousness that can account for the phenomenological intuition of intrinsicness and open a path to its naturalization.

5. A Functional and Embodied understanding of Pre-reflective Self-consciousness

The main task of this section is to account for the nature of pre-reflective self-consciousness without taking it to be a basic, intrinsic property of experience. The solution I propose is a hybrid position.¹⁷ It states that pre-reflective self-consciousness consists of two aspects, namely being functional (relational) and being embodied (non-relational)¹⁸.

One way of articulating this position is to account for the structure of conscious experience in the way presented in the last section: phenomenal qualities are present within the stream of consciousness, which itself depends on the

¹⁷ Giustina (2022) also defends a hybrid account. However, she defends a view employing representationalism and acquaintance, while I defend a hybrid pairing functionalism and embodiment.

¹⁸ Elsewhere, I have argued for a view called Phenomenal Q-*me*-ism which already points to the idea of a functional understanding of pre-reflective self-consciousness (Gärtner 2018).

instantiation of pre-reflective self-consciousness. This notion rejects the ideas – presented in section 4.1. - that the simultaneous presence of pre-reflective self-consciousness and phenomenal qualities constitutes the nature of conscious experience, but it also rejects the view that pre-reflective self-consciousness is just another phenomenal quality. Rather, this notion holds that pre-reflective self-awareness is ontologically prior to phenomenal qualities, therefore constituting the stream of consciousness. To justify this structure of experience, I will now have to show what it means for the nature of pre-reflective self-consciousness to be functional and embodied. To do so, the first step consists in explicating a) what functional roles conscious experience as a whole plays within our mental economy and b) what the functional role of pre-reflective self-consciousness within an experience is.

Why is it important to consider the functional role of experience as an entity? The reason, I shall argue, is that analyzing the functional role of experience will show that conscious experience makes a difference to us. It is important to understand that consciousness is not only some extra phenomenological property that makes, for instance, ice cream taste good, but that experiencing the world actually has a function for us. So, what is the functional role of experience within our mental economy?¹⁹ Consider the driving example again. After driving for a while in a homogeneous environment, we are starting to loose awareness of the fact that we are driving. While we are 'unconsciously' driving – somehow keeping the car on the road – the involved mental states still instantiate particular qualities that resemble aspects of the world.²⁰ It seems that only when there is a sudden change in routine – such as a traffic light abruptly turning red - we become aware of the fact that we are driving. This is also the moment when we become pre-reflectively self-conscious of – and experience in a first-person mode of givenness - ourselves as driving. As a consequence, our mental dispositions – and even our behavior – will functionally adapt to the fact that we are

¹⁹ I would like to emphasize that I am not interested here – at least for now – in its neural implementation. The case I want to make is that not all mental states are the same. Conscious experience makes a difference in our mental economy, i.e. experience plays a functional role in what the mind in specific circumstances does. Thanks to an anonymous reviewer for pointing out this distinction. ²⁰ It appears reasonable to claim that, without the availability of those qualities, we would not be capable to react accordingly.

now consciously driving. For instance, automatisms – such as unconsciously following the profile of the road – will be superseded by deliberative action and reasoning.²¹

Of course, our driving example is merely illustrative and other cases cannot be easily described in this way. Consider for instance the case of pain. Kripke (1980) states that pain can only be instantiated when we are aware of it. Following the view of the structure of experience defended here, this means that it does not exist any case of pain where the quality of pain is present without prereflective self-consciousness. If true, then there are differences in the type of experiences we can have, i.e. there are some instances where qualities can only be instantiated by conscious mental states. However, from this idea it does not follow that the presence of qualities in mental states entails necessarily that those mental states need to be conscious. It is plausible to argue that pre-reflective self-consciousness does not always have to be present for a mental state to be able to carry qualities. Furthermore, cases such as pain do not constitute counterexamples to the idea that conscious mental states and unconscious mental states play particular roles in our mental economy. Much of our mental activity happens unconsciously. There is only a small percentage of mental processing that actually becomes conscious.

To understand what conscious experience – as entity – does, we need to allow for the idea that it plays distinct functional roles in our mental economy. This means that we need to be able to functionally differentiate, at least, between unconscious mental states and conscious experiences. But this can only be a starting point. To be able to naturalize consciousness, we will also need to consider the structure of experience itself. Since pre-reflective self-consciousness is assumed to be the root of conscious experience, and therefore essential to its structure, I will argue that we also need to apply our functional analysis to this kind of self-awareness. ²² To analyze the functional role of pre-reflective self-consciousness requires the examination of the idea that it is an invariant feature shared by all experiences (Nida-Rümelin 2014; Parnas and Sass 2011; Sass and Parnas 2003; Zahavi and Kriegel 2015). I will claim that this view is misguided.

²¹ One particular fruitful way to think about this idea is dual-process theory. In this case, the automatisms (system 1) are interpreted as the result of evolutionarily old intuitive minds that we largely share with animals, while deliberative actions (system 2) are thought of as the result of reflective minds, additionally attributed to human beings (Evans 2010; Frankish 2010; Kahneman 2011).

²² Again, at least for now, I am not interested in neural implementation.

Even though pre-reflective self-consciousness is the root of the stream of consciousness – and therefore ontologically more basic than phenomenal qualities – experience is a structural unity that have to be considered as a whole. Therefore, changes in phenomenal qualities will not only affect the way we experience this quality; they can – and often do – also affect the way we sense subjectivity, i.e. how we sense the 'first-person mode of givenness'.

Alterations to the way pre-reflective self-consciousness is sensed depends on what kind of experience we are currently undergoing. A change in quality from a red to a blue experience, for instance, may only slightly – or even not at all – cause modifications in the first-person mode of givenness. However, a change from an experience of red to an experience of pain is different. Moving from a sensation of perceiving redness to the sensation of feeling pain in my left arm will not only modify the quality of the experience I am in, it will also alter the way I sense the first-person mode of givenness. It is important to notice that I am not simply arguing that the presence of pre-reflective self-consciousness changes in degree. This could be claimed by any proponent of an invariance account as well. I am arguing that perceiving redness and being in pain involve two different forms of being pre-reflectively self-conscious. This implies in my opinion that the way we sense subjectivity in the presence of the color red and when feeling pain may share the fact that they exhibit a first-person mode of givenness which grounds the idea of subjectivity, even though sensing an experience under this mode is not something that is necessarily constant. It depends, for instance, on the involved modalities or the type of intimacy under which it is sensed. One reason to believe that there is more to this change than simply a modification in degree is by considering the different functional roles pre-reflective self-consciousness can play within experience. Indeed, the difference in moving from an experience of red to an experience of pain can only be adequately explained if we consider not only how the involved phenomenal qualities change, but also by claiming modifications to the first-person mode of givenness, i.e. pre-reflective self-consciousness as being part of the world directed experience. An important consequence of this view is that the stream of consciousness is much more heterogeneous than we would initially expect. Even though the structure of experience stays constant, the dynamics within this structure can vary substantially. ²³

²³ To explain in detail what the functional roles of pre-reflective self-consciousness are is of course a difficult endeavor. One major reason is that this idea depends largely on the functional role of experience as a whole. Experience itself stands in numerous relations to other mental phenomena

For the sake of argument, let us assume that there is something to the idea that the change of functional roles from an experience of red to an experience of pain not only modifies the involved phenomenal qualities, but also substantially alters pre-reflective self-consciousness. We can call this the relational aspect of pre-reflective self-consciousness. However, one open question remains: why should we think of pre-reflective self-consciousness as being dynamic in the first place? This is where the idea of embodiment comes in. To explain why the functional nature of pre-reflective self-consciousness is dynamic, it is also necessary to claim that this nature is essentially embodied. But what do I mean by embodied? Basically, to be embodied implies that the brain is not enough to account for the mind, but rather that the mind is extended throughout the body (Varela, Thomson and Rosch 1991). This means, the mind "[...] is deeply dependent upon features of the physical body of an agent [...]" and "[...] aspects of the agent's body beyond the brain play a significant causal or physically constitutive role [...]" (Wilson and Foglia 2017, introduction). In this context, note that the idea of embodied pre-reflective self-consciousness is often present in the phenomenalogical tradition. For instance, according to Sass and Parnas, pre-reflective self-consciousness "[...] is not purely spiritual or cognitive but embodied, rooted in the basic affective tonalities." (Sass and Parnas 2003, p. 219). But this is not exclusively the case. ²⁴ One particular interesting view can be found in Schlicht (2018). He uses the notion of embodiment to naturalistically explain why the subject of experience should be identified with the organism as a whole. This means that pre-reflective self-consciousness is not a purely cognitive phenomena but rather stems from a bodily enrooted self-awareness often described as a phenomenological sensation. We can refer to this idea as the non-relational aspect of pre-reflective self-consciousness.

To see how pre-reflective self-consciousness is embodied, consider feeling pain again. Following Aydede (2019), there are two different aspects of pain. First, pain identifies a bodily location. For instance, we feel pain in our left arm. Secondly, there is the subjective experience of being in pain itself, i.e. the

[–] such as unconscious mental states, cognition, the self, agency, personhood, just to name a few. Thus, the functional role of pre-reflective self-consciousness is probably a matter of highly complex psychological interactions which are situationally sensitive. For the discussion of situational sensitivity in the context of mental phenomena, see for instance (Clowes and Gärtner 2020; Lysaker and Lysaker 2008).

²⁴ For instance, Bermúdez (1998) and Blanke and Metzinger (2009) think that pre-reflective self-consciousness is in the end bodily self-consciousness.

way we experience hurtfulness. Being in pain entails both notions. It requires experiencing pain as being hurtful, while at the same time being experienced as a bodily sensation. ²⁵ Consequently, whenever we feel pain we undergo an experience of hurtfulness, while at the same time sensing the tissue damage in a particular bodily location. According to this view of conscious experience, it is not enough to assume that we experience different degrees of hurtfulness - by becoming more or less pre-reflectively self-aware of those qualities and in addition localizing the correspondent tissue damage - to describe pain. Rather, the sensation of our bodily self-awareness also forms part of the pain experience, i.e. we sense our experience of pain as being embodied. By following Sass and Parnas, I interpret this fact as a bodily instantiated first-person mode of givenness. This implies that pre-reflective self-consciousness is not only a cognitive or mental phenomenon, but in addition that it is enrooted in our basic bodily or physical sensations. Consequently, our bodily self-awareness is an embodied instantiation of pre-reflective self-consciousness and, as such, essential to our feeling of pain. This also explains why a change from a red sensation to a pain sensation involves an alteration of pre-reflective self-consciousness. Sensing subjectivity when perceiving redness is simply different from sensing subjectivity when feeling pain. The reason is that our bodily sensation of self-awareness is different, changing from a subjective point of view of seeing to a subjective point of view of feeling. This does not imply that there are no commonalities to these different subjective sensations. Obviously, we are still sensing a subjective point of view in both cases – i.e. the experience is still experienced under a first-person mode of givenness. However, being subjective is different in both situations. While perceiving redness is partially grounded in my eyes relating to some physical structure in a way that results in a red sensation, feeling pain is partially grounded in the nerve cords reporting tissue damage of a particular body part. 26

To explain the two experiential situations it is not enough to evoke differences in phenomenal qualities. The reason is that phenomenal qualities can

²⁵ In my view, this structure is present in all phenomenally conscious experiences. Consider, for instance, psychological phenomena: even an instance of psychological pain entails embodiment, since there is no feeling without manifesting some bodily sensation, i.e. a sensation of the body being tense, difficulty in breathing or a sensation of pressure in the chest etc.

²⁶Here is how Schlicht explains this idea: "Facial expressions and bodily postures are arguably partly constitutive of feelings and their expression; one's bodily position (e.g. walking upright), and thus one's bodily constitution (e.g. the position of the eyes) trivially determine what one can see. Moreover, perceiving an object from a certain point of view involves 'looking' by performing eye-, head- and whole body-movements." (Schlicht 2018, p. 2465)

explain alterations in the quality of perceiving redness and feeling pain, but it cannot explain why these mental states instantiate different kinds of situational roles (Clowes and Gärtner 2020). For instance, perceiving redness may only be peripherally subjective to me, while a pain sensation could be central. This means that, when focusing on an experience of red, I perceive my experience of redness as being subjectively affective in some way. However, when considering feeling pain, I understand that it dominates the subjective space. This depends, of course, on the fact that the situational context has changed. Since perceiving redness is partially grounded in my pre-reflective bodily self-awareness of a particular sense modality – and pain likewise – the situational context strongly suggests changes in pre-reflective self-consciousness. ²⁷

In general, I would argue that only when considering the conjunction of ideas that, first, pre-reflective self-consciousness is embodied and, secondly, it plays a characteristic role within experience – and hence our mental economy – we can account for the nature of pre-reflective self-consciousness. In brief, we can account for what pre-reflective self-consciousness does by employing its functional role and maintain that it *appears* phenomenologically intrinsic in nature.

This account, however, sparks an immediate criticism. ²⁸ Consider, for instance, how Kriegel (2005) rejects functional views of pre-reflective self-consciousness. According to him, the problem is that functionalism is inherently dispositional while being pre-reflectively self-conscious is categorical in character. It is simply not possible that the former can explain the latter. To put it in Kriegel's words:

A mental state's functional role is a merely *dispositional* property of it, whereas the inner awareness present in conscious experience is a *categorical* property. For a token mental state to have a certain functional role, nothing has to actually happen with it. It suffices that the state be of a type that tends to bring about, and be brought about by, certain other states. But when a mental state becomes conscious, something very real and categorical happens with it. It acquires a

 $^{^{27}}$ At this point, I want to note that I am aware of the fact that the argument from the brain in a vat (Harman 1973) is immanent. However, we do not know whether we are a brain in a vat or actually have a body. This implies that we do not know whether there is a real body or whether this body is only virtual. The question of whether or not we actually have a body or whether this body is just a form of virtual reality becomes less pressing, if we assume – as Chalmers (2017) does – that virtual reality is a sort of genuine reality. If this is the case, then, even if our body only exists virtually, this fact is enough to constitute a form of embodiment.

²⁸ Thanks to an anonymous reviewer for bringing this fact to my attention.

feature it did not have before. This feature may well turn out to be the categorical *basis* of a new dispositional property (the relevant functional role), but it is not *identical* to that dispositional property. (Kriegel 2005, pp. 37-38)

In a nutshell this means that functionalism must be supplemented with a further ingredient to bridge the difference between what it means for a mental state to have certain dispositions and how acquiring pre-reflective self-consciousness adds something categorically new. In Kriegel's view, the way forward is to acknowledge that, while mental states in general possess intentional objects, only conscious mental states are also intentionally directed towards themselves. According to him, this can be accounted for, most naturally, by positing self-representationalism, i.e. apart from representing an intentional object, a conscious mental state also represents itself. In section 2, I have criticized this view in detail. The strongest argument against this idea amounts to the following: just as Higher-Order Theory, Same-Order Theories originate a vicious regress which implies the necessity of positing infinite intentional objects. In the context of Kriegel's model, this means that self-representationalism cannot bridge the difference between dispositional and categorical properties because it cannot account for pre-reflective self-consciousness to begin with.

Consequently, what is needed is a solution that can solidly explain the introduction of a new categorical property. The million dollar question is: can embodiment do the job? In my view, the answer is yes. However, the notion of embodiment used here is non-relational in nature, hence it needs to find a way to come to grips with the idea of intrinsicness.

6. Substituting for Intrinsicness

The final question that I would like to discuss is how the functional and embodied view of pre-reflective self-consciousness can substitute intrinsicness. First, I want to affirm again that the view defended here is committed to the idea that pre-reflective self-consciousness is essential to conscious experience. Secondly, this view can also allow for some understanding of intrinsicness if 'being intrinsic to experience' means that pre-reflective self-consciousness is innate to any being exhibiting consciousness (Gallagher 2000). What is contested, however, is the thought that pre-reflective self-consciousness is basic and does not need to be explained. If pre-reflective self-consciousness is a phenomenon that is an object for science, then the phenomenological intrinsicness claim cannot follow.

The way forward to solving this challenge consists, in principle²⁹, in analyzing the nature of pre-reflective self-consciousness as being functional and embodied. This means, we need to consider phenomenological descriptions of experience and apply the view here defended to them. In this context, we can interpret the phenomenological claim that pre-reflective self-consciousness is ontologically more basic than phenomenal qualities in the following way: pre-reflective self-consciousness is the root of the stream of consciousness and phenomenal qualities are realized within this stream. Pre-reflective self-consciousness is therefore the most basic form of consciousness and without it no mental state can be conscious.

To overcome the phenomenological claim that pre-reflective self-consciousness is basic, we first need to consider what functional role it plays by differentiating between unconscious and conscious mental states. As I have argued above, just as conscious mental states, unconscious mental states can instantiate qualities. ³⁰ However, they do not instantiate pre-reflective self-consciousness. This constitutes a clear functional difference between the two types of mental states. Furthermore, I have argued that, due to the structure of experience prereflective self-consciousness is functionally sensitive in itself. This means that, contrary to many other theories, I am arguing here that pre-reflective self-consciousness is not constant or invariant, but rather dynamic. Consequently, it should, in principle, be possible to give a functional, relational explanation of what pre-reflective self-consciousness does. However, only by claiming that prereflective self-consciousness is embodied we can account for these dynamics and explicate the different situated manifestations subjectivity can take. One consequence of this view is the way embodiment can account for the categorical novelty of pre-reflective self-consciousness, namely by claiming that, strictly speaking, pre-reflective self-consciousness is not only constituted by cognitive properties, but also by structural properties of the body. 31 This means, being phenomenally conscious entails basic bodily sensations that are not purely rooted in cognitive phenomena as they also entail specific bodily constitutions. To be

²⁹ There is still a long way to go and much research to be done to explicate in detail how the functionally embodied nature of pre-reflective self-consciousness looks like. This endeavor most likely needs to be carried out by more than one scientific discipline.

³⁰ For a detailed defense of unconscious mental qualities see especially Coleman (2022).

³¹ One can think of this as pre-reflective self-consciousness being a form of bodily self-consciousness (Bermúdez 1998, Blanke and Metzinger 2009) or as being grounded in the organism as a whole (Schlicht 2018).

clear, this is not to say that unconscious cognition does not rely on bodily features but, rather – and only profound interdisciplinary scientific research will be able to show this –, that it should be possible to discern structural bodily features for conscious and unconscious mental states. ³² As a consequence, we can, in principle, substitute the phenomenological intrinsicness intuition by fleshing out the relational or functional features of pre-reflective self-consciousness and specify these features' dynamics in a non-relational, embodied manner.

Conclusion

In this paper, I have argued that traditional views of pre-reflective self-consciousness – relational and non-relational – fail to accurately account for the nature of this kind of self-consciousness and naturalize it. As a consequence, I have argued for an alternative hybrid account that explains pre-reflective self-consciousness as both being relational (functional) and non-relational (embodied). I have shown that this view can adequately respond to the phenomenological intrinsicness intuition, while still maintaining a naturalist stance.

ACKNOWLEDGEMENTS

I would like to thank Robert W. Clowes for discussions about pre-reflective self-consciousness. A special thanks goes to Davide Vecchi for helping to develop this paper. Further, I would like to extend my gratitude to the members of the Centro de Filosofia das Ciências da Universidade de Lisboa and the members of the Lisbon Mind, Cognition and Knowledge Group for conversations on the topic. Finally, I would like to thank the Universidade de Lisboa, the Faculdade de Ciências da Universidade de Lisboa, the Departamento de História e Filosofia das Ciências da Faculdade de Ciências da Universidade de Lisboa, the Centro de Filosofia das Ciências da Universidade de Lisboa, the Fundação para a Ciência e a Tecnologia and Fciências.ID.

Klaus Gärtner's work is funded by the financial support of FCT, 'Fundação para a Ciência e a Tecnologia, I.P.' under the Stimulus of Scientific Employment – DL57/2016/CP1479/CT0081. This work is endorsed by the Centro de Filosofia das Ciências da Universidade de Lisboa (UIDB/00678/2020).

³² I am thinking here about different bodily manifestations. While, for instance, consciously experiencing fear not only affects our state of mind, it also drastically deviates respiration, blood pressure, hard beat, etc. from its base line routine; conversely, unconscious cognition usually leaves our bodily workings within normal parameters or we would become conscious of this change.

REFERENCES

- Aydede, M. (2019). Pain, in: E.N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Spring 2019 Edition), https://plato.stanford.edu/archives/spr2019/entries/pain/.
- Balog, K. (2012a). In Defense of the Phenomenal Concept Strategy. *Philosophy and Phenomenological Research*, 84: 1-23.
- Balog, K. (2012b). *Acquaintance and the Mind-Body Problem.* In C. Hill & S. Gozzano (eds.), New Perspectives on Type Identity: The Mental and the Physical, 16-42, Cambridge: Cambridge University Press.
- Bermúdez, J. L. (1998). The Paradox of Self-Consciousness, Cambridge, MA: MIT Press.
- Blanke, O., Metzinger, T. (2009). Full-body illusions and minimal phenomenal selfhood. *Trends in Cognitive Sciences*, 13(1), 7–13.
- Block, N. (1990). Inverted Earth. *Philosophical Perspectives*, 4: 53-79.
- Block, N. (1996). Mental paint and mental latex. Philosophical Issues, 7: 19-49.
- Block, N. (2002). Concepts of consciousness. In D. J. Chalmers (Ed.), *Philosophy of mind. Classical and contemporary readings.* Oxford: Oxford University Press.
- Brentano, F. (1874/1973). *Psychology from Empirical Standpoint*. Ed. O. Kraus. Ed. of English edition L. L. McAlister, 1973. Translation A. C. Rancurello, D. B. Terrell, and L. L. McAlister. London: Routledge and Kegan Paul.
- Carruthers, P. (2000). *Phenomenal Consciousness: a naturalistic theory.* Cambridge: Cambridge University Press.
- Carruthers, P. (2020). Higher-Order Theories of Consciousness, in: E.N. Zalta (ed.), The Stanford Encyclopedia of Philosophy (Fall 2020 Edition), higher/.
- Chalmers, D. (1996). *The Conscious Mind. In Search of a Fundamental Theory*, Oxford: Oxford University Press.
- Chalmers, D. (2003). The Content and Epistemology of Phenomenal Belief, "in: Q. Smith & A. Jokic (eds.), Consciousness: New Philosophical Essays, 220-272, Oxford: Oxford University Press.
- Chalmers, D. (2007). Phenomenal Concepts and the Explanatory Gap, in: T. Alter & S. Walter (eds.), *Phenomenal Concepts and Phenomenal Knowledge:* New Essays on Consciousness and Physicalism, 167-195, Oxford: Oxford University Press.

- Chalmers, D. (2010). *The Character of Consciousness*, Oxford: Oxford University Press.
- Chalmers, D. (2017). The Virtual and the Real. *Disputatio*, *9* (46): 309-352.
- Clowes, R. W., and K. Gärtner (2020). The Pre-Reflective Situational Self. *Topoi 39* (3): 623–637.
- Coleman, S. (2022). Intentionality, Qualia, and the Stream of Unconsciousness. *Phenomenology and Mind 22*: 42-53.
- Dainton, B. (2008). The Phenomenal Self. Oxford: Oxford University Press.
- Dainton, B. (2016). I the sense of self. *Aristotelian Society*, Supplementary Volume, 90 (1): 113–143.
- Dretske, F. (1995). *Naturalizing the Mind*, Cambridge, MA: Bradford Books / MIT Press.
- Duncan, M. (2018). Subjectivity as self-acquaintance. Journal of Consciousness Studies, 25(3-4): 88-111.
- Evans, J. St. B. T. (2010). *Thinking twice: Two minds in one brain*. Oxford: Oxford University Press.
- Frankish, K. (2010). Dual-process and dual-system theories of reasoning. *Philosophy Compass*, *5*(10): 914–926. doi:10.1111/j.1747-9991.2010.00330.x
- Fumerton, R. (1995). Metaepistemology and Skepticism. Lanham: Rowman and Littlefield.
- Gallagher, S. (2000). Philosophical conceptions of the self: Implications for cognitive science. *Trends in Cognitive Sciences*, 4(1), 14-21.
- Gallagher, S. & Zahavi, D. (2015). Phenomenological Approaches to Self-Consciousness. In E.N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy (Spring 2015 Edition)*, URL = https://plato.stanford.edu/archives/spr2015/entries/self-consciousness-phenomenological/>.
- Gärtner, K. (2018). Conscious Experience and Experience Externalization. In Hipólito, I., Gonçalves, J. Pereira, J. G. (eds.), Schizophrenia and Common Sense: explaining the relation between madness and social values, Studies in Brain and Mind, 97-112, Springer, Switzerland.
- Gertler, B. (2001). Introspecting Mental States. In *Philosophy and Phenomenological Research*, 63: 305–328.

- Gertler, B. (2012). Renewed Acquaintance. In D. Smithies & D. Stoljar (eds.), *Intro*spection and Consciousness, 93-128, Oxford: Oxford University Press.
- Goldman, A. (1970). A Theory of Human Action. New York: Prentice-Hall.
- Guillot, M. (2017). I me mine: On a confusion concerning the subjective character of experience. *Review of Philosophy and Psychology*, 8: 23–53.
- Guistina, A. (2022). An Acquaintance Alternative to Self-Representationalism. *Philosophical Studies*, 179 (12): 3831–63. https://doi.org/10.1007/s11098-022-01868-5.
- Gurwitsch, A. (1941). A Non-egological Conception of Consciousness. *Philosophy and Phenomenological Research*, 1: 325-338.
- Harman, G. (1973). Thought. Princeton, NJ: Princeton University Press.
- Harman, G. (1990). The Intrinsic Quality of Experience. In *Philosophical Perspectives*, 4, *Action Theory and Philosophy of Mind*: 31–52.
- Harman, G. (1996). Explaining Objective Color in Terms of Subjective Reactions. *Philosophical Issues*, 7: 1-17.
- Howell, R. J. and Thompson, B. (2017). Phenomenally mine: In search of the subjective character of consciousness. *Review of Philosophy and Psychology*, 8: 103–127.
- Husserl, E. (1984). *Logische Untersuchungen II, Husserliana XIX/1–2.* Den Haag: Martinus Nijhoff.
- Kahneman, D. (2011). *Thinking, fast and slow.* New York: Farrar, Straus and Giroux.
- Kriegel, U. (2005). Naturalizing subjective character. Philosophy and *Phenomenological Research*, 71, 23–57.
- Kriegel, U. (2009a). Subjective consciousness. Oxford, UK: Oxford University Press.
- Kriegel, U. (2009b). Self-representationalism and phenomenology. *Philosophical Studies*, *143*, 357–381
- Kriegel, U. (2012). In defense of self-representationalism: Reply to critics. *Philosophi-cal Studies*, *159*, 475–484.
- Kripke, S. (1980). Naming and Necessity. Cambridge: Harvard University Press.
- Lane, T. (2012). Toward an explanatory framework for mental ownership. *Phenomenology and the Cognitive Sciences*, 11 (2): 251–286.

- Levine, J. (2006). Conscious Awareness and (Self-) Representation. In U. Kriegel & K.W. Wiliford (eds.), Self-Representational Approaches to Consciousness, 173-198, Cambridge: MIT Press.
- Levine, J. (2007). Phenomenal Concepts and the Materialist Constraint. In: T. Alter and S. Walter (eds.), *Phenomenal Concepts and Phenomenal Knowledge: New Essays on Consciousness and Physicalism*, 145-166, Oxford University Press.
- Lycan, W. G. (1996). Consciousness and Experience. Cambridge, MA: MIT Press.
- Lycan, W. G. (1998). In defense of the representational theory of qualia (replies to Neander, Rey and Tye). In J. E. Tomberlin (Ed.), Language, mind, and ontology: Philosophical perspectives (Vol. 12). Atascadero, CA: Ridgeview Publishing Company.
- Lycan, W. G. (2004). The superiority of HOP to HOT. In R. Gennaro (ed.) *Higher-Order Theories of Consciousness*. Philadelphia: John Benjamins, pp. 93–114.
- Lysaker, P. H., & Lysaker, J. T. (2008). *Schizophrenia and the fate of the self*: Oxford University Press, USA.
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge & Kegan Paul.
- Metzinger, T. (2003). *Being No One: The Self-Model Theory of Subjectivity*, Cambridge: MIT Press.
- Metzinger, T. (2011). The No-Self Alternative. In S. Gallagher (ed.), *The Oxford Hand-book of the Self* (pp. 279-296): Oxford: Oxford University Press.
- Metzinger, T. (2020). Minimal phenomenal experience: Meditation, tonic alertness, and the phenomenology of "pure" consciousness. *Philosophy and the Mind Sciences*, 1(I), 7. https://doi.org/10.33735/phimisci.2020.I.46
- Nida-Rümelin, M. (2007). Grasping phenomenal properties. In T. Alter & S. Walter (eds.), *Phenomenal Concepts and Phenomenal Knowledge: New Essays on Consciousness and Physicalism*, 307-349, Oxford: Oxford University Press.
- Nida-Rümelin, M. (2008). Phenomenal Character and the Transparency of Experience. In E. Wright (ed.), *The Case for Qualia*, 309-324, Cambridge: MIT Press.
- Nida-Rümelin, M. (2014). Basic Intentionality, Primitive Awareness and Awareness of Oneself. In A. Reboul (ed.) Mind, Values, and Metaphysics. Springer. pp. 261– 290.

- Parnas, J., & Sass, L. (2011). The structure of self-consciousness in schizophrenia. In S. Gallagher (Ed.), *The Oxford handbook of the self* (pp. 521-546).
- Rosenthal, D. (1997). A Theory of Consciousness. In N. Block, O. Flanagan and G. Güzeldere (eds.) *The Nature of Consciousness*, Cambridge, MA: MIT Press, pp. 729–753.
- Rosenthal, D. (2005). Consciousness and Mind. Oxford: Oxford University Press.
- Russell, B. (1967). The Problems of Philosophy. Oxford: Oxford University Press.
- Sartre, J.-P. (1943/1976). L'Être et le néant. Paris: Tel Gallimard.
- Sartre, J.-P. (1957). *The Tran scen dence of the Ego.* tr. F. Williams and R. Kirkpatrick. New York: The Noon day Press.
- Sass, L. A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, 29(3), 427-444.
- Schlicht, T. (2018). Experiencing organisms: From mineness to subject of experience. *Philosophical Studies*, 175(10), 2447–2474. https://doi.org/10.1007/s11098-017-0968-4.
- Stoljar, D. (2005): "Physicalism and Phenomenal Concepts", in: Mind and Language, 20: 469-494.
- Tye, M. (1995). Ten Problems of Consciousness, Cambridge, MA: Bradford Books/MIT Press.
- Tye, M. (2009). *Consciousness revisited*. Cambridge, MA: MIT.
- Van Gulick, R. (2012). Subjective consciousness and self-representation. *Philosophical Studies*, 159: 457-465.
- Varela F., Thompson E. & Rosch E. (1991). The Embodied Mind. Cambridge: MIT Press.
- Wilson, R. A. and Foglia, L. (2017). Embodied cognition. In. E.N. Zalta (ed.), *The Stan-ford Encyclopedia of Philosophy (Spring 2017 Edition)*. URL = https://plato.stanford.edu/archives/spr2017/entries/embodied-cognition/>.
- Williford, K., (2006). The self-representational structure of consciousness. In Kriegel, U. and Williford, K. (eds.), *Self-Representational Approaches to Consciousness*. Cambridge, MA: MIT Press.
- Zahavi, D. (1999). *Self-awareness and alterity: A phenomenological investigation*. Evanston, IL: Northwestern University Press.

- Zahavi, D. (2004). Back to Brentano?. Journal of Consciousness Studies 11/10-11, 66-87.
- Zahavi, D. (2005). Subjectivity and Selfhood: Investigating the First-Person Perspective. Cambridge, MA: The MIT Press.
- Zahavi, D. (2006). Two Takes on a One-Level Account of Consciousness. *Psyche*, *12*, 1-9.
- Zahavi, D. (2014). Self and Other: Exploring Subjectivity, Empathy and Shame. Oxford: Oxford University Press.
- Zahavi, D., & Kriegel, U. (2015). For-me-ness: What it is and what it is not. In D. Dahl-strom, A. Elpidorou & W. Hopp (eds.), Philosophy of Mind and Phenomenology. Routledge. pp. 36-53.