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The approximate representational character of Perceptual Experiences

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Abstract Facing the idea that there is an immediate normative epistemic relation between a perceptual experience (PE) (or a sequence of them; PEs) and a perceptual experience belief (PEB) based on that (or those), we defend that such relation is not immediate. That is, (i) neither it is a relation of justification (based on the model of an argument), because the PEs content is not conceptual, (ii) nor it is of entitlement, since it is not immediate. We defend as an alternative that it is a relation of epistemic support. Facing the idea that PEs are fallible in a weak sense, because they can be erroneous, we defend that they are fallible in a strong sense. This is due to the fact that mainly the genuine PEs only have a representational content which is approximately accurate (or approximately false). We attempt to analyse it with the help of certain ideas of Zalta.

Keywords Perceptual experience, perceptual experience belief, justification, entitlement, epistemic support, fallibility, approximate representation.

1 Introduction

There is a type of beliefs that owing to their close connection with perception episodes has always aroused an enormous philosophical interest, especially inside the empiricist tradition. We say that such beliefs are based on, or generated from, perceptual experiences (hereafter PEs) that human beings have from our environment. In this work we will refer to them as 'perceptual experience beliefs' (PEBs for short). In terms of philosophy of mind it is usual to describe PEs and PEBs (PE and PEB in singular) as mental episodes or states that are intentional when they address something or they deal with something. The contents of PEs and PEBs consist, respectively, on the mode the intentional object (or state of things or scene) is presented (in the perception) or is conceived (in the belief); and according to this it is said that they are representational, or that they represent something –that is probably happening in the environment– being in a particular way. They possess, therefore, some conditions of evaluation: of correctness/incorrectness (accuracy/inaccuracy), in the case of Pes; of truth/falseness in the case of PEBs. The conditions of correctness of a PE are fulfilled if the environment is the same as represented by the EP, in which case it is considered completely accurate or veridical. On their behalf, the truth conditions of a PEB[1] are fulfilled when its content corresponds to a state of affairs that takes part in the casual source of the PE that favours that PEB (regardless of the accuracy level of the PE).

The relation among PEBs considered true regarding the corresponding veridical PEs in which those PEBs are based is usually interpreted, beyond the obvious relation of causation that exits between both of them, as a powerful epistemic-normative relation. In some cases, especially for those philosophers close to a classic and empiricist foundationalism, it is understood that such normative relation can provide to the PEBs an infallible status of knowledge. We prefer to be more cautious and, having in mind the questioning that due to Sellars' critics (1963) has been made about the metaphor of some incontrovertible and final bases, we believe that it must be assumed that both, our PEs and the PEBs that we develop from them, have a fallible nature, always subject to the possibility of error or falseness, so that the knowledge provided by this type of beliefs cannot be considered infallible. But beyond its

[1] Here, we speak of the truth conditions of a PEB, as for example the belief of a subject S (suppose that the subject is John, and the PEB is 'the blouse is green', when John is in presence of a blouse. We are not speaking of the truth conditions of sentences as "John believes that the blouse is green" (in an determined context). Note that "John believes that the blouse is green" could be true (in a determined context), because it depends on the John's belief, even if "The blouse is green" is not true in the same context.

fallible nature, which is indicative that they *can be considered* inaccurate or false, we consider important to remark that they *can be in fact* partially inaccurate, or in a positive way, partially accurate. Using another expression that accounts for the same, we can say that PEs and PEBs can be *approximately accurate or approximately true*. We are not going to deal strictly with the approximately true nature (or approximately false) that our PEBs can have, but we will focus on the approximately accurate/correct nature that our PEs can have. In that regard we defend that the genuine PEs[2] of any human subject are normally approximately accurate or inaccurate, with a graduation whose limits are both the complete accuracy and the complete inaccuracy[3]. The quantitative objects of that graduation won't be the aim of this work since we are focusing on the qualitative aspects. We are especially interested in the problem of how the epistemic-normative relation occurs between certain PE (or sequence of PEs) of a subject S and a corresponding PEB (or PEBs) of S, and how the fact that the majority of the genuine PEs of humans beings are only approximately accurate influences on such relation. Thus, in this work we offer a description of the epistemic relation between PEs and PEBs that we expect it to be in accordance with the fallible nature of the first ones, or to be more precise partially fallible of the first ones, adding in it some theoretical elements that allow us account for what we believe it is in the origin of such fallibility: the *approximate representational* character that our content of PEs have. In section 2 we will do a description of the epistemic relation between PEs and PEBs in terms of what we refer to as 'epistemic support'[4]. Although succinctly, such description will be enough to emphasise the fact that the warrant that the PEs provides to our PEBs, when such epistemic relation of support is established, is not an immediate warrant. In section 3 we will take into consideration, in a non-formal way, the 'mode of presentation' category as it's used by Zalta (2001) for speaking about perceptions and other aspects. Such nuanced notion will provide us a useful tool to articulate, then in section 4, an 'approximate representational content' idea attributable to the PEs and the consideration of an immediate determination of a fictitious object (or fictitious situation) that correspond partially to the final object (or a state of affairs or a final scene); final object that is the concrete object of perception when this is genuine. That idea will provide to our initial proposal of

[2] A genuine PE is not hallucinatory, but it can be partially accurate, erroneous or illusory, and obviously, in principle it could also be veridical.

[3] Strictly a PE is only completely incorrect when it is not genuine, that is, when it is hallucinatory.

[4] For a more detailed development of our proposal of normative epistemic relation between PEs and PEBs in terms of what we call 'epistemic support' cfr. Falguera & Peleteiro (2014a and 2014b).

epistemic support with the element which transforms it into a useful explanation of the creation and warrant of a type of beliefs, the PEBs, which are inevitably fallible –although they can become true– because of the type of warrant that the corresponding PEs provides them.

2 Non-immediate epistemic warrant

The epistemic link or relation between experiences and beliefs has been traditionally understood in terms of justification. According to this frame, philosophers as Davidson (1983) reject the idea that something given –the given–, independently of our conceptual capacities, could justify beliefs by itself alone, when the given remains, as Sellars claimed (1963), excluded from the logical space of the reasons or from the space where the justifications take place (Sellars 1963, 169). Facing this tendency, and with the intention of protecting the justifiable role of the PEs, authors such as McDowell (1994) and Brewer (1999) have proposed to interpret their contents as a type of propositional content, and so conceptual; that is, as a content of the same type than the content of the PEBs which they sustain. From this perspective the relation of justification between PEs and PEBs is drawn in a similar way to the argumentative relation among propositional contents of beliefs. According to this analogy the PEs would function as premises supposedly followed by the corresponding PEBs, just as a deductive argumentative model (or maybe of another argumentative type).

However, there are enough reasons to think that the content of our PEs *is not of one of the conceptual or propositional content kind*, as several psychologist or philosophers of perception have defended (call them non-conceptualists)[5]. Among those reasons it is worth to highlight some empirical evidence such as the discovery of the sensorial registers, in particular of the traces of the iconic memory, from Sperling's experiments (1960) for visual perceptions and others that are more recent[6]. We don't have enough space here to describe, even briefly, these experiments, or even to develop any of the philosophical arguments that have been offered in favour of the non-conceptual nature of PEs[7]. Nevertheless, we want to indicate that,

[5] The reader can find references to these authors in Falguera & Peleteiro (2014a and 2014b).

[6] See Sperling (1960) and Averbach & Coriell (1961). Also follow Fodor's considerations (2007, 112-113; 2008, 118 and ff.) about this type of experiments and their implications.

[7] For some of the most discussed arguments of this type see Crane (1992), Martin (1992), Peacocke (2001), Tye (2005) or Block (2007; 2011).

in our view, the fact of assuming the non-conceptualist thesis of the content in PEs, together with the evidence that the mentioned experiments could contribute to this end, forces to rethink the epistemic relation between PEBs and PEs in different terms of the argumentative deductive model (or a different type of argumentative model).

This is, for instance, the direction followed by Burge (2003) and Pryor (2005) when having proposed a kind of epistemic-normative relation that here we call, following the first one, 'entitlement'[8]. The difference between this entitlement and a justification adapted to the argumentative model resides on the following:

> From the conceptualist authors' perspective, in order that a content justifies another one must accomplish two indispensable conditions: i) the first content must be such that it can be constituted as premise or conclusion of an argument, and ii) the subject connecting both contents must be able to recognize the first consciously as his/her reason to believe. Evidently, a proposition is the type of entity for the first content that can fulfil these conditions. By the contrary, the relation of entitlement proposed by Burge and Pryor does not entail that the subject has to consider her PEs contents as her reasons to believe. They claim that when the PEBs of a subject are entitled from her PEs, then certain epistemic rules are accomplished; epistemic rules that the subject does not have to be conscious about (Burge 2003, 512 and ff.; 521; 547) nor has to follow deliberately (Pryor 2005, 195 and ff.). The perceptual content does not have to be necessarily a reason that the subject can take consciously into consideration as itself, and therefore it does not have to be constituted necessarily as a premise from which interfere the content of a belief. Furthermore, for Burge (2003) this perceptual content must be a non-propositional content (and, so, non-conceptual), in a similar way as other non-conceptualists defend; for and Pryor (2005) can the perceptual content can be non-conceptual.

We agree with Burge and Pryor about the fact of considering that the epistemic role of a PE regarding a corresponding PEB has to be different to this of being a reason or of justifying. For that we also reject the argumentative model.

However, as Burge and Pryor we think that there is a relation of epistemic warrant –and so normative– between a PE and a corresponding

[8] Pryor (2005) calls it 'immediate justification', but we can consider that the epistemic-normative relation is the same.

PEB. But we understand that the entitlement proposal, as it is presented by them, is not the one that achieves to give account satisfactorily for the mentioned epistemic relation.

Burge and Pryor defend that when a PE *entitles* a certain PEB it is providing an *immediate warrant* of that PEB. That immediacy is connected in their approaches to the consideration about the fact that, although every PE can be fallible[9], human PEs are reliable in normal conditions[10]; that is, they are mostly veridical and so they entitle PEBs based on them. According to such an approach, the fact that a PE is fallible just points to that possibility of fail in the representation of the concrete object or the concrete scene (the concrete subject matter) to which that PE points to, when that matter exists and causes the PE –that is, when the PE is *genuine*–. However, from our point of view the fact that genuine PEs are fallible encloses something stronger than the mere possibility that they are inaccurate. We believe that such fallible nature is mainly due to the fact that they are only *partially* correct; in other words, those PEs, when genuine, represent *approximately* their concrete subject matter. This circumstance already limits the assumed immediate entitlement that a PE provides to a corresponding PEB. But we have to add a greater reason to doubt the immediacy of the epistemic relation. The proposal defended by Burge and Pryor seems to assume that there is such immediate connection between a PEB and its corresponding PE in the processing of the information. We believe that between a PEB and its corresponding PE a more complex epistemic process is given, the one that we call 'epistemic support' of a PEB by a PE (Falguera & Peleteiro 2014a and 2014b)[11]. As we will see now,

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[9] "No perceptual state type can be reliably veridical under all conditions. Perceptual states are components of perceptual competencies. Our perceptual competencies are fallible. All perceptual states and all perceptual competencies are subject to possible error. (….) every perceptual state type would be unreliable in a variety of possible abnormal environments that are perceptually indiscernible, at the time of a given perception, from the normal environment." (Burge 2003, 535).

[10] It is perfectly understood that PEs are reliable for human subjects with normal perceptive conditions: "The only reliability that is relevant to the contribution of perceptual states to perceptual warrant is one that attaches to the states' normal functioning in the conditions that explain their natures. That is the only reliability that is non-accidental relative to the natures of the perceptual states. [] Thus the normal environment […] is privileged in explanation of entitlement." (Burge 2003, 536).

[11] Speaking about a unique PE is nothing else than an idealization. Frequently, in cases of genuine perception, a PEB is supported on a sequence of PEs which a subject S has in a brief interval where the PEs of the sequence have to do with an identical concrete subject matter.

the *epistemic support* relationship does not imply an immediate warrant, and that fact permits that we can integrate that element of approximation in our proposal. The epistemic support provided by a PE always entails the meditation of the background of relevant beliefs and the previous perceptual learning of the subject of such experiences. Otherwise, in the relation of entitlement the previous background is only taken into account, it only plays a role, *when it provides against criteria* that avoids such entitlement (Burge, 2003, 526 and 546).

Briefly, the process of epistemic support is the following: a subject S perceives genuinely an object (or a state of affairs or a scene) O, take as an example a bar of soap with the shape and colour of a lemon. The content of her PE is a non-conceptual or an iconic content[12] that represents O in a specific way, and therefore it can be correct or erroneous[13]. The PE of O triggers in (the mind/brain of) S one or several hypotheses about O. Such hypothesis is (hypotheses are) obtained from the PE depending on the conceptual apparatus which S has, and as a result of dealing and selecting certain aspects of its informative content. The content of this (these) hypothesis (hypotheses), unlike the PE that triggers it (them), is (are) obviously propositional; and, thus, conceptual[14]. We will call the hypotheses of this kind 'Direct Perceptual Hypotheses' (DPHs).

Imagine that in front of the visual perception of the bar of soap, the following (erroneous) DPH 'this is a lemon' (given the appearance of O) is the only triggered in (the mind/brain of) S. Once the DPH(s) is (are) triggered, it (they) will be evaluated by S in the light of her previously acquired background of beliefs and visual learning. As a result of this evaluation S adopts as belief that hypothesis, which is considered the best one that accounts of O (given the contextual aspects that S pays attention to) in the light of her acquired background. In this way it can be interpreted that S comes to adopt a certain PEB through a kind of inference to the best explanation (or more precisely, inference to the best hypothesis). The epistemic support entails, then, an inference relation among propositional

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[12] We assume the iconic character of the perceptual contents according to the same criteria which Fodor (2007, 106 and ff.; 2008, 170 and ff.) uses to differentiate between discursive representations and iconic representations.

[13] A representation always has the peculiarity that *it can be erroneous*. As we have already mentioned, our added qualification consists of saying that it can be *approximately* erroneous or accurate.

[14] We understand that owing to its character of hypothesis its content cannot be anything but propositional, and so conceptual.

contents. However, it is fundamental to take into account the fact that that inference relation is not established between the PE itself and the corresponding PEB that S adopts (since we have convened that the content of the first one is non-conceptual), but among the hypotheses which that PE triggers and the PEB adopted. Moreover, during the inference process the acquired background can provide other relevant hypotheses (for the purpose of the starting PE) which take part in that evaluation together with the previous ones. These new hypotheses are called by us 'Non-Direct Perceptual Hypotheses' (NDPHs). It can occur that the DPHs triggered by the PE of S collide with her previous background. Occurring this, S could adopt as her belief some of the NDPHs that S has activated from her background on the occasion of that PE. Suppose that this occurs in the case we consider: the previous background of S could provide the NDPH 'this is a bar of soap with the shape and colour of a lemon (given previous experiences, such as tactile, which are corrective of the possible belief that it is a lemon) and S deduces that this is the best hypothesis about O, eventually adopting it as her PEB (look at figure 1).

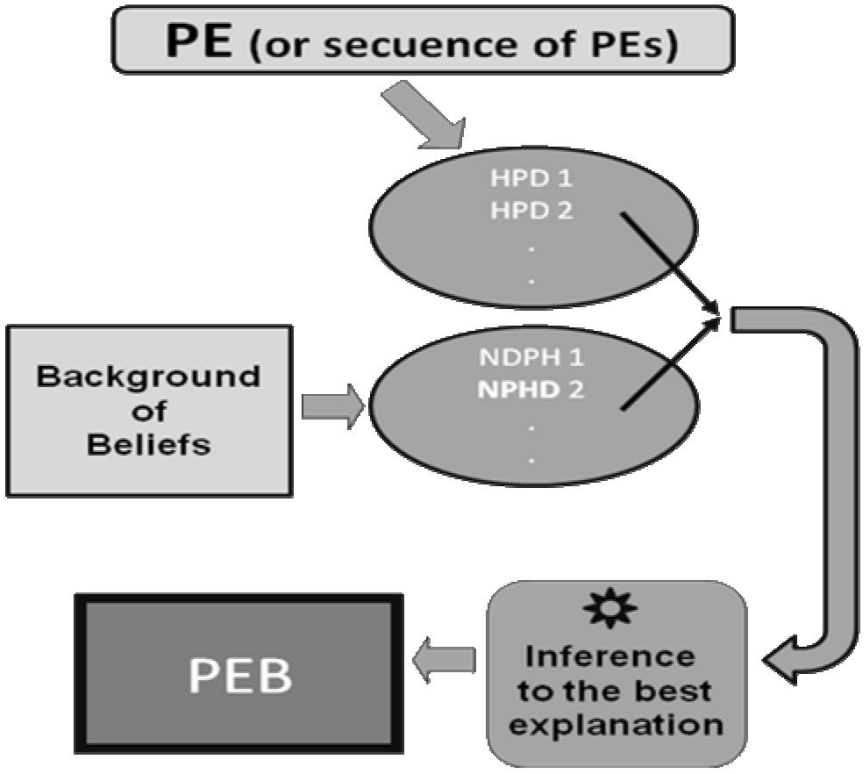


Figure 1

Notice that even in the most simple cases in which the PE is completely accurate and only triggers one NDPH, this will be adopted as PEB after an evaluation in the light of the previous background of S –supposed that there exists such background, as it is normal in our daily lives. In our example, the

most simple possibility would be that one in which the PE of the bar of soap triggers in S only the DPH 'this is a bar of soap with the shape and colour of a lemon'. Even in that case, what we propose is that such hypothesis becomes the PEB of S only while it is brought to light of the previous background of beliefs acquired by S. Thus, we claim in a general way that a PE supports epistemically a PEB while its occurrence leads to the subject S to establish a propositional inference relation (probably abductive) between the hypothesis (hypotheses) which that PE triggers and the PEB which he/she finally adopts, always in the light of the relevant background previously acquired by S. This mediation of the acquired background transforms the warrant which a PE provides into a *non-immediate* warrant.

In addition, the PEs which provide that non-immediate warrant possess a content that is always, as we introduced before, approximate representational, even in the case of completely accurate or veridical PEs. We even defend that although our PE[15] of the environment generally has a great richness and fineness of grain, yet it is not normally able to present us that environment with an absolute fidelity or without margin of error. Consider that in genuine visual experience the error is initiated with the colour shades with which a subject captures an object (or parts of it or of a scene) and that the colour shades do not really correspond to it –whatever 'a really suitable colour shade for a specific object' means–, and it is increased with properties that a subject perceives but they do not occur in the concrete object or with unsuitable identifications of the object, and the error has an important expression in the illusions –while these are systematic and unavoidable errors in the perceptive experiences of the human subject (from a human community). In other words, there is never a complete correspondence with the finally represented. So, the approximate representational character is something inevitably characteristic of the content of our PEs, since although in our dealing with the world throughout PEs these are usually greatly accurate, they are accurate actually in part, in the sense that in any case some properties are represented accurately and some others are not; that is, some are suitable with what happens in the environment and some others are not. Extreme cases of complete accuracy or complete inaccuracy are not the usual cases for normal perceptual subjects. In this way, the differences among accurate, erroneous or even illusory PEs are reduced to a gradual difference in the approximate level of representation of the content of PEs. If it is true that the fact that the approximate representational character of the content of our PEs, when they are more accurate than inaccurate, does not have a great practical significance regarding our successful interaction with the world, we consider that it is advisable to have in mind this aspect in any explanation or

[15] It is obvious that we refer to human subjects *with normal perceptual capacities*.

description of the epistemic relation between PEs and PEBs. In the following sections we will try to give shape to this idea of 'approximate representational content'.

3 Cognitive content and modes of presentation

Belief is a type of propositional attitude; we can say that it is a state of mind in which the subject adopts certain attitude towards a particular propositional content. Such attitude consists of the fact that the subject S *believes* a proposition that can be expressed by a statement introduced by a relative clause. In our example, S can have attitudes of belief either as the fact that S believes *that* 'this is a bar of soap with the shape and colour of a lemon', or as the fact that S believes *that* 'this is a lemon'. While intentional state of mind, the belief of S has an object: either the bar of soap or the postulated lemon; that is, what the belief that S adopts about is. It has also a content: the proposition expressed by the subordinate sentence, constituted by the concepts BAR OF SOAP, COLOUR, LEMON, etc., whatever depending on the belief adopted. Although there is no unanimity when it comes time to determine the ontological nature of propositions and concepts, we can consider them as *intensional* entities, and, as that, *abstract objects*. Conceiving them as abstract objects means to accept the fact that they have *objective* character and so *intersubjective*.

Among those who defend the fact that concepts are abstract entities we find the ones who analyse the propositional attitudes in terms of Fregean senses. One of them is Zalta (2001). He informs that, in any case, the analysis about the propositional attitudes based on Fregean senses lack enough flexibility to account for 'the frequent recognition failures of familiar objects and properties and the apparently contradictory attitudes we sometimes have with respect to one and the same object' or state of affairs (Zalta 2001, 341). Although Frege considered that the sense of a term (for some uses and contexts) contained several modes of presentation or modes of establishing a reference, the 'mode of presentation' category should be understood, according to Zalta's point of view, as a wider category than the sense category, since 'not all modes of presentation function as the sense of some term of the natural language' (Zalta 2001, 341). Being like this, Zalta thinks that such category can provide the suitable tool to explain cases of propositional attitude reports whose analysis in terms of Fragean senses seem problematic (Zalta 2001, 337 and ff.); and, in general, for the contents of certain types of intentional attitudes, such as the ones of the perceptions. Our aim is appealing to Zalta's proposals related to the analysis of the contents of PEs.

Before studying thoroughly such proposal it would be convenient to offer some brief intuitive notes about the Zaltian theory of objects[16]. Zalta classifies objects in ordinary and abstract. An ordinary object (or O-object) is defined for being *possibly concrete*; that is, there is a possibility that it is a space-temporal object (i.e. possibly it occupies a place and a time in the factual world). On their behalf, according to Zalta the abstract objects (or A-objects) are all those entities that cannot be concrete (or spatio-temporal). The criterion of spatio-temporal impossibility is also used in Zalta for characterising an A-object as something that is non-mental. The fact that an A-object is not mental means to Zalta that is not something which is in someone's mind (in her head). As objects is mind Zalta points out the mental tokens, which he consider intrinsically asemantic and asignificative; i.e., purely neurophysiological events which occur in the brain, and, therefore, which belong to the sphere of spatio-temporal objects or possibly concrete O-objects[17].

Assuming the (non-spatio-temporal) existence of A-objects entails admitting two ways of having properties: to exemplify and to encode. An O-object just exemplifies certain properties (or relations). For instance, a concrete O-object as my cat exemplifies characteristics such as 'being of white colour', 'being a feline', 'having four legs', 'being a concrete individual', etc. But an A-object ends determined by a group of properties, the properties which constitute it. Thus, an A-object, as the ones indicated by 'Frodo' or 'hobbit'[18], is determined by the properties attributed to him/it in Tolkien's novels. And an A-object as the one indicated by '1' is determined, for example, by all those properties attributed to it by a certain theory of natural numbers. These properties which determine an A-object are properties that such object encodes[19]. However an O-object only exemplifies certain

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[16] The following considerations can be deduced from Zalta (1983 and 1988), and also from his previously mentioned article.

[17] In his ontology Zalta considers two great types of objects (mutually exclusives): ordinary and abstract. However, inside of Zalta's abstract objects theory different kinds of entities have a place. Beyond what is usually considered as abstract entities, such as numbers, propositions, types, etc., Zalta also includes fictitious entities, such as literary characters, or impossible entities, such as the circle-square.

[18] Notice that both of them are abstract to Zalta for being fictitious objects. Also notice that the object denoted by 'Frodo' is an individual, while the one denoted by 'hobbit' is a property.

[19] For the purposes of formalizing, given an individual 'a' and a property 'P', if the individual exemplifies the considered property it would be written, as it is usual in a text of formal logic, 'Pa'. In that case the individual described by 'a' could be ordinary (even concrete), but it could also be abstract. But in case that the individual

properties, while an A-object, besides encoding certain properties –the ones that determine it-, exemplifies certain other properties. Thus, an A-object as the number 1 exemplifies properties as 'being expressible by means of sign '1'', 'being an abstract object', 'not being a physical object', etc. And an A-object as the one indicated by 'Frodo' exemplifies properties as 'being conceived by Tolkien', 'being a fictional being', 'not being a USA citizen', etc.

Zalta classifies both O-objects and A-objects in individuals, properties and relations. The thing that we are interested in emphasising is that, for instance, a *certain A-individual encodes properties which can correspond to properties that a certain O-individual exemplifies* (although because of A-individual nature it can also encode other properties which the O-individual in question does not exemplify, or even properties which no O-individual exemplifies). Zalta considers that the same can be claimed regarding a certain A-property or a certain A-relation.

Well then, Zalta presents the modes of presentation as A-objects. The modes of presentation can also function as the cognitive content of mental tokens[20]. According to Zalta a mental token, as mental symbol of a belief or a perception, can represent a concrete O-object. In the case of a genuine PE such concrete O-object is the final object of that PE, the object that causes it. Zalta regards such final object of a perceptive experience as an 'objective content'. He distinguishes such *objective content* from the mode in which it is presented in the perceptive experience. Such mode of presentation constitutes for Zalta the 'cognitive content' of the PE (Zalta 2001, 342-343). Zalta assumes that when speaking about modes of presentation we are speaking about concepts, identifying these as a type of A-objects (Zalta 2001, 343). In this way, certain A-objects from a specific type (individuals, properties or relations), which are modes of presentation or modes of being given, can represent O-objects of a similar specific type, while they can encode properties which are exemplified by those O-objects. In this context representing means a '*way* of conceiving' something and it must not be blended in with what it is understood by representing when it is said, for instance, that a mental token represents an object. In words of Zalta:

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encodes that property it would be written 'aP'. In this second case the individual described by 'a' would be necessarily abstract, since there are no ordinary individuals which encode properties.

[20] This turns the 'mode of presentation' category into an acceptable category not only to resolve typical questions of philosophy of language but also questions related to philosophy of mind.

> "The first reason for thinking that modes of presentation can be identified as A-objects is that there is a clear sense in which A-objects can *re*present ordinary individuals and properties, namely, by encoding properties that ordinary individuals and properties exemplify. By saying that A-objects 'represent' ordinary objects, I do not mean to imply that A-objects are 'in the head'. A-objects are *not* in the head, though they can be used to classify what is in the head. As we shall see, A-objects can objectify the cognitive content of the mental tokens that are in the head. Of course, philosophers often suppose that the (intrinsically meaningless) mental tokens in our brains are the entities which 'represent' ordinary individuals and properties, and certainly there is a sense of 'represent' on which this may be true. But I am not using this sense of 'represent'.
>
> I am using 'represent' to mean a *way* of conceiving an object or property, and though an intrinsically meaningless mental token can be a vehicle by which an object or property is conceived, it is not a *way* of conceiving them if it is intrinsically contentless. I am using a sense of 'represent' on which the object which is doing the representing does so in virtue of some *content* which it has. A *way* of conceiving an ordinary individual or property involves some cognitive content by which that individual or property is conceived." (Zalta 2001, 342-3).

Given our aforementioned example, and applying it to the possible belief that 'this is a bar of soap with the shape and colour of a lemon', the cognitive (propositional) content of such belief would be a (complex) A-object which would be composed by a series of concepts, which are A-objects in turn. The latter are the ways in which the subject conceives the final object of belief. It is necessary to have in mind the fact that these concepts would not be equal to the senses of the terms that constitute the statement used to express the propositional content of that belief. With the purpose of distinguishing this concept acceptation with that which is usually associated to the sense of an expression, we are going to call them 'concepts$_{mp}$ from this point on', meanwhile we will refer to the concepts associated to senses of a term as 'concepts$_s$'. We equally distinguish between 'propositions$_{mp}$' and 'propositions$_s$'. The concept$_s$ of the term 'soap' indicates to Zalta a rigid reference, while the SOAP$_{mp}$ concept$_{mp}$, if we accept what Zalta proposes, would be a flexible and variable mode of presentation, related to how a subject conceives a bar of soap in a specific moment. Being so, concepts$_{mp}$ can be presented as a type of modes of presentation which allow us to analyse propositions$_{mp}$[21], which the concepts$_{mp}$ are part of as contents with an

[21] We apply the same when recurring to the subscript 'mp' to differentiate between

approximate representational character regarding their respective final O-objects. We can say that these $concepts_{mp}$, which are modes of presentation, reify to the private contents of each subject as abstract entities, as A-objects[22]. On the behalf $concepts_{s}$ are suitable for the intersubjective contents, the ones that are created publically; they are suitable for the idealized contents created throughout the uses of a term in a linguistic community during a period of time. *Mutatis mutandi*, the same can be applied, respectively, to $propositions_{mp}$ and $propositions_{s}$.

In the following section we will propose a different type of mode of presentation, non-identifiable with A-objects of the concepts type, which can be applied when dealing with the contents in PEs.

4 approximate representational contents for PEs

We have just indicated that Zalta, in his proposal, identifies concepts as A-object. This does not offer any problem since until this point we have spoken about the Zaltian A-objects as constituting the cognitive content of beliefs. Well then, we consider that this identification seems controversial if we take into account the fact that Zalta establishes it independently on whether the mental token in question is a believe or a perception; in fact, in his text he illustrates his proposal imagining what would occur in a perceptive situation. Evidently we refuse such identification regarding the perceptive contents because it implies a conceptualist position that we do not assume. Our point of view is that A-objects which constitute the content of PEs should be understood as modes of presentation that do not work as $propositions_{mp}$, nor given by $concepts_{mp}$ (in the acceptation of modes of presentation), nor as propositions, nor as given by $concepts_{s}$ (in the acceptation of Fregean senses), but as the *non-conceptual modes in which an object perceptually is presented to a subject at a given time*. These non-conceptual modes of being presented an object to a subject would equally possess the flexibility and variability characteristics which Zalta attributes to the conceptual modes in which a subject can conceive an object. Extended this way, we think that the Zaltian category of ‘mode of presentation’ or ‘A-object’ turns then into a very useful explicative tool for accounting for the approximate representational nature of the perceptual contents. In our exposition we will adopt a scheme that Zalta

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the propositional content given by the mode of presentation, for a subject, and the statement which expresses a belief and the corresponding proposition for the sense of that statement.

[22] Notice that the private contents of each subject are subjective, while the modes of presentation which reify them –that is, the $concepts_{mp}$ and the $propositions_{mp}$– given that they are A-objects, then they also are objective and intersubjective.

follows when describing what occurs in situations of perception, although we will speak of modes of being presented an object to a subject in cases where Zalta speaks of concepts and ways of conceiving.

Therefore, given a PE of a subject S, for example visual, in which its content is not propositional (according to the previously assumed), we would obtain that that content will be formed by an *global iconic mode of presentation* (GIMP) of the concrete O-object (or of the state of affairs or the concrete scene) which is the final target of the PE[23]. Such GIMP of O will have aspects or will include properties that we can consider as the *iconic modes of presentation of aspects or properties* (IMPA) of the concrete O-object (or of the state of affairs or the concrete scene). The common thing is that such GIMP contains some aspects or some properties which do not really belong to O; that is, that part of its IMPA are inaccurate regarding the aspects and properties of O. How much quantity of inaccurate IMPA marks how inaccurate GIMP is in its representation of O, in the way of conceiving O by S, or how correct that GIMP is. To the extent that some of such IMPA is inaccurate in a systematic and unavoidable way for the members of a cultural community we would be in front of an illusion. In any case, even when it is not about illusions, but about mere errors, even inaccuracies about some IMPA(s) that are not much significant concerning the entirety of the GIMP of any old O, we would obtain that the GIMP in question would be partially inaccurate, it would be an approximate representational content. Both the GIMP of certain O and the components of the IMPAs of that O are, according to the considerations deduced by Zalta's works, A-objects; that is, they are objective and susceptible to be shared intersubjectively. Such entities are the content of our mental tokens. The latter –the mental tokens– are, as it was previously announced, asemantic, purely neurophysiological events (and so O-objects). While the IMP (whether global, or of aspects or properties) of a concrete O are A-objects which reify the private contents of each subject as abstract entities. IMP account for the way of conceiving the concrete O-object by a subject S.

Now we can introduce another element which, although it is not present in Zalta (2001), is inspired in the approaches that he develops in other

[23] We need to think that in the light of analyses such as the one by Marr (1982), or of considerations such as the ones by Fodor (2997) about the compositionality of the pictorial or iconic representations, it can be considered the existence of modes of presentation which are components of the global mode of presentation (GMP) that corresponds to a PE. In any case, if we accept Fodor's point of view (2007) there wouldn't something similar to the standard procedure to decompose a GMP for a pictorial representation in component modes of presentation. Marr's analyses (1982), although they do not deal with the problem of how to decompose the content in a PE, seem to permit the identification of standard component elements.

places (cfr. Zalta 1983 and 1988). In such texts Zalta considers that each term which do not describe a real entity has, in addition to sense, a reference that is an object (individual, property or relation) of fiction. Thus, the name 'Frodo' describes an individual of fiction and 'hobbit' describes a species (a property) of fiction, in both cases concerning what is established in Tolkien's stories. To the extent that certain IMPs do not account for anything that exists as O-object, we could say that they determine fictitious entities. The latter ones for that reason would be A-objects (A-individuals, A-properties or A-relations) for Zalta. It may be thought that with this we introduce an unnecessary duplication of abstract entities, but there is at least one aspect which seems to make it unavoidable: IMPs are not fictitious entities, they are intensional entities, and yet it would appear that to the extent that they are not accurate they are determining fictitious entities. We have to emphasise another aspect: Zalta would mark that the GIMPs[24] that are partially inaccurate *represent* the O-objects that are their intentional final target (Zalta 2001, 342).

Now let's look at it through our case of the bar of soap with the appearance of a lemon. Suppose that a subject S has a PE of a concrete O-individual. Call the latter *bs*, applied to our example of the bar of soap. When facing *bs*, some of the features or properties of that concrete O-individual have an impact on the cognitive apparatus of S generating a mental token **bs** in their mind. What properties are registered depends on things such as how S is situated in the presence of *bs*, which features it deals with and what is its discrimination capacity. In this way **bs** remains cognitively bound to the mental tokens of the aspects and properties of *bs* (Zalta 343). The properties that *bs* exemplifies can be encoded by a GIMP μ_1 – an A-individual; what Zalta calls the cognitive content – of **bs**. It is by virtue of this fact that we say that **bs** represents *bs* (in the usual acceptation of representing[25]).

However a GIMP μ_1 can also contain as components to IMPAs, as aspects or properties which do not achieve correspondence with the ones that *bs* exemplifies although they keep correspondence with the ones exemplified by other O-individuals different from *bs* or even they do not keep them with properties exemplified by any O-individual. Thus, if P_1, P_2, P_3, P_4, P_5, $P_{6, \ldots\ldots\ldots}$,

[24] Have in mind that Zalta does not speak about iconic modes of presentation (IMPs), neither global nor of aspects or properties. This formulation is incorporated by us.

[25] This usual acceptance is the standard of semiotic, to which a material support represents, through the mediation of an intensional content, something. The non-usual acceptance is the one that deals with a certain way of conceiving something.

P_{15} are properties that μ_1 contains as components, it follows that only a subgroup of them correspond to the ones exemplified by *bs*. This constituted the fact that μ_1 represents *bs* to a concrete subject S in a concrete situation or, what we think it is the same, that μ_1 is the mode in which *bs* is presented to S in that situation. In a different situation, for example in case that S erroneously perceives the bar of soap as a lemon, the same object *bs* would cause a different mental token, **bs´**, with the A-object μ_2 as its cognitive content. This could encode properties different enough to make that the subject S fails to recognise *bs*, that is, different enough to make that the subject adopts the erroneous belief of 'this is a lemon'. μ_1 and μ_2 are two different A-individuals, two different GIMPs, while they constitute two different modes in which *bs* is presented to S.

We said before that each of these GIMPs, to the extent that they are not completely accurate to represent *bs* (in the sense of not being completely accurate ways of conceiving *bs*), determine respectively a different individual of fiction; assume that μ_1 determines α_1 and μ_2 determines α_2. Notice that the subject S does not perceive α_1 in a circumstance or α_2 in another, since α_1 and α_2 are fictitious entities and a human subject does not perceived fictitious entities, except in hallucinations. When the perception is genuine, although it is not completely accurate, a subject S always perceives a concrete O-object, but conceived according to a GIMP. In the cases that we have been mentioning S always perceives *bs*, once it is conceived according to the GIMP μ_1 and another one according to the GIMP μ_2. But each of the GIMPs determines a different fictitious entity – α_1 and α_2 –, since not all of the aspects and properties – not all of the IMPAs which form μ_1 or μ_2, are suitable for *bs*. In this proposal (a bit different to how Zalta presents it) the individuals α_1 and α_2 are the ones who encode, respectively, the properties given by μ_1 and μ_2. α_1 and α_2 are also A-objects, as μ_1 and μ_2. The first ones are fictitious A-objects, but not the second ones owing that they are intensional.

Connecting the previous with our proposal of epistemic support it seems more plausible the fact that the process of support requires that one or some DPHs are triggered in order to submit to the background of beliefs, and not a PEB immediately. The approximate representational character of the content of any PE seems to require that these hypotheses are generated in the mind of the subject S and that they are necessarily evaluated in the light of the previous background of that subject. We could say that it is that fallible character of PEs, in a strong sense, what makes the fact that the subject has necessarily a process of choice of the best hypothesis, among DPHs and NDPHs in each occasion, in the light of the PE itself (or sequence of PEs) and of the background of relevant beliefs which the subject S has. If we could consider the content of any PE as absolutely trustworthy or completely veridical perhaps there would be no necessity to describe the epistemic

relation between veridical PEs and PEBs postulating that intermediate step. However, since this would only occur in an ideal situation, that intermediate element must be included when explaining the epistemic relation between a PE, which is only approximate representational regarding its final concrete O-object, and the corresponding PEB, something that our proposal of epistemic support permits to do.

With these elements we can finally formulate a definition of epistemic support as follows:

> A PE (or sequence of PEs) of a subject S epistemically supports a certain PEB of S regarding an O-object (or scene Sc) while, possessing an approximate content (an A-object consisting in a certain mode in which O (or Sc) is presented to S in that moment), its occurrence triggers in S one or several hypotheses (direct or indirect), which subjected to evaluation in the light of the background of beliefs that S has through a process of inference to the best explanation (or the best hypothesis), leads to the fact that S finally adopts as its PEB that one which it considers the best one when accounting O (or Sc).[26]

5 Conclusions

In this work we have defended:

- the non-conceptual nature of the content of PEs;
- the fallible nature in a strong sense (of the content) of PEs;
- the approximate representational nature (of content) of the PEs;
- that the warrant relation between a PE (or a sequence of PEs) and a PEB based on it (them) is the one of epistemic support (and not the ones of justification and entitlement);
- that the approximate representational nature (of content) of PEs provides a reason that is more in favour of the proposal of epistemic support.

Moreover, we have developed our analysis relying (with qualifications) on a way of analysing the intensional contents, especially the modes of presentation, carried out by Zalta. In such development we have postulated what we call 'iconic modes of presentation' (IMP) for the visual perceptions. (Following our proposal other non-conceptual modes of presentation correspond to other types of perceptive experience.)

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[26] This definition modifies the one that we provided in previous works when appealing the approximate representational nature of PEs.

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