

Experiential Awareness: Do You Prefer *It to Me*?

Abstract

In having an experience one is aware of having it. Having an experience requires some form of access to one's own state, which distinguishes phenomenally conscious mental states from other kinds of mental states.

Until very recently, Higher-Order (HO) theories were the only game in town aiming at offering a full-fledged account of this form of awareness within the analytical tradition. Independently of any objections that HO theories face, First/Same-Order (F/SO) theorists need to offer an account of such access to become a plausible alternative.

My aim in this paper is twofold. In the first place, I wish to widen the logical space of the discussion among theories of consciousness by offering a distinction, orthogonal to that between F/SO and HO theories, between what I will call 'Self-Involving' (SI) and 'Mental-State-Involving' (MSI) theories and argue in favor of the former one. In the second place, I will present the basics of a characterization of such a Self-Involving theory in Same-Order terms.

1 Subjective Character

Conscious experiences have a subjective dimension, undergoing them feels some way or, borrowing Nagel's expression, *it is like something for the subject* of experience to undergo them. When I look at the red apple close to my computer, there is something it is like for me to have this experience. The way it is like for me to have the experience is the phenomenal character of the experience.

Theories of consciousness aim at offering a comprehensive account of phenomenal character. One interesting way of facing this task is a divide-and-conquer one (Kriegel 2009; Levine 2001) that begins by making a conceptual distinction between two components of phenomenal character—the qualitative character and the subjective character—and the two associated problems.

A theory of qualitative character accounts for *what it is like* for me to undergo the experience, the concrete way it feels to undergo it. In this sense, the qualitative character is what distinguishes the kind of experience I have while looking at my red apple from the one I have while, say, looking at a golf course. A theory of subjective character explains what it is like *for me* to undergo the experience. It abstracts from the particular ways having

different experiences feel and concentrates on the problem of what makes it the case that having a conscious experience feels at all. Hence, the qualitative character is what makes a state the kind of phenomenally conscious state it is, and the subjective character what makes it a phenomenally conscious state at all (Kriegel 2009).¹

Conscious experiences differ in a relevant sense from other kinds of states. Conscious experiences are not states that merely happen *in me*, states that I merely “host,” as the beating of my heart or subpersonal states, but states that are *for-me*. This is the problem of the subjective character of the experience. In having a conscious experience as of a red apple I am not merely aware of some features of the apple but also somehow AWARE² of my experience. I will call this form of awareness 'Experiential Awareness'. As Kriegel presents the idea:

[W]hen I have my conscious experience of the sky, I must be aware of having it. In this sense, my experience does not just take place in me, it is also for me. (Kriegel 2006, 199)

It is often assumed that we can understand any form of awareness as some form or other of representation. I will grant this assumption and focus on the kind of representation required to make sense of the subjective character of the experience: conscious experiences require a certain form of self-representation. My aim in this paper is to explore the logical space for understanding the required sense of self-representation and the problem of the subjective character of the experience in such a way.

The expression 'self-representation' is ambiguous: it can mean (i) representation of the state itself or (ii) representation of oneself. This contrast allows me to build a distinction, orthogonal to the well known one between First/Same-Order and Higher-Order (introduced in section 2.1), between what I will call 'Mental-State-Involving theories' and 'Self-Involving theories'.

In section 3 I will defend the *Self-Involving* view, and in section 4 I will present the

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- 1 This paper focuses on the subjective character and remains neutral on the relation between subjective and qualitative character (for instance, on whether one of them constitutively depends on the other) and on theories of qualitative character. It is perfectly compatible with this conceptual distinction that there are no states that exhibit qualitative character while lacking subjective character, as I believe is the case.
 - 2 In what follows, I will use 'experiential awareness' and 'AWARENESS' with capital letters interchangeably to refer to this second relation, distinguishing it to the former and making clear that there is no need for them to be of the same kind.

basics for an understanding, in terms compatible with naturalism, of self-involving representation without the need of a higher-order state.

2 The Logical Space for Experiential Awareness.

2.1 First-Order (FO), Same-Order (SO), and Higher-Order (HO) Theories

Until very recently, HO theories were the only game in town aiming at offering a full-edged account of experiential awareness within the analytical tradition.

Based on the idea that a conscious state is a state whose subject is AWARE of being in (Lycan (2004); Rosenthal (2005)), HO theorists explain the difference between conscious and nonconscious states by appealing to a higher-order representation. Conscious states are the objects of some kind of higher-order process or representation. There is something higher-order, a meta-state, in the case of phenomenally conscious mental states, which is lacking in the case of other kinds of states.³ The kind of representation that is required by the theory marks a basic difference between different HO theories. The main concern is whether higher-order states are belief-like or perception-like. The former are called Higher-Order Thought (HOT) theories (Gennaro 1996, 2012; Rosenthal 1997, 2005) the latter Higher-Order Perception (HOP) or 'inner-sense' theories (Armstrong 1968; Carruthers 2000; Lycan 1996). According to the former ones, when I have a phenomenally conscious experience as of red I am in a mental state with certain content, call this content RED. For this mental state to be phenomenally conscious, there has to be, additionally, a HOT targeting it, whose content is something like 'I am seeing RED.' On the other hand, HOP theories maintain that what is required is a (quasi-) perceptual state directed on the first-order one, and making me thereby AWARE of it.

Many philosophers since Aristotle (Caston 2002) have opposed HO theories. Among them, it is worth mentioning philosophers in the phenomenological tradition (Brentano 1874/1973; Husserl 1959; Merleau-Ponty 1945; Sartre 1956; Zahavi 2005). They are,

3 This definition is rough enough as to make room for both a theory (i) that identifies the property of having a conscious experience with that of being in a state that is adequately represented by a higher-order one and a theory that (ii) identifies the property of having a conscious experience with that of having the right kind of higher-order representation to the effect that one is in a certain state or that a certain state obtains. Although there has been a tendency to interpret HO theories as committed to (i) philosophers like Rosenthal (2005) and even more explicitly Rosenthal (2011) and Weisberg (2011), who seem to endorse (ii).

however, mainly interested in the structure of consciousness and are not very interested in reductive theories of consciousness (explaining consciousness in nonconscious terms). According to these views, experiential awareness or self-representation should be better understood in first-order or same-order terms and not as something conferred by another state, as in HO theories.

Reductive FO theories have typically focused on the problem of qualitative character and have often been blamed by their opponents of either ignoring the problem of subjective character or failing to offer a comprehensive account of it.

Consider, for example, Tye's popular PANIC theory (Tye 1997, 2002). According to Tye, phenomenal character is constituted by representational content of a certain kind. Concretely, he characterizes this content as PANIC: *Poised*, in the sense that it is available to first-order belief-forming and behavior-guiding systems; *Abstract*, meaning that the intentional content is not individuated by the particular things represented; and *Nonconceptual* in the sense that it is not structured into concepts. Granting the possibility of nonconscious, abstract and nonconceptual intentional content,⁴ *Poise* is presumably the part of the theory responsible for the distinction between phenomenally conscious states and other kinds of states and therefore the part responsible for accounting for the subjective character of experience. The difference between conscious and non-conscious mental states is a difference in functional role: the former but not the latter is available to first-order belief-forming and behavior-guiding systems. PANIC maintains that the content of the mental state should not be accessed but accessible. But *Poise*, as some philosophers have noted cannot be the right kind of property that accounts for experiential awareness because the latter is something occurrent or manifest and the former a mere dispositional property—see Burge (1997) and Kriegel (2009) for elaboration on this line of objection.

The kind of theories we are considering attempt to explain experiential awareness in representational terms: i.e., it is in virtue of having certain content that a state is phenomenally conscious. Same-Order (SO) theories locate themselves in between HO and FO theories. Both SO and HO theories accept that in having an experience one is AWARE

⁴ See Merikle and Daneman (1999) for a review of the empirical evidence in favor nonconscious perception.

of (oneself as) being in a certain state and hence that in having the experience we are not just aware of the world—namely, that having an experience is not just a matter of being in a state that represents the world as being a certain way— but deny that such an experiential awareness is conferred by a different state. We should not, therefore, look for the difference between HO and SO theories in the content but rather in the conditions for a mental state to have such content:⁵ SO theorists demand whereas HO theories deny that the presence of the “world-directed” state (the “first-order” state) is necessary for a mental state to have the required content.

An alternative to HO would have to be able to construct self-representation without postulating an independent state.⁶

2.2 Self-Involving (SI) Vs. Mental-State-Involving (MSI)

It is, independently of the former debate, ambiguous how we should unpack self-representation. The expression 'M is self-representational' can mean either:

1. M represents itself.

or

2. M represents oneself.

The following two quotes of Brentano illustrate respectively the two senses:

[Every conscious act] includes within it a consciousness of itself.

Therefore, every [conscious] act, no matter how simple, has a double object, a primary and a secondary object. The simplest act, for example the act of hearing, has as its primary object the sound, and for its secondary object, itself, the mental phenomenon in which the sound is heard. (Brentano 1874/1973, 153-154)

[T]he mentally active subject has himself as object of a secondary reference regardless of what else he refers to as his primary object.

5 On the other hand, as we are about to see, the discussion between SI and MSI theories that I want to present is a discussion about what the content is and hence orthogonal to the one between HO and FO/SO theories.

6 One of the aims of this paper is to offer an alternative theory of subjective character to that of HO theories. For this reason I will pack First and Same-Order theories together despite their differences and distinguish between them when required.

(Brentano 1874/1973, 276-277, also quoted in Kriegel 2003)

I will call 'self-involving' those theories that maintain that the correctness conditions of experience concern the individual that is having the experience and 'mental state-involving' those theories that maintain that it is *merely* the state itself that enters the content of experience.⁷⁸

The distinction between MSI and SI is clearly orthogonal at the very least to that between SO and HO theories. It seems reasonable to see HOP theories (Carruthers 2000; Lycan 1996) as defending an MSI view because they typically construct experiential awareness as a form of higher-order perception, which is about or represents the “world-directed” state, without any need for an appeal to oneself in the correctness conditions of this higher-order state.

For instance, in Carruthers's (2000) theory, some of the first-order perceptual states acquire, at the same time, a higher-order content by virtue of their availability to the Theory of Mind faculty combined with the truth of some version of *consumer semantics*.⁹ This way, a percept of red might be at the same time a representation of red and a representation of seeming red or an experience of red. States with this latter content are phenomenally conscious states.

HOT theories clearly endorse a SI position. According to HOT theories (Gennaro 2012; Rosenthal 2005), the higher-order state has the form of a thought to the effect that one is *oneself* in a certain state.

Naturalistic F/SO theories, that take subjective character into serious consideration in the analytic tradition are rare, Kriegel's (2009) same-order theory being a notorious exception.¹⁰ The tendency is quite the opposite in other philosophical traditions like the

7 Note that SI theories do not deny that the state itself be part of the content of experience; what is at issue is whether the correctness conditions of the state concern the subject that is having the experience or not. I am grateful to Richard Brown for pressing me at this point.

8 The distinction I am presenting between MSI and SI theories should not be confused with that well known in the literature between 'non-egological' and 'egological' theories (Gurwitsch 1941). See footnote 15 for further clarification. In getting clear about the relation between Gurwitsch's distinction and the one I am presenting here I have benefited enormously from fruitful exchange with Ken Williford.

9 Very roughly, the main idea of consumer semantics is that the content of a mental state depends on the powers of the organism which 'consumes' that state (Millikan 1984, 1989; Papineau 1993; Peacocke 1995). For instance, what a state represents will depend on the kinds of inferences that the cognitive system is prepared to make in the presence of that state.

10 See also Levine (2001) and Williford (2006).

phenomenological one. Whereas Brentano, for example, seems to endorse clearly an MSI position, where consciousness is directed at the same time at its primary object (say an apple as in an experience as of a red apple) and at itself as a secondary object, other philosophers like Husserl and Zahavi have defended a SI position.¹¹ Phenomenologists are mainly interested in the structure of consciousness but not in a reductive explanation of it, and theories of consciousness within the analytical tradition have paid much less attention to this position.

The following chart presents some theories and their position in the debate:¹²

	MSI	SI
HO	Carruthers(2000); Lycan(1996)	Gennaro(2012); Rosenthal(2005)
F/SO	Brentano(1874/1973); Kriegel(2009)	Husserl(1959); Zahavi(2005)

Tab. 1: The Logical Space of Self-Awareness

HO theories, however, have been deeply studied. It is well known that they face some serious objections (Block 2007a, 2011a, 2011b; Caston 2002; Kriegel 2009; Neander 1998; Sebastian 2013; Shoemaker 1968), but it is also true that HO theorists have tried to rebut

11 The claim that Husserl maintains a self-involving position is controversial. See Zahavi (2005), especially chapter 2.

12 This is not, of course, the only interesting way to divide such a space of possibilities. Brown (2012), for example, distinguishes theories that accept the idea that in having the experience one is AWARE of (oneself as—if one prefers the SI formulation) being in a certain state from those that do not, and the former into what he calls 'relational' and 'nonrelational' views depending on whether a state becomes conscious in virtue of “becoming part of a complex state that has as its parts a HO awareness [experiential awareness] directed at a lower-order mental state.” Brown's distinction between relational and nonrelational views matches some authors' way of distinguishing HO and SO theories (Kriegel 2009). As such, I prefer the way I have spelled out the difference between HO and SO—as a difference in the conditions for having the required content— for it is not clear to me what would justify the claim that a conscious state cannot occur unless the “lower-order” also does (a relational view) if the latter is not required for having the relevant content, considering that having such content—the one that accounts for experiential awareness—is what explains the difference between conscious and nonconscious states in the framework we are considering.

Gennaro (2012) presents an example of a HO (the self-representational content is conferred independently of the presence of the first-order state) but relational theory (conscious states are complexes of the higher-order and the first-order state). It seems reasonable in this case to demand a justification of the relational claim: why do they constitute a complex? See Brown (2012) for a closely related and more detailed criticism. More importantly for my purposes, the distinction between 'relational' and 'nonrelational' theories also cuts across that between SI and MSI theories.

them (Brown 2011; Rosenthal 2005; Rosenthal 2011a; Weisberg 2011), and most of them still remain controversial. It is beyond the purpose of this paper to evaluate these arguments and their rejoinders. I will focus on the discussion between MSI and SI theories, a discussion that has been ignored or pushed into the background, and on making plausible an SO account of self-involving representation that is compatible with naturalism.

3 SI Vs. MSI

3.1 The Phenomenological Observation.

The subjective character of experience is a property all, and only, phenomenally conscious experiences have in common. In that sense, it accounts for what makes an experience a conscious experience at all. This common element is manifest in our conscious experiences. To a first approximation, the best way to point out this common element is, I think, by similarities.

Experiences as of different shades of red are more similar, phenomenologically speaking, to each other than either is to an experience as of green. But all three experiences are also similar in some sense and differ phenomenologically from, say, visual experiences of forms, like a visual experience as of a square. And it seems that the phenomenal character of all visual experiences is, in a sense, similar. The same is true for other modalities: tactile experiences have something in common, the same for auditory experiences, visual experiences, taste experiences, pains, orgasms, etc.; and all experiences have something phenomenological in common. They are, so to speak, marked as *my* experiences. Phenomenally conscious experiences happen for me (the subject that is having the experience) in an immediate way, they are implicitly marked as *my* experiences. All conscious experiences have in common their distinct first-personal character: a quality of for-meness or me-ishness (Block 2007a; Kriegel 2009). A more detailed characterization of such a phenomenology is offered by Gallagher and Zahavi (2006):

There is something it is like to taste chocolate, and this is different from what it is like to remember what it is like to taste chocolate, or to smell

vanilla, to run, to stand still, to feel envious, nervous, depressed or happy, or to entertain an abstract belief. Yet, at the same time, as I live through these differences, there is something experiential that is, in some sense, the same, namely, their distinct first-personal character. All the experiences are characterized by a quality of mineness or for-me-ness, the fact that it is I who am having these experiences. All the experiences are given (at least tacitly) as my experiences, as experiences I am undergoing or living through. All of this suggests that first-person experience presents me with an immediate and non-observational access to myself, and that consequently (phenomenal) consciousness consequently entails a (minimal) form of self-consciousness.

The idea of qualities of the experience being presented to the subject that undergoes such an experience is introduced by Tyler Burge (2007) as follows:

Phenomenal consciousness in itself involves phenomenal qualities being conscious for, present for, the individual [...] I think that this relation can be recognized a priori, by reflection on what it is to be phenomenally conscious. Phenomenal consciousness is consciousness for an individual.
(405, my emphasis)

I am going to call this 'the phenomenological observation': it is the observation that, in phenomenally conscious experiences, phenomenal qualities are presented to the individual of experience, as Burge maintains, or that they are marked as my experiences as I presented it in the previous example.

The phenomenological observation suggests that a certain form of self-awareness is constitutive of the phenomenal character of experience; in having an experience, a quality is presented to oneself. If experiential awareness is to explain the subjective character (namely, what makes a state a phenomenally conscious state at all), then it has to explain this first-personal character that, the phenomenological observation suggests, is common to all and only phenomenally conscious mental states. Hence, if experiential awareness is to be unpacked as a form of representation, then the content of experience is not merely that such-and-such is the case, but that such-and-such is presented to the subject that enjoys the

experience: it is in the nature of experience that its correctness conditions concern the subject that is having the experience.¹³

3.2 F/SO-MSI

As we have seen, F/SO MSI theories have been proposed in the (pre-) phenomenological tradition by Brentano (1874/1973). In the analytic tradition, Uriah Kriegel (2009) has recently developed a neo-Brentanian reductive theory according to which my conscious experience of the apple is a state that represents certain features of the apple and also the state itself.¹⁴

But Kriegel's proposal fails to satisfactorily account for the phenomenological observation. I have suggested that what is phenomenologically manifest is the presence of the qualities of experience for the subject; the phenomenal character is self-involving: what my experience reveals is that both the apple and myself are constitutive of the content of the experience (the content is SI in opposition to *merely* MSI). The content of my experience is not merely that such and such is the case, but that such and such is presented to myself. In having phenomenally conscious experiences like this, I do not *merely* attribute certain properties to the object causing the experience, I attribute to myself the property of being in a certain state, that of being presented with an object with these properties.¹⁵

13 Ideas along these lines can be found in Frank (2007); Peacocke (MS); Zahavi (2005).

14 The idea of self-representation might appear contradictory to some at first glance. Kriegel, however, unpacks this idea in a way clearly compatible with naturalistic theories of mental content. To this aim, Kriegel introduces the notion of indirect content and makes use of the mereological distinction between complexes and sums. Roughly, the difference between mereological sums and complexes is that the way parts are interconnected is not essential for the former but it is for the latter. Kriegel concludes that a phenomenally conscious state, M, is a complex state that has two states, M* and M+, as proper parts, such that M* represents M+ directly and M indirectly in virtue of representing one of its proper parts. M is not a mere mereological sum of M* and M+, but a mereological complex. It is therefore clear why Kriegel's theory is a SO one: the presence of the "world-directed" state (M+) is necessary for M to have the required content. The difference between HO and Kriegel's SO theory depends on the distinction between complexes and sums, a distinction upon which one might cast reasonable doubts; see Sebastian (2012) for elaboration.

15 Philosophers like Sartre (1956) have tried to show how a reflexive structure of consciousness together with the temporal connection of consecutive episodes can explain the phenomenological observation. This kind of position illustrates a non-egological self-involving theory and shows how the distinction I am making here cuts across Gurwitsch's one. The discussion between SI and MSI theories is a semantic one, that is, a discussion about the content of experience. The distinction between egological and non-egological theories, like the one between HO and SO as I have presented, is a metasemantic discussion: a discussion about what is required to account for such content.

Although there are some proposals, like Williford (2006) and especially Williford, Rudrauf, and Landini

Kriegel concedes that the phenomenological observation reveals these facts, but denies that they are constitutive of phenomenal consciousness. What is constitutive of a phenomenally conscious mental state is having a content like 'this mental state is occurring' and not something like 'I am in this mental state'.

If I were to make another unpedestrian phenomenological assertion, I would say that my current experience's pre-reflective self-consciousness [experiential awareness] strikes me as egological [self-involving]¹⁶ that is a form of peripheral self-awareness. My peripheral awareness of my current experience is awareness of it as mine. There is an elusive sense of self-presence or self-manifestation inherent in even a simple conscious experience of the blue sky. It is less clear to me, however, that this feature of peripheral inner awareness, its being self-awareness and not mere inner awareness [SI and not merely MSI], is constitutive of the phenomenology. (Kriegel 2009, 177)

Kriegel holds that whereas the experience is self-involving in normal human adults, this fact is not constitutive of the phenomenology: experiential awareness is often self-involving but not constitutively so (2009, 178). He thinks that infants' and animals' experiences lack this feature. But, if phenomenal consciousness is essentially self-involving, then Kriegel's neo-Brentanian condition (a state representing itself) does not suffice for an experience to have subjective character.

I see no pre-theoretical reason for maintaining that infants' and animals' phenomenally conscious experiences differ in this respect from mine and are not SI—it is phenomenologically manifest that my experiences are somehow experiences of mine and not merely that they represent themselves. Kriegel could claim that my consideration is due to the fact that I am a human adult and human adults' experiences are SI. He could further

(2012), that elaborate on Satrean ideas, they do not pursue a representational project—the background assumption of this paper—but rather to find models that satisfy the observed reflexive structure of consciousness. It is widely accepted that structure does not suffice for mental content and therefore these proposals are not satisfactory for my current purposes. It is open to further analysis whether these two projects are compatible ones or not; for example, Williford (2011) appeals to similar structures as those proposed in the next section although, as noted, with different purposes.

¹⁶ Note that what is at issue in Kriegel's claim is what is conveyed by the experience: a semantic question. Therefore, the discussion is whether the experience is constitutively self-involving or not independently of the metasemantic question—whether something like an *ego* is required to account for such a content.

claim that, on the contrary, infants' or animals' experiences are not SI because of the highly cognitive demand that that would require, which in turn would entail that they do not enjoy conscious experiences. In the sequel, however, I will offer a notion of SI under which it is intuitive that infants and animals may have that kind of states.

One reason for rejecting SI theories is that they seem to be committed to postulate some sort of obscure experiencing entity, the *ego*, prior to the experience, which is the object of consciousness.¹⁷ This is, I think, misguided, for, as we are about to see, oneself is not represented *as an object* in the experience but, as Wittgenstein puts it, *as a subject*. Let me start the outline of a positive proposal by elaborating on this idea.

4 Sketch for a Self-Involving Theory

Self-Involving F/SO theories have their roots in Husserl's writings. However, there hasn't been, to the best of my knowledge, any attempt to elaborate on these ideas in naturalistically acceptable terms.

I have argued that the phenomenological observation supports the claim that in having an experience I am AWARE of myself as being in a certain state, which in the representational framework we are considering is a matter of representing myself as being in a certain state. Imagine Marta who is looking at a red apple. She has an experience as of red. Her experience conveys, in a nonconceptual manner, that she herself (Castañeda 1966) is confronted with a red object. Her experience does so without any need to identify herself with any kind of entity and is prior to any such identification. Marta might fail to know that she is Marta and thereby not know that Marta is confronted with any object. A characterization of the content of experience requires the so-called essential indexical (Perry 1979); the correctness conditions of phenomenally conscious states concern the very same individual that is undergoing the experience as such: the content of experience is *de se* (Castañeda 1966; Chisholm 1981; Lewis 1979).¹⁸ That is, in having an experience Marta

¹⁷ Namely, that SI theories are committed to egological views.

¹⁸ Understanding the content of experience as *de se* content offers two further advantages: First, as Egan (2006), following Shoemaker (1994, 2000), shows, it offers a proper characterization of the content of the experience that makes compatible representationalism about qualitative character and the empirical evidence in favor of shifted spectrum (Block 2007b). Second it offers an understanding of the sense of unity among my experiences that make them essentially different to others' experiences from my point of view.

attributes to herself (she represents herself as having) the property of being in a certain state, say that of being presented with a red apple. The experience is about the apple and in a sense about herself.

Shoemaker (1968) has presented a closely related idea. He distinguishes, following Wittgenstein (1958), two different uses of the word 'I' (or 'my'): a use *as an object* and a use *as a subject*. Although both entail a self-attribution of a property, the latter but not the former attribution is *Immune to Error through Misidentification relative to the first-person pronoun (IEM)* and is the one involved in the self-ascription of mental states in general and in experiential awareness in particular. For illustration we can consider Wittgenstein's examples as in the following two sentences:

1. My arm is broken.
2. I am in pain.

Imagine that Marta sees a person with an arm covered by a cast. She believes that she is in front of a mirror and comes thereby to have a belief that she would express with sentence (1). It makes sense to ask her whether she is sure that it is she who has the broken arm. This is an example of a use *as an object*. It requires identification with a particular person, and such identification is subject to error. Compare this with (2), which illustrates the use as a subject. As Wittgenstein puts it, "To ask 'are you sure it is you who have pains?' would be nonsensical": no error seems possible in this regard. Shoemaker goes on and argues that the use *as a subject* is not reducible to the use *as an object* because the use as an object requires identification and not every self-ascription could be grounded on an identification of a presented object as oneself—see also Frank (2007) for an elaboration of these ideas focusing on experiential awareness.¹⁹

¹⁹ This poses a serious problem for HOT theories. According to these theories a mental state is conscious in virtue of being targeted by a higher-order thought whose content includes the concept 'I'. The problem for conceptualism is to spell out the reference fixing mechanisms of the concept 'I' without appealing to the experience. Gennaro (2012) maintains that there are different *I-concepts* that might play the desired role: I qua this thing (or body), as opposed to other physical things, I qua experiencer of mental states, I qua enduring thinking thing. Gennaro convincingly argues that infants and most animals do have, at minimum, a self-concept like the first one. It is unclear what the relation between such a concept and the content of experience as *de se* content—which would require something along the lines of the second one (qua experiencer of mental state)—is. Now, in order to possess such a concept one arguably needs to undergo experiences, that in turn, according to conceptualist HOT theories, require one to possess the adequate concept. This challenge is faced by Rosenthal (2011b). He agrees that the reference of the pronoun 'I' in the higher-order thought refers to oneself as such, as the individual that does the referring. Rosenthal

Coming back to the example of Marta's experience while looking at the red apple, the apple is represented as an object of the experience, whereas she is not represented as an object in her experience but as the subject of it. This is precisely what the *de se* content amounts to in the case of experience: her experience represents both the apple *as an object* and herself *as a subject*. This distinction can be illustrated by noticing that whereas she can be mistaken about what is represented as object (she can hallucinate a red apple, suffer an illusion, and see a green apple as red), it is not plausible to maintain that she can be mistaken about the fact that she herself is the one undergoing the experience.

The content of my experience is not merely that such and such is the case, but that such and such is presented to myself: the content of experience is *de se*. In having an experience I self-attribute a certain property (Lewis 1979), that of being in certain state. And according to Shoemaker such self-attribution is immune to error through misidentification. What requires further clarification is how a mental state comes to have such content: what it takes to self-attribute the property of being in a certain state, at least in the particular case of experiences.

I will deal with this question in 4.2, but it will be useful to briefly outline the project of naturalizing mental content in general and present an example first. This is the purpose of the next subsection.

4.1 Understanding and Naturalizing Mental Content

I like the view of mental content according to which the role of mental states is to distinguish between different possibilities (Stalnaker (1999)). Mental states have traditionally been taken to be correct or incorrect relative to a way the world might be: they divide the space of possibilities determining sets of possible worlds. Consider for example one's belief that there is a red apple on the table. This belief distinguishes two ways the world might be—it might be such that there is a red apple on the table or such that there is

maintains that it is the disposition to identify an individual as the thinker of a thought including 'I'—thereby rejecting IEM—that secures the reference; this way, he goes on, self-reference seems to be independent of self-description altogether. But this explanation seems to be unsatisfactory because, as we saw in the case of Tye's POISE, experiential awareness is a categorical property, which cannot be satisfactorily explained in terms of a disposition: what happens when a subject lacks such a disposition because of say a memory problem? Would she thereby lack consciousness? In order to evaluate the merits of this proposal the categorical basis of this disposition has to be spelled out.

not—and one takes part for one side of the distinction: it is correct or appropriate in the first case and incorrect otherwise. Such a partition of the space of possibilities is typically determined by the attribution of properties to objects; i.e., by representing objects as having properties—like that of being red to the apple in the example.

Naturalistic theories of mental content attempt to explain what it takes to attribute a property to an object: they attempt to explain the relation that holds between the vehicle of representation and its content, how we represent the world as being a certain way—in a way that is compatible with the truth of materialism. One of the most promising family of theories in this project is the teleosemantic one. I will present them as an example and I will make use of their core ideas in presenting my own proposal in the next subsection.

Dretske (1988) has defended that the notion of representation is intimately connected to that of indication (tracking of information) but that we don't want to maintain that a mental state *M* represents all the things that it indicates; *M* represents exclusively those entities that it indicates in *normal conditions*. This is a normative notion that has to be unpacked, and for this purpose teleological theories appeal to the teleological function of *M*.²⁰ Dretske maintains that a representing system is one that has the teleological function of indicating that such-and-such is the case, being such-and-such its intentional content:

(Teleological) A state *M* represents *C* because *M* has the teleological function of indicating *C*.²¹

According to these theories, a mental state, *M*, represents that there is a red object (attributes the property of being red to an object) because *M* has the teleological function of indicating red objects. *Teleological*, as an example of a metasemantic theory, attempts to explain the attribution of properties to objects, but this does not suffice for understanding mental states whose content is *de se*—as I have argued it is in the case of conscious states. The reason is that they make finer-grained partitions (Lewis 1979; Perry, 1979; cf. Stalnaker 2008) than that among possible worlds: they are not correct or incorrect relative

20 According to it, the function of a trait is not necessarily something the trait does, but rather something that the trait is supposed to do. Function attributions seem to be normative in this sense. For example, it is said that the function of kidneys is to filter toxins and waste products from the blood, even in the case of someone suffering from renal insufficiency.

21 This rough characterization is intended to capture the insight of teleological theories. For further and different elaboration of the details, see, for example, Dretske (1988); Millikan (1984, 1989); Mossio, Saborido, and Moreno (2009); Neander (1991); and Schroeder (2004).

to a way the world might be but also relative to an individual.²² Following Lewis (1979), such partitions are determined not by attribution of properties to objects but by self-attribution of properties. In having an experience I self-attribute a certain property: that of being in a certain state. To a first approximation (leaving worries about circularity and reduction aside for the moment) this idea can be expressed in ordinary English by saying that in having an experience as of a red apple I attribute to myself (self-attribute) the property of being confronted with an object that is causing an experience as of a red apple in me in normal circumstances.²³

Let me recapitulate before moving on into a positive proposal. The kind of theories I am considering in this paper attempt to explain experiential awareness in representational terms. In section 2 I have made a distinction among these theories depending on how they characterize the content that accounts for it; whether the correctness conditions concern the subject having the experience or merely the mental state itself and argue that the former is to be preferred: experiential awareness is explained as representing myself as being in a certain state. We have seen that, if the project has naturalistic ambition, besides offering a characterization of the content that accounts for experiential awareness a metasemantic theory is required—an explanation of how a mental state comes to have the content it has. Metasemantic theories like teleosemantics are promising in offering such an explanation in the case of propositional attitudes and help us understand what it takes to attribute a property to an object; but, as we have seen, this is not sufficient for states whose content is *de se* like conscious experiences. We need an answer to the question of what it takes to self-attribute a property. Offering a reply to it in SO terms in the particular case of conscious states is the purpose of the next subsection.

22 More formally, whereas the content of propositional attitudes determine a set of possible worlds, centered propositions, understood as the content of *de se* attitudes, determine sets of centered worlds, that is sets of pairs of possible worlds and individuals ($\langle w, i \rangle$). Propositions are determined by the attribution of properties to objects, centered propositions by a self-attribution of properties. Following Lewis (1979) the latter is not reducible to the former but not so the other way around. For further details, see, for example, Egan (2006) and Lewis (1979).

23 Let me remark once again that the fact that the content of an experience is expressible through these complex English sentences does not entail that the subject needs to have the corresponding conceptual capacity in order to have an experience. The content of, at least some, experiences is nonconceptual (Crane 1992; Dretske 1981; Evans 1982; Peacocke 1986).

4.2 Naturalizing *De Se* Content.

My experience represents myself in a particular way that we have characterized as *representation as a subject*: the correctness conditions of the experience concern the very same individual that is undergoing the experience *as such*. In having an experience I self-attribute (I represent myself as having) a certain property, where in Lewis's words, "Self-ascription of properties is ascription of properties *to oneself under the relation of identity*"²⁴ (1979, 543, my emphasis). Furthermore, this self-attribution should better not involve identification if Shoemaker is right—cf. Rosenthal (2011b).

The first question that should be faced is what kind of entities are individuals in the claim above. In a naturalistic framework, organisms are probably the best candidates for this. Organisms are prior to experiences; this does not mean that representations of organisms are prior to the experience nor that I have to recognize myself as being a certain organism—I do not have to identify myself with a certain organism. Having an experience as of a red apple cannot be a matter of representing one privileged organism and representing the apple. In this case we would have two representations *as an object*, and it is unclear how, and Shoemaker has argued not possible that, I can come to identify myself with such an entity. We need to explain how the organism represents itself as having a certain property, how such a self-ascription is possible without identification.

Organisms are continuously changing entities that remain nonetheless as functional unities, as unique systems, during the organisms' life. A widespread view in biology holds that living organisms are self-maintaining systems. The notion of a self-maintaining system has a long history in philosophy dating back to Aristotle (Godfrey-Smith 1994; McLaughlin 2001). In contemporary science it was popularized by cyberneticians but more recently, after Ilya Prigogine won the Nobel Prize in 1977 for his work on dissipative structures and their role in thermodynamics, many scientists started to migrate from the cybernetic approach to the thermodynamic view of self-maintaining systems.

In a self-maintaining system, the dynamics of the system tend to maintain the inherent order; its organizational pattern appears without a central authority or external element

²⁴ It is important to recall that a subject *S* might attribute to *S* a property without self-attributing it: Perry might believe that Perry is making a mess without believing that he himself is making a mess (Perry 1979).

imposing it through planning. This globally coherent pattern appears from the local interaction of the elements that makes up the system. The organization is, in a way, parallel, for all the elements act at the same time, and are distributed, for no element is a coordinator.^{25,26}

If organisms are self-maintaining systems it seem appealing to look for the mechanisms that guarantee the stability within the organism's boundaries as the mechanisms that ground the distinction between what is part of the system—the organism—and what is not me, the distinction between what is me and what is not, and might also be justified by the phenomenological sense of unity of all my experiences as being present for the same individual or self.

One interesting proposal in this direction is Damasio's notion of proto-self. In his book, *The Feeling of What Happens*, Damasio (2000) presented the proto-self as a constitutive element of our experiences.²⁷

According to Damasio,

The proto-self is a coherent collection of neural patterns which map [represent], moment by moment, the state of a physical structure of the organism in its many dimensions...[t]hese structures are intimately involved in the process of regulating the state of the organism. (Damasio, 2000, 154)

It is an integrated collection of separate neural patterns that map,

25 A simple example of these self-maintaining systems is the flame of a candle. In the flame of a candle, the microscopic reactions of combustion give rise to a macroscopic pattern, the flame, which makes a crucial contribution to maintaining the microscopic chemical reaction by vaporizing wax, keeping the temperature above the combustion threshold, etc. The flame itself favors the conditions that enable it to work. This is an example of the minimal expression of self-maintenance, called 'dissipative structures':

Dissipative structures are systems in which a huge number of microscopic elements adopt a global, macroscopic ordered pattern (a 'structure') in the presence of a specific flow of energy and matter in far-from-thermodynamic equilibrium (FFE) conditions. Mossio, Saborido, and Moreno (2009, 822)

26 Teleological theories of mental content are typically etiological theories. According to them, the function of a trait depends on the causal history of (tokens of the type of) the trait, evolution typically: the function of the trait is what the trait has been selected for (Cao 2012; Dretske 1995; Millikan 1989; Neander 1991; Papineau 1993; Shea 2007; Tye 2002). Many have thought that the metaphysical possibility of a microphysical duplicate of a human being lacking an evolutionary history—a Swampman—jeopardizes this kind of theories. Appealing to the contribution of a trait to a self-maintaining system one might try to unpack the normativity—the “normal conditions”—in the relation of representation getting rid of the causal history of the trait. For details, see Mossio, Saborido and Moreno (2009).

27 For a further development of Damasio's ideas about consciousness and the self see Damasio (2010).

moment by moment, the most stable aspects of the organism's physical structure. (Damasio, 2010, 190)

The proto-self does not just map the internal milieu (the extracellular fluid environment) but also, for example, the musculoskeletal and visceral musculature. I will make use of this proto-self in my elaboration of the conditions under which a mental state becomes to have *de se* content—in the particular case of experiences. I think that we can offer an account of such *de se* content by characterizing a conscious state as a complex of two states that I will call 'proto-self' and 'the proto-qualitative state'.

On the one hand, the proto-self is a brain structure that has the function of regulating the homeostasis of the organism. It regulates the internal environment and tends to maintain a stable, constant condition required by the self-maintaining system; the stability required for life.

On the other hand, the proto-qualitative state is another brain structure that has the function of indicating that such-and-such state of affairs obtain in the world—for example, the function of indicating that there is a red apple—as in *teleological*.²⁸

Different phenomenally conscious states are constituted by different proto-qualitative states. Proto-qualitative states are not phenomenally conscious: the proto-qualitative state doesn't have the required content. The proto-self is not a phenomenally conscious state either. It is the interaction between both of them that gives rise to a phenomenally conscious mental state that has the function of indicating that the very same organism that the proto-self regulates is being affected by the object the proto-qualitative state represents.²⁹

When looking at the red apple in front of me I undergo a phenomenally conscious experience. My visual system will generate a representation of the properties of the apple; this is a proto-qualitative state (PQ). Let me focus on the redness of my experience, accept, following *teleological*, that the content a mental state is what it has the function of

28 Formally, one could think of the content of proto-qualitative states as the properties that result from fixing the individual in the centered features that I have argued constitute the content of experience. The content of a proto-qualitative state PQ would therefore be a set of worlds and not a set of centered worlds.

29 One should not find puzzling the idea that the PS-PQ complex have different representational properties that those PS and PQ conjointly have. For there is nothing particularly mysterious, at least *prima facie*, in the fact that the interaction between parts gives rise to complexes having different properties than those held by the conjunction of the parts. Just consider two atoms of hydrogen and one of oxygen that do not constitute a molecule on the one hand and a water molecule on the other.

indicating and, for the sake of simplicity, that PQ has the function of indicating what is disposed to cause it in normal conditions,³⁰ which in this case would be something like 'via the *particular visual path*_{PQ} under *particular lighting conditions*_{PQ}'.³¹ An object would have the property that PQ represents only if the object is disposed to cause the activation of PQ via the *particular visual path*_{PQ} under *particular lighting conditions*_{PQ}. Imagine that if an object reflects light with, say, a wavelength of 650nm in these lighting conditions, then it can cause PQ via *the particular visual path*_{PQ}. The surface of the apple reflects light, in these *particular lighting conditions*_{PQ}, with a wavelength of 650nm and is therefore represented by PQ: when the system is in PQ, it attributes to the apple this surface reflectance. The proto-qualitative state indicates a certain shade of red (assuming colors are surface reflectances). But this is, still, an unconscious representation.

On the other hand, the organism has a subsystem, the proto-self, that monitors and controls the homeodynamics of the organism. The proto-self represents the status of certain internal state like the extracellular fluid environment, the musculoskeletal structure and the visceral musculature.³² This latter representation is altered by the processing of the apple—changes in the retina or in the muscles that control the position of the eyeball, but also changes in the smooth musculature of the viscera, at various places of the body, corresponding to emotional responses, some of them innate. At the level of content, this interaction will explain why the content of the complex state constituted by the proto-self and the proto-qualitative state is *de se*. What is relevant for the correctness of this mental state is not only the properties that the object of the experience (say, the apple) has; that the apple is causing the activation of a certain neural network (PQ) in normal conditions, but the fact that it is causing the activity of the neural network and that this neural network

30 For more detailed characterizations see any of the teleological proposals mentioned in fn. 26. Nothing relevant for my current purposes hinges on these details.

31 *PQ_i* doesn't have the function of indicating Transcranial Magnetic Stimulation or any drug, even if both are disposed to cause its activation. For that reason something like 'via the *particular visual path*_{PQ}' is included. In the case of vision, the normal conditions would also include particular lightning conditions. These normal conditions have to be fixed by the teleological function of *PQ*, assuming the truth of a teleological theory of mental content.

32 Two things are worth stressing to avoid misunderstandings.

First, the proto-self does not have the function of indicating the presence of the PQ state, the PQ state is not part of its content. Second, the proto-self indicates a certain state of the organism. Its content would be something like 'there is such and such internal state' or 'organism O is in such and such internal state'. It does not indicate that I am in a certain state, its content is not *de se*.

plays a relevant role in the homeodynamic regulation of a particular organism, the very same organism that the proto-self happens to regulate. The function of this complex is not just to indicate (to track information about) an object with certain surface reflectance nor to indicate that such-and-such bodily state obtains, but to indicate that the very same system that is doing the representing (given that the PS is part of the complex) is in a certain perceptual state. When the organism is in this complex state it does not attribute a property to another object but it attributes a property—that of being in certain perceptual state—to itself, to the very same organism that the proto-self regulates, “under the relation of identity”: the system attributes the property to the very same system that is doing the representing without any need of an identification. This complex state represents that the organism itself (Castañeda 1966) is presented with an object that PQ represents: the object that is disposed to cause PQ in normal conditions (*via particular visual path_{PQ} under particular lighting conditions_{PQ}*).³³

Figure 1 illustrates the model. To remark that this is not an HO proposal, causal and representational relations are indicated in red and green respectively. A stimulus S causes the activation of the proto-qualitative state (PQ). On the other hand, PQ represents S because S is what causes PQ in normal conditions: PQ has the function of indicating S. Something similar happens in the case of the proto-self, a collection of states that have the function of indicating the situation of bodily internal states. There are furthermore, causal connections that might involve some further structures (Interrelation Structures), between the proto-self and the proto-qualitative state. These causal processes are a constitutive part of a phenomenally conscious state for they allow for the interaction between the proto-self and the proto-qualitative state that is required for giving rise to a state with *de se* content according to the proposed theory.

³³ One might object that this kind of interaction between a state and the proto-self might happen entirely unconsciously. As a conceptual possibility it cuts no ice against the proposal. I argue that experiential awareness should be explained in *de se* terms and make an empirical claim about the kind of brain structures interaction that would account for such content. Surely, if we were to find empirical evidence that such an interaction were to obtain in an unconscious process, this would falsify this part of the presented proposal.

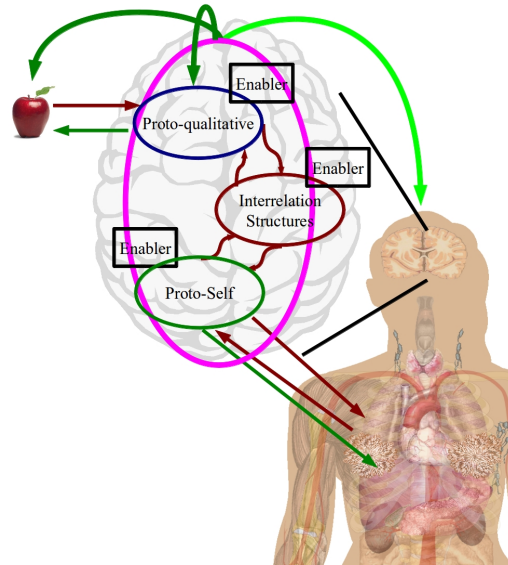


Figure 1. The proto-self interacts with the proto-qualitative state.

Green arrows in fig.1 also show that the conscious state (in magenta) is concerned with the apple and the proto-qualitative state—both constitutive of the perceptual state—but also with the organism itself. A different color (light green) marks the discussed particular sense in which the organism itself enters the truth conditions of the conscious state.

At the neural level, the total neural correlate of an experience as of red will be constituted by the proto-qualitative state, the proto-self and the structures that implement the interaction between the proto-self and the proto-qualitative state plus the mechanisms that allow these areas to perform their function.³⁴ Figure 2 illustrates some of the involved areas (see Damasio [2000, 2010]; Laureys and Tononi [2008] for empirical evidence suggesting that these areas are constitutive of the neural correlate of our conscious experiences), according to the colors in fig.1.³⁵³⁶

34 I call these mechanisms 'enablers'. An example of an enabler is the reticular formation.

35 The brain pictures are copyrighted by the University of Washington (Digital Anatomist Program).

36 The proposal above is an example of non-cognitive theory (Overgaard and Gruennbaum, 2012) and is perfectly compatible with the most popular account of our cognitive access to our mental states, the Global Workspace theory (GWS) (Baars (1988); Dehaene (2009)). This theory postulates a kind of memory system, the GWS, which encodes the content of certain states. The content of this memory is broadcast for global control and can be freely used in reasoning, reporting, and rational control of action. According to the GWS theory, allied processes compete for access to the GWS, forming assemblies striving to disseminate their messages to all other processes in an effort to recruit more cohorts and thereby increase the likelihood of achieving their goals. Phenomenally conscious mental states have good

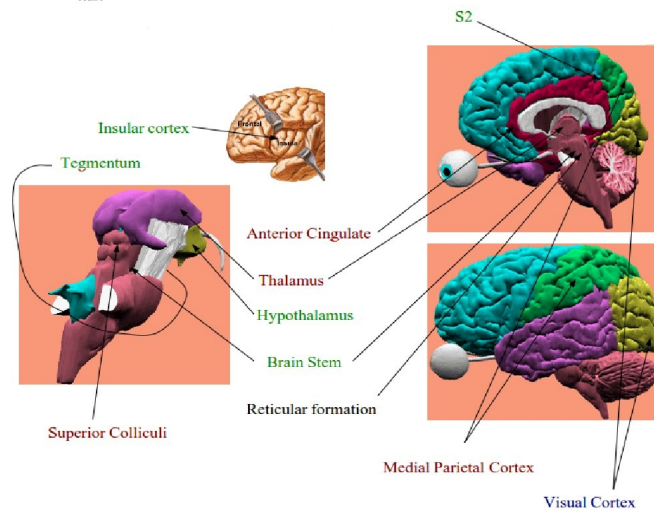


Fig. 2: Structures involved in phenomenal consciousness

5 Conclusions

It is platitudinous that in having an experience one is AWARE of having it. The characterization of this relation underlies the problem of the subjective character of experience and is essential to any theory of consciousness.

I have offered an orthogonal distinction to that between HO and F/SO theories between Self-Involving theories and Mental-State-Involving theories, and argued that what is phenomenologically manifest is the former: in having an experience I represent myself as being in a certain state. It is in the nature of the content of experience that it concerns the subject that is having the experience. The content of the experience is *de se*.

In order to have an alternative to HO theories, I have sketched, in naturalistically acceptable terms, a characterization of such *de se* content and the basics of a possible model of what it takes for a mental state to have self-involving content. A model supported by

chances of gaining access to the GWS. The proto-qualitative state and the proto-self are examples of those assemblies: the recurrent loops between them that help to constitute the phenomenally conscious mental state would at the same time increase the likelihood that the phenomenally conscious state will access the GWS. Arguably further processes are required in order to gain access to the global workspace. Attention is likely to be one of the mechanisms involved (see Kentridge 2011; Koch and Tsuchiya 2007; and Prinz 2011; for discussion on the relation between consciousness and attention).

current biological theories and neurological evidence.³⁷

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