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

*Miguel Ángel Sebastián*

msebastian@gmail.com

Abstract

In having an experience one is *aware* of having it. Having an *experience* requires some form of *access* to one's own experience, which distinguishes phenomenally conscious mental states from other kind 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-Order (FO) theorists need to offer an account of such an 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 FO 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 first-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. On the other hand, a theory of subjective character explains what it is like *for*
me to undergo the experience. It abstracts from the particular way 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)).

Conscious experiences differ in a relevant sense from other kind of states. Conscious experiences are not states that merely happen in me, states that I merely “host”, as the beating of my heart or sub-personal 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 AWARE of my experience. As Kriegel presents the idea:

[When 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, p. 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 between two senses: it can mean i) representation of the state itself or ii) representation of the self. This contrast allows me to build a distinction, orthogonal to the well known one between first-order and higher-order (introduced in section 2.1), between what I will call mental-state-involving theories (i) and self-involving theories (ii).

In section 3 I will vindicate the self-involving view and in section 4 I will present the basics for an understanding, in naturalistic compatible terms, of self-involving representation without the need of higher-order representation.

2 The Logical Space for Experiential Awareness.

2.1 First-Order (FO) vs. Higher-Order (HO) Theories

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

---

1 This paper focuses on the subjective character and remains neutral on the relation between the 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, which exhibit qualitative character while lacking subjective character, as I believe it 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.
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 non-conscious states by appealing to a higher-order AWARENESS. 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 phenomenal conscious mental states, which is lacking in the case of other kind of states. The kind of representation that is required by the theory makes a basic difference among 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); Rosenthal (1997, 2005)) the latter Higher-Order Perception (HOP) or 'inner-sense' theories (Amstrong (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 to 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, however, mainly interested in the structure of consciousness and are not very interested in reductive theories of consciousness (explaining consciousness in non-conscious terms). According these views, experiential awareness or self-representation should be better understood in first-order terms and not as something conferred by another state, as in HO theories.

However, reductive FO theories have typically focused on the problem of qualitative character and being blamed by their opponents of either ignoring the problem of subjective character or failed 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 intensional content is not individuated by the particular things represented; and Non-conceptual in the sense that it is not structured into concepts.

Granting the possibility of non-conscious, abstract and non-conceptual intentional content, Poised is presumably the part of the theory responsible for the distinction between phenomenally conscious states and other kind of states and therefore the part responsible for accounting for the subjective character of the experience. The difference between conscious and non-conscious mental states is a difference in functional role: the former but not the latter is available.

\footnote{See Merikle and Daneman (1999) for a review of the empirical evidence in favor non-conscious perception.}
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 Poised, as some philosophers have noted (Burge (1997); Kriegel (2009)) cannot be the right kind of property that accounts for self-awareness because the latter is something occurrent/manifest and the former a mere dispositional property.

An alternative to HO would have to be able to construct self-representation in first-order terms.

### 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.
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, pp.153-154)

> The mentally active subject has himself as object of a secondary reference regardless of what else he refers to as his primary object. (Brentano (1874/1973, pp. 276-277), also quoted Kriegel (2003))

I will call 'self-involving' (SI) those theories that maintain that a sense of self is required to characterize the correctness conditions—the content—of experience and 'mental state-involving' (MSI) those theories that maintain that it is merely the state itself what enters the content of experience.4

The distinction between MSI and SI is clearly orthogonal to the one between FO an HO theories. It seems reasonable to see HOP theories (Carruthers (2000); Lycan (1996)) as defending a MSI view because they typically construct experiential awareness as a form of higher-order perception, which is about/represents the first-order one, without any need to appeal to oneself in the correctness conditions of this higher-order state.

For instance, in Carruthers (2000) theory, some of the first-order perceptual states acquire, at the same time, a higher-order content by virtue of its availability to the Theory of Mind faculty combined with the truth of some version

---

4 These positions are sometimes referred to in the literature as ‘non-egological’ and ‘ego- logical’ [Gurwitsch (1941)]. I prefer the name ‘self-involving’ to ‘ego-logical’ because I prefer to avoid the unnecessary, and often confusing, connotations of the term ‘ego’, which, as we will see have lead some philosophers to reject self-involving views.
of consumer semantics. This way, a percept of red might be at the same time a representation of green and a representation of seems red or experience of red. States with this later content are phenomenally conscious states.

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

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

Brentano, for example, seems to endorse clearly a MSI position. According to him, consciousness is directed at the same time at its primary object (say the apple) and at itself as a secondary object. While rejecting that there are two different “acts of consciousness”, some phenomenologists like Sartre or Merleau-Ponty have defended positions in the vicinity of a MSI view. On the other hand, a FO-SI position has been defended by some philosophers like Zahavi and Husserl. 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.

<table>
<thead>
<tr>
<th></th>
<th>MSI</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brentano (1874/1973)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merleau-Ponty (1945); Sartre (1956)</td>
<td></td>
</tr>
</tbody>
</table>

Tab. 1: The logical space of self-awareness

HO theories, on the other hand, have been deeply studied. It is well known that they face some serious objections (Block (2007a, 2011, forthcoming); Caston (2002); Kriegel (2009); Neander (1998); Sebastian (forthcoming); Shoemaker (1968)), but it is also true that HO theorists have tried to rejoin them (Brown (2011); Rosenthal (2011a, 2005); 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 in making plausible a first-order account of self-involving representation in naturalistic compatible terms.

5 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, which the cognitive system is prepared to make in the presence of that state.

6 See also Williford (2006)

7 The claim that Husserl maintains a self-involving position is controversial. See Zahavi (2005), especially chapter 2.
3 SI Vs. MSI

3.1 The Phenomenological Observation.

The subjective character of the 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 to this common element is, I think, by similarities.

Experiences as of different shades of red are more similar, phenomenologically speaking, between them than with regard to an experience as of green. But they are also in sense similar and differ phenomenologically from, say visual experiences of forms, like a visual experience as of a square. And it seems that, in a sense, 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 experience. 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.(ibid. p.405, my emphasis)
I am going to call the *phenomenological observation*, 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 is constitutive of the phenomenal character of the 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 the 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. As Peacocke (MS) puts it, it is in the nature of the experience that its correctness conditions concern the subject that is having the experience. 

3.2 FO-MSI

As we have seen first-Order Mental-State-Involving theories have been proposed in the phenomenological tradition by Brentano (1874/1973); Merleau-Ponty (1945); Sartre (1956). We have also seen that there is, nonetheless, substantial disagreement among these theories. Brentano maintained that the experience I undergo when I hear a certain sound has both, the sound and the hearing, as their objects. On the other hand, Merleau-Ponty or Sartre disagree and argue that my Awareness of my experience is not an awareness of it as an object. Although the idea of representing something not as an object may seem obscure at this point, I think we will be able to make sense of it after presenting the centered world semantics for *de se* content in the next section.

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. 

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 phenomenally conscious experiences I do not merely attribute certain properties to the object causing the experience, I attribute to myself being presented with an object with these properties.10

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] –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 [phenomenal character] –its being self-awareness and not mere inner awareness [SI and not merely MSI]– is constitutive of the phenomenology. Kriegel (2009, p. 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 egological but not constitutively so.” (ibid. p.178). He thinks that infants’ and animals’ experiences lack this feature. If phenomenal consciousness is essentially self-involving then Kriegel’s neobrentian 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 seems to me that a certain form of self is essential for an account of the phenomenal character of experiences: it is phenomenologically manifest that my experiences are somehow experiences of mine and not 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 claim that, on the other hand, infants’ or animals’ experiences are not SI because of the highly cognitive demand that that would require. In the sequel, however, I

---

10 Philosophers like Sartre, have tried to show how a reflexive structure of consciousness together with the temporal connection of consecutive episodes can explain the phenomenological observation. However, my aim is to offer a reductive account of consciousness in representational terms. As far as I know, there is no reductive account that has tried to elaborate on these Sartrean ideas. Furthermore, it is unclear how MSI can come to construct de se content by appealing to a reflexive structure.

I am grateful to Kenneth Williford for pressing me in this point.
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, and hence the term 'egological' that I try to avoid—prior to the experience which is the object of consciousness. 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 elaborate on this idea.

4 Sketch for a Self-Involving Theory

Self-Involving 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 naturalistic compatible terms.

When I was presenting the phenomenological observation, I noted that I experience my experiences as mine, it is for-me. In having an experience I attribute to myself (I represent myself as having) the property of being presented with an entity with certain features. The experience is about the apple and in a sense about myself.

Imagine Marta who is looking at a red apple. She has an experience as of red. Her experience conveys, in a non-conceptual 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 knowing 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 content (Castañeda (1966); Chisholm (1981); Lewis (1979)).

Shoemaker (1968) has presented a similar idea in a slightly different way. 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'. The latter but not the former is immune to error through misidentification relative to the first-person pronoun and is the one involved in experiential awareness. For illustration we can consider Wittgenstein examples as in the following two sentences:

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

(1) is an example of a use “as an object”. It requires the recognition of a particular person, and such recognition has to make room for the possibility of

---

11 Understanding the content of the 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 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.
error. 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 the sentence 'My arm is broken'. It makes sense to ask her whether she is sure that it is her who has the broken arm. Compare this with (2). As Wittgenstein puts it “To ask ‘are you sure it is you who have pains?’ would be nonsensical.” Shoemaker goes on and argues that the use as a subject is not reducible to a 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).12

Coming back to red apple example, we have seen that this experience is about the apple but also about myself. There is a big difference between the sense in which the two elements are represented. The apple is represented as an object of the experience, whereas I am not represented as an object in my experience but as the subject of it. This is precisely what the de se content amounts to: my experience represents both the apple as an object and myself as a subject. This distinction can be illustrated by noticing that whereas I can be mistaken about what is represented as object (I can hallucinate a red apple, suffer an illusion and see a green apple as red), it is not plausible to maintain that I can be mistaken about the fact that I am 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. What requires further clarification is the fact that the content of phenomenally conscious experiences is de se content and how a mental state comes to have such content.

Let me first get clear about what it mean that the content of the experience is about myself as a subject, about the idea of de se content.

---

12This poses a serious problem for HOT theories. According to these theories a mental state is conscious in virtue of being targeted by a higher-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 as the first one. It is unclear what the relation between such a concept and the content of experience as de se content is, which would require something along the lines of the second one —qua experiencer of mental state. Now, in order to possess such a concept one arguably needs to undergo experiences, what in turns, according to HOT theories, requires to possess the adequate concepts.

This challenge is faced by Rosenthal (2011b). He agrees that the reference of the pronoun 'I' the higher-order thought refers to oneself as such, “as the individual that does the referring”. Rosenthal maintains that it is the disposition to identify an individual as the thinker of a thought including 'I' what secures the reference, this way, he goes on, “self-reference seems to be independent of self-description all together”. This explanation seems to be unsatisfactory because, as we saw in the case of Tye’s POISED, 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.
4.1 Understanding De Se Content.

I like the view about mental content according to which the role of mental states is to distinguish between different possibilities (Stalnaker (1999)). Content of mental states, are ways of dividing the space of possibilities. So, what is relevant to the content is that it excludes certain possibilities.

According to this view, my belief that Assange’s arrest is a farce distinguishes between worlds that I take to be candidates to be actual; namely, worlds in which Assange’s arrest is a farce, and worlds in which it is not. The division in the logical space is made according to the corresponding proposition, in this case ‘Assange’s arrest is a farce’. We can, therefore, understand propositions as functions from worlds to truth values.

When I have a state with de se content, its correctness condition do not merely concern the way the world might be but also myself. Propositions are not well-suited to capture its content. When I have, say, a belief about myself, it is not well picked up as an attitude toward a proposition (understood as a set of possible worlds). As Egan (2006) notes:

Possible-worlds propositions do not cut finely enough –knowledge of, and belief about, possible worlds propositions can pin down which worlds I am in, but cannot pin down my location within that world. (2006, p.106)

We need centered proposition. If a possible world is a way the world might be, a centered world can be thought as a way the world might be for an individual. Centered worlds propositions do not just individuate a way the world could be, but also a certain logical position within this world. We can think of them as functions from ordered pairs of worlds and individuals (⟨world, individual⟩) to truth value. The content of my experience is a centered proposition, a function from world centered in me to a truth value.

The set of worlds that constitutes the content are generally (if not always) determined by the attribution of properties to things. In the example of my belief the content is the set of worlds in which Assange’s arrest has the property of ‘being a farce’. For a given world, a property determines an extension. In the actual world (⊆) ‘being a farce’ determines an extension of all the things that are a farce in ⊆. Assange’s arrest is in the extension of ‘being a farce’ in the actual world if, and only if, ⊆ is a member of the proposition expressed by ‘Assange’s arrest is a farce.’ In such a case, we can think of properties as functions from worlds to extensions.

If the above mentioned analysis of the content of the experience is true I do not attribute to the apple a property so understood but a centered property

\[\text{In order to make a certain partition of the logical space, one does not require to possess the concepts required to express this proposition, in spite of the fact that the proposition is usually expressed by a sentence. I am assuming here that the content of the experience is non-conceptual: experiences have correctness conditions, make partitions in the space of possibilities, independently on whether the individuals undergoing them have the conceptual resources to express such conditions.}\]
understood as a function from pairs of possible worlds and individuals to extensions. That is to say, in having an experience I attribute to myself a certain property (Lewis (1979)).

To a first approximation (leaving worries about circularity and reduction aside for the moment) this idea can be expressed in ordinary English either by saying that by having an experience as of a red apple I attribute to the apple the centered feature of having the disposition to cause an experience as of a red apple in me or by saying that by having an experience as of a red apple I attribute to myself (self-attribute) the property of being confronted with an object that has the disposition to cause experiences as of a red apple in me. The content of this centered proposition is a set of centered worlds, those centered worlds in which the object I am looking at is disposed to cause the experience in me.

The content of this centered proposition is a set of centered worlds, those centered worlds in which the object I am looking at is disposed to cause the experience in me (those centered worlds in which I am confronted with the object that causes the experience in normal circumstances).

The next step, to make sense of this proposal, is to get clear about the kind of entities that individuals, selves or subjects of experiences are and how the correctness conditions concern them in a way that is compatible with naturalistic theories of mental content.

### 4.2 Naturalizing De Se Content.

I have argued that the correctness conditions of an experience concern the very same individual that is undergoing such an experience as such. My experience represents myself in a particular way that we have characterized as representation as a subject to contrast it with other manners of representing. In having an experience I self-attribute (I represent myself as having) a certain property. As we have seen, this kind of self-attribution does not require identifying oneself with any kind of entity. A centered world semantics presented in the previous section provides a framework for understanding this manner of representation; it provides a semantic of de se content. A naturalistic theory requires, on top of that, an explanation of the relation that holds between the vehicle of representation and its content. In this section I attempt to provide the first steps towards a metasemantic theory of de se content.

We can consider, for illustration purposes, a naturalistic theory of mental content according to which a representing system is one that has the teleological function of indicating that such-and-such is the case, being such-and-such its content. In centered world semantics, the content of experience is understood

---

14 With this semantic tool in hand, we can think of MSI contents as functions from pairs of worlds and mental state to truth value. In this case it becomes even clearer that from just with MSI content we cannot make sense of the idea that all my experiences are for-me.

15 Let me remark once again that the fact that the content of an experience be expressible through these complex English sentences does not entail that the subject need to have the corresponding conceptual capacity in order to have an experience. The content of experience is non-conceptual (Crane (1992); Dretske (1981); Evans (1982); Peacocke (1986)).

16 This over-simplistic example amounts to the claim that representational states represent what causes them in normal circumstances, where the normative notion 'normal circumstances' is unpacked appealing to the function of the state. It is intended to capture the
as a function from pairs of words and individuals to truth value. How a state does come to have the function to indicate centered properties; i.e., how does a state come to have *de se* content? Moreover, if one is moved by the arguments against HO and in order to have an alternative to such theories, the reply to this last question should better not involve meta-representation.

The first question that should be faced is what kind of entities enters as a parameter of this function. In a naturalistic framework, organisms are probably the best candidates for this. In centered world semantics, organisms would occupy the centered position. 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. 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, and Shoemaker has argued not possible, how can I 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 a functional unity, as a unique system, during the organism’s life. A widespread view in biology, holds that living organisms are self-maintaining systems. The notion of self-maintained system has a long history in philosophy dating back to Aristotle (Godfrey-Smith (1994); McLaughlin (2001)). In contemporary science it was popularized by cyberneticians and more recently, after Ilya Prigogine won the Nobel Prize in 1977 for his work on dissipative structures and their role in thermodynamics, many scientists start to migrate from the cybernetic approach to the thermodynamic view on 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 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 way parallel, for all the elements *act* at the same time and distributed for no element is a coordinator.\(^{17}\)

If organisms are self-maintaining systems it seem appealing to look for the mechanisms that guarantee the stability within the organism boundaries as the insight of teleological theories. For further and different elaboration of on the details see Dretske (1988); Millikan (1984, 1989); Mossio et al (2009); Neander (1991); Schroeder (2004).

\(^{17}\) A simple example of these self-maintained 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 maintain 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 et al (2009, p. 822)
mechanisms that ground the distinction between what is part of the system and what is not, 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 a proto-self as a constitutive element of our experiences.\footnote{For a further development of Damasio’s ideas about consciousness and the self see Damasio (2010).}

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, p. 154)

> It is an integrated collection of separate neural patterns that map, moment by moment, the most stable aspects of the organism’s physical structure. (Damasio, 2010, p. 190)

I will make use of this proto-self in my elaboration of the \textit{de se} content. I think that we can offer an account of such \textit{de se} content by characterizing a conscious state as a complex of two states that I will call the proto-self and the proto-qualitative state.

On the one hand, the proto-self is a brain structure that has the function 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 a certain property.\footnote{We can 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 is therefore a set of worlds and not a set of centered worlds; something like the disposition to cause the activation of PQ in normal circumstances in organism O.}

Different phenomenally conscious states are constituted by different proto-qualitative states. Proto-qualitative states are not phenomenally conscious; i.e. the properties of proto-qualitative states do not suffice for having a phenomenally conscious experience. The proto-self is not a phenomenally conscious state either.

It is the interaction between both of them what gives rise to a phenomenally conscious mental state that indicates that the property X is affecting the organism. Phenomenally conscious mental states play a differential role in the homeodynamics of the organism. A difference in functional role accounts for the differences between those mental states that are phenomenally conscious and those that are not.

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. Let me focus on the redness of my experience. The proto-qualitative state indicates a certain shade of red, but this is, still, an unconscious representation. On the other hand, I have a representation of my internal states: the proto-self. 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). The interaction between the proto-qualitative state and the proto-self constitutes a mental state with the content 'redness for-me', a conscious mental state.

Figure 1 illustrates this idea. To remark that this is a first-order 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 my internal states. There are furthermore, causal connection that might involve some further structures (Interrelation Structures), between the proto-self and the proto-qualitative state. These causal processes are constitutive of a phenomenally conscious state. They allow for the interaction between the proto-self and the proto-qualitative state that give rise to a state with de se content.

At the level of content, this interaction will explain why the content of experience is de se. What is relevant for the 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 (the proto-qualitative state $PQ$) in
normal conditions, but the fact that it is causing the activity of the neural network and that this neural network plays a relevant role in the homeodynamic regulation of a particular organism, the very same organism that the proto-self happens to regulate. The content is not just that the object is disposed to cause the state PQ (in normal conditions) but that the object is disposed to cause PQ in me, in the very same organism that the proto-self regulates.

Consider a state of my organism PQ. Imagine that PQ, has the function of indicating what is disposed to cause it in normal conditions. In this case we can assume that such normal conditions would be something like "via the particular visual path_{PQ} under particular lighting conditions_{PQ}". An object has the property that PQ represents only if the object is disposed to cause the activation of PQ in an organism like mine via the particular visual path_{PQ} under particular lighting conditions_{PQ}. 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 lighting conditions, with a wavelength of 650nm and is therefore represented by PQ. PQ interacts with my proto-self, the system that monitors and controls the homeodynamics of my organism. The state that results from this interaction is a phenomenally conscious mental state. This state represents that the organism is presented with an object that is disposed to cause PQ in normal conditions (via particular visual path_{PQ} under particular lighting conditions_{PQ}). When the organism is in this state, it attributes to itself the property of being presented with an object that is disposed to cause PQ in normal conditions: it attributes to the object a centered feature.

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. Figure 2 illustrates some of the involved areas (Damasio (2000, 2010); Laureys and Tononi (2008)), according to the colors in figure 1.

---

20 PQ doesn’t have the function of indicating Transcranial Magneto 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 lighting conditions. These normal conditions have to be fixed by the function PQ, assuming the truth of a teleological theory of mental content.

21 Note that there is no need to read this pronoun de se. This is a normal indexical and not a essential one. Perry (1979)

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

23 Brain's pictures copyrighted by the University of Washington (Digital Anatomist Program).

24 The proposal above is perfectly compatible with the most plausible account of our cognitive access to our mental states, the global workspace (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 broadcasted 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, 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 chances of gaining access to the GWS. The proto-qualitative state and the proto-self are examples of those assem-
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 FO theories between self-involving theories and mental state-involving theories, and argued that what is phenomenologically manifest is the former. It is in the nature of the content of the 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 attempted to sketch, in terms naturalistic compatible terms, a characterization of such a de se content and the basics of possible model of what it takes for a mental state to have self-involving content. A model supported by our current biological theories and our neurological evidence.25

25 I am deeply grateful to Ned Block, David Chalmers, Marta Jorba, Uriah Kriegel, Manolo Martinez, Farid Masrour, Myrto Mylopoulos, David Pineda, David Rosenhal, Pepa Toribio, Stephan Torre and Josh Weisberg for useful discussion on the topics presented in this paper.

Some of the ideas of this paper were presented in the Cognitive Science talks at CUNY Graduate Center in summer 2010 and, as a poster, in the ASSC conference in Toronto. This paper was presented in the 10th Biennial Toward a Science of Consciousness and in the

Fig. 2: Structures involved in phenomenal consciousness
References


Block N (2011) The higher order approach to consciousness is defunct. Analysis 71(3):419–431

Block N (forthcoming) Perceptual consciousness overflows cognitive access. Trends in cognitive Science


Burge T (2007) Foundations of Mind (Philosophical Essays). Oxford University Press, USA


Castañeda HN (1966) 'he': A study in the logic of self-consciousness. Ratio 8:130–157


4th Consciousness Online Conference (CO4). I am very grateful to the audience of these events, and especially to Rocco Gennaro, Robert Lurz and Ken Williford for their detailed and thoughtful comments and discussion in CO4.

Financial support for this work was provided by the Committee for the University and research of the department of Innovation, Universities and Company of the Catalunya government and the European Social Fund and also by the DGI, Spanish Government, research project FFI2009-11347, the Consolider-Ingenio project CSD2009-00056 and by the AGAUR of the Generalitat de Catalunya (2009SGR-1077)
5 Conclusions


5 Conclusions


Neander K (1991) Functions as selected effects: The conceptual analyst’s defense. Philosophy of Science 58(2,):168–184


Peacocke C (MS) Self and self-representation URL
audio/id418891992


Prinz J (2011) Is attention necessary and sufficient for consciousness? In:
Christopher Mole WW Declan Smithies (ed) Attention: Philosophical and
Psycological Essays, Oxford University Press

437

Guzeldere G (eds) The Nature of Consciousness, Mit Press


Sartre JP (1936) Being and Nothingness. trans. Hazel E. Barnes New York:
Philosophical Library

tion in Mind, Elsevier

Sebastian MA (forthcoming) Not a HOT dream. In: Brown R (ed) Phenomenol-
ogy and the Neurophilosophy of Consciousness., Studies in Brain and Mind.
Springer Press


Shoemaker S (2000) Phenomenal character revisited. Philosophy and Phe-
nomenological Research 60(2):465–467

Shoemaker SS (1968) Self-reference and self-awareness. The Journal of Philoso-
phy 65:555–567

and Thought. Oxford University Press, USA

Tye M (1997) Ten Problems of Consciousness: A Representational Theory of
the Phenomenal Mind. The MIT Press


Weisberg J (2011) Abusing the notion of what-it’s-like-ness: A response to
block., Analysis 71:438–443
5 Conclusions

