Can perceptual content be conceptual and non-theory-laden?

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1. Introduction

Traditionally the idea that perception is theory-laden has been suggested within philosophy of science in reaction to the idea that there is a pure given, namely, a level of experience uncontaminated from our theories. Perception is always dependent on our beliefs and, more generally, on our theories. This thesis about the theory-ladenness of perception, however, has been criticized as leading to perceptual relativism –a position which is unacceptable for epistemological and ontological reasons. In contemporary philosophy of mind there is a related discussion about the content of perceptual experience. The debated issue here is whether perceptual content is conceptual or nonconceptual. There is certainly a close affinity between these two debates. Indeed, McDowell (1994a) connected them by criticizing the notion of nonconceptual content as a version of the myth of the given. An issue that is not clear, however, is whether the acceptance of conceptualism about perceptual content obliges one to accept also the theory-ladenness of perception. I would like to argue that this is not the case. More particularly, in this paper I will argue first that the perceptual content is conceptually articulated and second that it is not necessarily theory-laden.

2. The metaphysics of concepts

What are concepts? There are three main approaches to the metaphysics of concepts. According to these, concepts are abstract entities, mental particulars and capacities respectively. I will criticize the first two approaches and opt for the third.

2.1 Concepts as abstract entities

Frege understands concepts as senses. However, the ontological status of Fregean senses is very problematic. According to Frege, senses are abstract entities which are both mind- and language-independent. Senses belong to a Platonic type of world which should be distinguished both from the domain of material things and the domain of the psychological: "A thought belongs neither to my inner world as an idea [Vorstellung], nor yet to the external world, the world of things perceptible by the senses" (Frege 1988, p. 52)[1]. Senses are abstract entities that exist perennially independently of whether they have been grasped or not: "The work of science does not consist in creation, but in the discovery of true thoughts … the truth of a thought is timeless" (Frege 1988, p. 51). Thus, senses do not need human understanding in order to exist –they are objective and mind independent: "When he grasps or thinks a thought he does not create it but only comes to stand in a certain relation to what already existed" (Frege 1988, p. 55, note 7)[2].

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[1] See, also, Frege 1993, p. 144-145: "The reference and sense of a sign are to be distinguished from the associated idea [Vorstellung] … The reference of a proper name is the object itself which we designate by its means; the idea, which we have in that case, is wholly subjective; in between lies the sense, which is indeed no longer subjective like the idea, but is yet not the object itself".

[2] See, also, Frege 1988, p. 55: "…the thinker does not create [the thoughts] … but must take them as they are. They can be true without being grasped by a thinker".

The ontological status of Fregean senses creates insurmountable problems, particularly in our days that most of the philosophical approaches tend to be naturalistic. One of the bigger problems is that of interaction: there is no satisfying explanation on how something immaterial, like sense that belongs to a third realm, can interact causally with the things of the material world and the psychological state of the subject. Frege maintains that "[w]hen a thought is grasped, it at first only brings about changes in the inner world of the one who grasps it; yet it remains untouched in the core of its essence, for the changes it undergoes affect only inessential properties" (Frege 1988, p. 54). What Frege calls "grasp of a sense" is a mysterious act which does not make any clearer the way a linguistic sign is understood. Moreover, if sense belongs to a timeless and immutable world, then all senses exist in advance and are independent of historical developments. But, then, the problem that arises is how it is possible to understand new terms.

2.2 Concepts as mental particulars

A second approach to the metaphysics of concepts is that concepts are mental particulars, namely mental representations[3]. Among others, this idea was championed by the British empiricists. According to this approach, concepts are (or, more exactly, are composed) of introspectible mental items, that is, images.

The idea that concepts are mental images faces several problems[4]. The possession of a mental image seems to be neither necessary nor sufficient for the possession of concepts, for it is possible to use competently a concept without entertaining any accompanying mental image, as it is possible to possess an image without understanding it[5]. Moreover, as Wittgenstein has noticed, when two subjects use the same word it is possible that the same mental images could come before their minds and still use the words in a different way: "What is essential is to see that the same thing can come before our minds when we hear the word and the application still be different. Has it the *same* meaning both times? I think I shall say not" (Wittgenstein 1953, §140). Thus, the possession of an image of a triangle is compatible both with the possession of the concept 'triangle' and the possession of the concept 'isosceles triangle'.

The main point of all these objections is that concept possession cannot be identified with the possession of conscious qualitative states. However, contemporary philosophy of mind has rehabilitated the notion of mental representation –this time as a *subpersonal* symbolic state[6]. Mental representations, understood in this way, are not accessible from the first-person perspective. Subpersonal mental representations are only accessed by the mechanisms of the brain (and, perhaps in the future they might become accessible from the third-person perspective through special devices). Being unconscious, subpersonal mental representations are not liable to the criticisms advanced against understanding concepts as conscious images. Thus the suggestion

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[3] See Fodor 1998, p. 3: "…a concept is a kind of mental particular".
[4] See Frege 1988.
[5] See, also, Putnam (1981, p. 19-20): "…possessing a concept is not a matter of possessing images (say, of trees –or even images, 'visual' or 'acoustic', of sentences, or of whole discourses, for that matter) since one could possess any system of images you please and not possess the ability to use the sentences in situationally appropriate ways …A man may have all the images you please, and still be completely at a loss when one says to him 'point to a tree', even if a lot of trees are present. He may even have the image of what he is supposed to do, and still not know what he is supposed to do. For the image, if not accompanied by the ability to act in a certain way, is just a picture, and acting in accordance with a picture is itself an ability that one may or may not have."
[6] See Fodor 1975.

that concepts are subpersonal mental representations[7] seems to stand on a better footing.

According to Fodor (1998, p. 7) "[subpersonal mental representations] are the primitive bearers of intentional content". Understood in this way, mental representations are one of the main building blocks of the contemporary Representational Theory of Mind (RTM). Currently, there is a heated debate about the adequacy of RTM. The most important problems that RTM faces are immediately related to the hypothesis that there are subpersonal symbolic representations. A first problem concerns the expressive adequacy of the subpersonal symbolic representations, namely whether all knowledge can be expressed propositionally and, a fortiori, in terms of subpersonal symbolic representations. One of the main objections here can be reconstructed as follows: there is a kind of practical knowledge which is necessary for the skillful application of propositional knowledge and this practical knowledge cannot be expressed propositionally. I will return to this objection and defend it in section 4. Another problem concerns the very existence of the subpersonal symbolic representations. This is the problem of the naturalization of mental representations: in virtue of what can a brain state acquire representational content and become a mental representation? Currently there are various theories for the naturalization of mental representations which, however, still face grave difficulties[8]. Finally, a third problem concerns the bridging of the gap between the subpersonal and the personal level. Can the content of experience be constituted out of subpersonal contents? How could we ever explain our direct access to the world in terms of *orphan* mental *representations*?

2.3 Concepts as capacities

The third approach to the metaphysics of concepts is that to have concepts amounts to having certain discriminatory, recognitional and linguistic capacities. One issue that varies in the different versions of this approach is whether the three kinds of capacities mentioned should all be possessed in order for a creature to possess concepts or whether it is sufficient to possess only two or even one of them. Geach (1957, p. 12), for example, considers the possession of linguistic capacities as a sufficient (though not a necessary[9]) condition for the possession of a particular concept: "It will be a *sufficient* condition for James's having the concept of *so-and-so* that he should have mastered the intelligent use (including the use in made up sentences) of a word for *so-and-so* in some language. Thus: if somebody knows how to use the English word 'red', he has the concept of red"[10].

In fact, this version of the capacity approach is the most widely accepted. Thus, the capacity to have concepts is intimately connected to the capacity to use language:

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[7] See Fodor 1998.

[8] See Fodor 1990, Millikan 1984, Dretske 1988, Block 1986, Whyte 1990. One of the deeper problems that the programs of naturalization of mental representations face is the problem of the indeterminacy of content. For an examination of this and of the other problems that haunt the aforementioned programs see Pagondiotis 2001.

[9] See Geach 1957, p. 44.

[10] For a recent approach which considers the possession of recognitional capacities as sufficient for the possession of a particular kind of concepts see Loar (1990, p. 87): "Given a normal background of cognitive capacities, certain recognitional or discriminative dispositions suffice for having specific recognitional concepts, which is just to say, suffice for the capacity to make judgements that depend specifically on those recognitional dispositions. Simple such judgements have the form: the object (event, situation) *a* is *one of that kind*, where cognitive backing for the predicate is just a recognitional disposition, i.e. a disposition to classify objects (event, situations) together".

possessing a concept amounts to understanding the meaning of a word which, in its turn, amounts to the capacity to use appropriately the word in different contexts. Meaning is not understood as a self-standing entity –abstract or particular– but it is considered as equivalent to the possession of a certain know-how. Ryle (1957, p. 145) expresses succinctly this point:

> "meanings are not things, not even very queer things. Learning the meaning of an expression is more like learning a piece of drill than like coming across a previously unencountered object. It is learning to operate correctly with an expression ... But [the use of an expression] is not an additional substance or subject of predication. It is not a non-physical, non-mental object -but not because it is either a physical or a mental object, but because it is not an object. As it is not an object, it is not a denizen of a Platonic realm of objects"[11].

The possession of a concept amounts to the possession of practical knowledge; it is to know *how* the corresponding word for the concept should be used in various contexts. This is not a propositional kind of knowledge. That is why one can use a word intelligently "without being able to give an account of its use" (Geach 1957, p. 16). In that sense, the "knowledge" of the use of a word seems to be very similar to the knowledge of the skillful use of a tool for the accomplishment of some task.

If concepts are understood as capacities of subjects, then they are subjective in nature. This, however, does not threaten intersubjective communication. As Geach (1957, p. 14) notes: "The subjective nature of concepts does not however imply that it is improper to speak of two people as 'having the same concept'; conformably to my explanation of the term 'concept', this will mean that they have the same mental capacity, i.e. can do essentially the same things".

Concepts should not be considered as mere potentialities. A conceptual capacity can be actualized. However, this actualization can take place only along with the actualization of other conceptual capacities. In particular, conceptual capacities are actualized in mental acts[12]. According to McDowell (1998, p. 434), the paradigmatic mode of actualization of conceptual capacities is judgment[13].

In what follows I will presuppose the capacity approach to the problem of the metaphysics of concepts. Namely, I will accept that to possess a concept is to possess certain discriminatory, recognitional and linguistic capacities. My aim is to determine more clearly what is involved in these capacities and whether they are exercised in perception.

3. Is perceptual content conceptual?

As I already noticed, most of the supporters of the capacity approach consider the possession of linguistic capacities as a sufficient condition for the possession of concepts. Linguistic capacities are taken to involve a family of inferential capacities, namely capacities which, very generally speaking, allow the appropriate use of words and sentences. But, there must also be recognitional capacities that are involved in the capacity to use language. Minimally, we cannot use words and sentences if we are not already able to recognize them as such and differentiate them from other items that are not words or sentences.

In what follows, I will focus initially on this capacity to recognize signs because it will pave the way for an elucidation of the notion of recognition. Based on this

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[11] See, also, Wittgenstein 1953, § 43.

[12] As Evans (1982, p. 102) remarks: "[t]his is the analogue of the fact that the understanding of a word is manifested only in the understanding of sentences".

[13] See also Geach (1957, p. 7): "concepts … are capacities exercised in acts of judgment".

elucidation I will then attempt to show that recognitional capacities are also involved in perception and that it is for this reason that perceptual content is conceptual. I speak here about elucidation because I am not going to give a reductive account of what is involved in the possession of recognitional capacities, namely an account in terms of non-conceptual capacities. In that sense, there is a kind of circularity in the suggested approach: the capacities that are involved in a conceptual capacity, such as the recognitional capacity, are already conceptual capacities. But this circularity would be problematic only if I intended to provide a reductive approach.

My insistence on the recognitional capacities that are involved in perception is a way to focus on the intentionality of perceptual experience and to produce an additional argument in favor of the conceptualists, namely an argument which does not rely on the inferential capacities and, in particular, on the justificatory role of perceptual experience. In sort, I'll attempt to defend the conceptuality of perceptual experience by focusing on intentionality and not on inference.

3.1 The capacity to recognize signs

Recognizing something as a sign is to recognize that it stands for something else. What is involved in this capacity? One way to approach the question is to compare the recognition of a sign with the recognition of other items that are not signs (e.g. tables). What more is involved in the recognition of a sign compared to the recognition of other kinds of things? Let us initially approach this question in terms of the behaviour induced by recognizing something as a sign.

One first suggestion could be that a creature which is capable of recognizing *A* as a sign of *B* is one which reacts to the presence of *A* as it would react to the presence of *B* itself[14]. However, I think that this characterization seems to be more suitable for what Judge (1983) calls "signals"[15]. In the animal kingdom it is often the case that animals of a particular species take flight not only when they detect an enemy but also when they hear a cry produced by a conspecific which warns them of enemy presence. The cry seems to constitute for the animals of this species a distress signal for the presence of a predator in the nearby area.

On the other hand, a creature which is capable of recognizing *A* as a *sign* of *B* does not necessarily react to the presence of *A* as it would react to the presence of *B* itself. Indeed, if the sight of the sign *A* induces the same reaction that the sight of *B* itself induces, then that, most often, shows that *A* was not recognized as a sign. A well-known incident which happened in the first days of cinematography illustrates this point: when the Lumière brothers' movie *The train's entrance to La Ciotat station* was played for the first time, the viewers, seeing a train rushing towards them, were terrified and started to run in order to save their lives. The viewers in this occasion reacted as they would react had they seen the train itself. In other words, they did not understand that it was only a sign of the train and not the train itself, namely a bodily present train.

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[14] This is, according to Tugendhat (1976, p. 289-290), the position of the pragmatist-behaviorist tradition. Tugendhat refers to Morris who, along with Peirce, is the founder of the general theory of signs called semiotics. Morris (1938, p. 84) notes, in particular, that "[f]rom the point of view of behavioristics, to take account of D by the presence of S involves responding to D in virtue of a response to S". See, also, Morris (ibid, p. 109): "…the interpretant is the habit of the organism to respond, because of the sign vehicle, to absent objects which are relevant to a present problematic situation as if they were present".

[15] See Judge 1983, p. 40 and Taylor 1985 who both appeal to Piaget 1962.

Signs do not function as substitutes of what they stand for[16]. What is then the function of signs? This is an extremely difficult question and, perhaps, there is not any unifying answer to it. Hopefully, a preliminary answer will suffice to pave the way for my main concern in this section, which is what is involved in the capacity to recognize signs. The preliminary answer is that the function of signs is to refer. Through this referential function of signs an entity or a class of entities is specified and singled out.

But what is involved in the capacity to recognize signs? When someone recognizes *A* as a sign of *B*, he is capable of disengaging himself from the immediate environment. Thus, a new dimension is opened up, the dimension of reference to things. This, prima facie, presupposes the capacity to disengage the vehicle of the sign from the referent. Thus, the referent is grasped as something not related to the immediately perceived environment. The referent is grasped as not belonging to the current spatio-temporal framework and, thus, as not having any causal impact on the objects of the immediate environment; in other words, it is grasped as *non-bodily present*. This liberates the sign-user from the restricted set of responses signals can induce. The capacity of the sign-user to distance himself from the immediate environment allows him to grasp entities outside of any particular spatio-temporal context. This distancing is a necessary condition for grasping something as past, future, imaginary, possible etc.

If the capacity to recognize signs is combined with the inferential capacities of the sign user, then a host of new connections are established which lead to a host of new responses. A creature that has the capacity to grasp entities outside of any particular context can 'dwell' on them (whenever time permits) and this allows it to make new comparisons, to discern new similarities and differences, to make new connections. Thus, if such a creature can form the judgments *Fa* and *Gb*, then, in principle, it can also form the judgments *Ga* and *Fb*.

The very capacity to distance oneself from the immediate environment is a necessary condition for making normative distinctions, such as true and false: the capacity to make judgments about the world opens up the possibility of being faithful or not to the facts.

In general, when an entity *A* ceases to be used as a signal of *B* and starts being used as a *sign* of *B*, we can say that *B* is *presented - manifested* in some way to the user of *A*. Thus, the capacity to recognize and use signs affords an additional degree of freedom, which concerns the way things are presented. It affords a perspective on the world.

In order to distinguish the recognition of signs from the recognition of signals I would say that, unlike signs, signals do not refer to something, but rather *indicate* something to their users. It is important to stress at this point that the difference that I pointed out between the use of signals and the use of signs is not suggested here as pointing to a difference between animal capacities and human capacities. My aim is just to isolate and describe a basic capacity that is involved in recognizing something as a sign. That is why I examined what more is involved in the use of signs compared to the use of signals. It is possible that in the animal kingdom there are creatures that use signs, as it is possible that humans, in some cases, use signals in the way described. This is an empirical issue that can be settled only by empirical research.

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[16] Peirce in a letter he wrote to Lady Welby, which most possibly was never sent to her (Hardwick 1977, p. 189), criticizes his choice to take representatives as a kind of sign. In particular, referring to his use of the word "representamen" as a synonym of the word "sign", he notes: "I thought of a representamen as taking the place of the thing; but *a sign is not a substitute*. Ernst Mach has also fallen into that snare" (Hardwick 1977, p. 193, emphasis added).

However, it could be objected here that when one is capable of recognizing an entity as a sign, namely as something which refers to a non-bodily present thing, then he should also be capable of recognizing signs which refer to a bodily present thing, like the expression "this tree" that refers to a tree situated in the immediate environment. Does this mean that the particular expression functions as a signal? I think not, because the expression "this tree", when recognized by a competent sign-user, does not simply indicate a bodily present thing, but it refers to the thing *as* bodily present. In other words, the grasp of the particular expression includes the additional dimension that concerns the presentation or manifestation of the tree. This is revealed from the fact that when a competent user of English hears the expression "this tree", he continues to grasp the vehicle of the expression as disengaged from the tree. This disengagement is not cancelled even if *there is* a causal connection between the vehicle of the sign and the tree.

On the other hand, a creature that uses *A* as a signal of *B* is not capable of disengaging *A* from *B*. Prima facie, that would mean that the creature treats *A* as a feature of *B* or as *B* itself[17]. Thus, a distress signal indicating a lion causes to a creature that hears it the same set of reactions that the olfactory or the visual detection of a lion itself would cause. This seems to show, at least prima facie, that signals are treated by the creatures that 'consume' them as features of the lion itself. The fact that natural language has ways to refer to bodily present things does not mean that these ways must be equated in their function with the use of signals. Reference to an entity of the immediate environment differs radically from the indication of such an entity: the vehicle of the sign, as opposed to the vehicle of the signal, is not taken by its user as a feature of the referent or as the referent itself.

However, if I finally specify the concept of indication in such a weak way, then it could be objected that it becomes indistinguishable from direct recognition of the thing itself. If the distress signal for the presence of a lion is treated by its user as some feature of the lion itself, then the recognition of the signal is of the same order as the recognition of the lion (or of some feature of it). This objection is justified. From the perspective of the signal user (who does not have the capacity to recognize signs) the indication of an object does not differ from the recognition of the object itself or of some feature of it. The difference between indication and direct recognition of an entity can be detected only from the perspective of an observer who has the capacity to recognize signs.

3.2 The capacity to perceive objects

Thus far, I have argued that one of the capacities that is involved in the recognition of signs is the capacity to distinguish between the bodily present and the non-bodily present. The reason that I insisted on this point is that the same capacity is also involved, though in a different way, in the more elementary capacity to recognize objects. When I recognize something as a tree, I single it out in my visual field. But my experience involves something more than that: I experience the tree as something of a kind seen before. That is why when I recognize something as a tree, I am prepared to judge that this tree is like one I saw before, namely like a non-bodily present tree. My experience is not 'trapped' to the here-and-now, disconnected from anything else. If

[17] Such a kind of use is possibly found in primitive people as well. Cf. Heidegger 1962, p. 113/82: "… for primitive man, the sign coincides with that which is indicated. Not only can the sign represent this in the sense of serving as a substitute for what it indicates, but it can do so in such a way that the sign itself always *is* what it indicates".

that was the case, then I could not detach myself from the immediate environment and experience something *as* bodily present neither could I reidentify it as the same kind with a non-bodily present thing. Thus the capacity to recognize objects involves the capacity to distinguish between the bodily present and the non-bodily present. This involvement, as I noticed at the beginning of section 3, should not be understood here as meaning some kind of reduction of recognitional capacities to non-conceptual capacities; it is intended just as an elucidation of the concept of recognitional capacities. The capacity to distinguish between the bodily present and the non-bodily present is already within the realm of the conceptual.

However, it could be objected that recognition is not the most elementary perceptual episode. After all, I could perceive a tree without recognizing it, namely without possessing the sortal concept 'tree'. Not all perceiving involves recognition and application of concepts. Thus, I could perceive a here-and-now object of my environment even though I could not recognize it. I would perceive it as *this X*, namely as this unknown object.

But even this kind of 'pure' perception involves the actualization of certain very general recognitional capacities. *Perceiving* something as an unknown object amounts to grasping it at least as bodily present. When we perceive something which we do not recognize, we grasp it as something more than an isolated punctual, two-dimensional facet (or, we could say, impression). The idea of an isolated, punctual image is an abstraction and not a phenomenological given. When we perceive, we grasp directly the environmental things themselves under different aspects. We do not experience two two-dimensional images floating in front of us, like after-images, which we subsequently grasp as a three-dimensional 'image'. Neither, do we experience a series of disconnected three-dimensional 'images' –one for every moment-, which we subsequently synthesize as a thing persisting through time. A persisting appearance cannot account for the appearance of persistence.

Thus, even when we perceive something without recognizing it, we single it out as something detached from us with a diachronically stable mode of persistence. That is why we are not prepared to call "perception" the appearance of an after-image in our visual field[18]. The after-image does not present any resistance because it does not afford us any way to explore it. Even when we perceive something completely unknown, we experience it as something that belongs to the actual environment, as something bodily present, as something which is explorable. But this is already, as I said, a conceptual capacity.

However, it could be objected that we share with non-concept possessing creatures "various innate 'object-constancy' and 'object-tracking' mechanisms that automatically 'lock onto' medium sized lumps –especially ones that are moving and/or staring at us"[19] – and, *that is all* that is needed for having perceptual experience of the world. These mechanisms can provide the discriminatory capacities necessary for the individuation and recognition of environmental objects in a bottom-up, nonconceptual way. Through these mechanisms, we and other less evolved creatures experience directly the 'real' taxonomy of the world. Thus, there is no need for the obscure terminology of bodily presence.

But I doubt that all these subpersonal mechanisms can account for perceptual experience. There is more to perception than to be able to keep track. Following

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[18] Thus, I am not claiming that all experience is conceptual; I am claiming that all perceptual experience is conceptual.

[19] Haugeland 1998, p. 260-261.

McDowell (1994b), we should rather insist that these are merely enabling and not constitutive conditions for perceptual experience. Blindsight can provide an empirical illustration for the claim that the operation of subpersonal mechanisms is not constitutive of perceptual experience. We can plausibly assume that blindsighted subjects have their 'object-constancy' and 'object-tracking' mechanisms intact since they can execute tasks which require visuo-motor coordination. Yet the blindsighted subjects do not perceptually experience the world (or, rather, parts of it). In other words, the world is not manifested to them as bodily present. Rather the visual stimuli, impinging on the retina of the blindsighted subjects, function as signals which do not even indicate their cause but just provoke a response. In short, we could say that they function as *imperative* signals.

Some researchers[20] have claimed that imperative signals are ontogenetically and phylogenetically prior to indicative signals. At first sight, this thesis seems plausible because the imperative signals, as opposed to the indicative signals, are directly related to behavior and, thus, they are more readily explicable in evolutionary terms. But the issue that remains open is what conditions must be satisfied in order for a proximal or a distal stimulus to be grasped as an order. I would like to suggest that one basic condition for a creature to grasp something as an order is to have the capacity not to obey it. But this can be possible only if the creature can detach the vehicle of the imperative signal from what this dictates in order to take a stance towards the latter; and this, again, involves the capacity to differentiate the bodily present from the non-bodily present. If the creature cannot take a distance from what the signal 'orders' and just obeys it blindly, then nothing is manifested to the creature, and its behavior is not the result of any kind of rule-following, but either an innate or an acquired reflex. As in the case of indicative signals, imperative signals can be taken as such only from the third-person perspective.

When we perceptually experience the world, the world is presented to us as bodily present[21]. We experience directly the world itself. There is nothing in our experience that would make it function as an internal sign of the external world. That would presuppose that our experience would be similar to the experience of an external sign. But whereas in the case of external signs we can focus our attention either on the vehicle of the sign or on the referent, nothing comparable can be done in the case of perceptual experience. When we perceive something, we cannot experience any vehicle of a purported mental representation, and this constitutes an additional, phenomenological argument against the idea that personal mental representations are involved in perception. But neither can a *subpersonal* mental representation –say, an internal index produced by an object-tracking mechanism– account for the direct experience of the object itself, because, as the case of the blindsighted subjects shows, the possession of such orphan subpersonal representations is not sufficient for having experience, not to mention, *direct* experience. A subpersonal index is, at most, an imperative signal (third-personally characterized) which necessitates a certain reaction without presenting anything to its possessor. A creature that detects moving black spots and responds instinctively to them has certainly no distance from its environment and nothing eatable is presented to it. However, the fact that such creatures are totally

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[20] See, for example, Skinner 1957, Papineau 1998, Place 2000. Cf. Wittgenstein (1980, p. 31): "The origin and the primitive form of the language-game is a reaction; only from this can more complicated forms develop. Language –I want to say– is a refinement, 'In the beginning was the deed'".

[21] See Husserl 1997, p. 12: "…the object stands in perception as there in the flesh [as bodily present (leibhafter)], it stands to speak still more precisely, as actually present, as self-given there in the current now".

immersed in their environment and cannot perceive it does not entail that they are deprived of any kind of sensory sensitivity. Nothing precludes that they can still make sensory discriminations and react differentially.

I have argued that perception is always concept-involving and that even when we perceive something unknown, we experience more than a series of impressions. Unlike what traditional empiricism claims, we experience the spatio-temporal things themselves situated among other things in the world. As Sellars (1978, p. 283) notes, "the idea that perceptual takings can be appropriately *minimal* and yet carry rich categorical commitments was lost to the empiricist tradition".

However, Dretske (1993, p. 268-269) raises the following objection: "To be aware of a thing is at least to be aware that it is … how shall we say it?… a thing…If the concept one must have to be aware of something is a concept that applies to *everything* one can be aware of, what is the point of insisting that one must have it to be aware?". I think that the answer to this question should be that it is exactly because certain concepts are involved in every perceptual experience that perceptual experience presents us an objective world.

However, it could be objected that concepts that express categorical commitments (such as the concepts 'object' or 'bodily presence') are very sophisticated concepts which we acquire long after the acquisition of sortal concepts. Children learn first to speak about such stuff as trees and lions, and much later they learn to speak about objects. Indeed, even adults may not use the concept of bodily presence.

One problem with this objection is that it appeals to the developmental history of concept acquisition and not to what is involved in the full-fledged conceptual capacities. Moreover, the possession of a concept does not necessarily involve the knowledge of a linguistic expression for that concept. What is more, one may possess a conceptual capacity just by exemplifying it in the actualization of other conceptual capacities, such as the actualization of sortal concepts[22]. In that sense, we may say that the actualizations of sortal concepts constitute instantiations of the possession of the concept 'object'. Even an unknown object is perceived as 'falling under' an as yet unknown sortal concept.

4. Is perceptual content theory-laden?

Thus far I have argued for the thesis that perceptual experience is conceptual. Now, I would like to examine whether this thesis entails that perceptual experience is theory-laden. One standard way to introduce the theory-ladenness of perception is to claim that perception is partly determined by our beliefs and expectations. Another way this claim is put forward is as follows: every perceiving is perceiving *as*[23]. Formulated in this latter way, the thesis of the theory-ladenness of perception seems to be indistinguishable from the thesis that perceptual content is conceptual. Of course there are many different interpretations of what 'theory' means here. However, in this paper I am going to consider only a very general idea of theory which is nevertheless quite dominant. According to this idea, a theory is a kind of propositional knowledge, a knowledge that can be expressed as a set of rules and descriptions. What I would like

[22] Cf. Strawson (1992, p. 23): "if a philosopher claimed that the concept of 'body' was basic in our conceptual structure, his claim could be understood as a kind of shorthand for the claim that it was a basic feature of our conceptual structure that it contained a range of concepts of a certain general type, namely, concepts of different kinds of body; and he could maintain this consistently with admitting that we ordinarily had no occasion to make use of so comprehensive a classification".

[23] See Hanson 1962, ch.1.

to argue is that if theory is understood in this way, then perceptual content is not necessarily theory-laden.

When we see something as a table, we actualize the concept 'table'. But does our seeing something as a table amount to the possession and application of a theory? What would that mean? Seeing something as something involves some kind of recognition. How is the recognition effected? I can certainly recognize something never seen before by just using a description of it. For example, I could recognize zebras, though I have never seen them before, by just using the description that zebras are animals very much like horses with white stripes. Obviously, rules and descriptions can play a crucial role in the recognition of things never perceived before[24]. But it seems that this is not the case with the recognition of entities with which we are perceptually acquainted, for it is possible to recognize something without relying on any description. For example, an eyewitness might not be able to recall the face of a criminal and still be able to recognize him as soon as she sees him[25]. But even in cases where we can recall and describe very well what we subsequently recognize, it does not seem correct to hold that the recognition is based on that description, because recognition occurs immediately and no steps are involved in it. Thus, the recognitional capacity need not rely on the capacity to recall descriptions[26].

Geach (1957, p. 44) makes a related remark claiming that the capacity to recognize does not involve the possession of a definition:

> "Are we to say that subjects who can recognize *pogs* but cannot verbally define the term '*pog*' possess the term *pog*? This certainly seems reasonable; how many of us could give a water-tight definition of 'chair' or 'money', words that we should certainly wish to say express concepts? Defining a term is normally a particular exercise of the corresponding concept rather than a way of getting the concept, and performance of this exercise is not a necessary condition of having the concept."

But one could object here that the conclusion that recognition is effected without recourse to rules and descriptions concerns the first-person perspective, namely the way the subject who does the recognition experiences his act. Put in other words, what was said above may be a good *description* of the phenomenology of recognition, but it does not constitute an *explanation* of how the subject manages to have this capacity. Moreover, the particular description does not preclude that rules and descriptions are *unconsciously* involved in the recognition. Learning to recognize things may start with the help of a set of rules and descriptions we consciously use, but, as we become better and better skilled, this process recedes in the unconscious and finally we have the experience of an immediate recognition.

However, this cannot be true, at least, for certain observable properties: no description of redness could allow one to recognize red colour. More generally, humans are particularly able to learn to recognize entities and properties just by demonstrative identification and without recourse to any description. Indeed, this is the most common way in which we develop our recognitional capacities. Thus, it does not seem correct to claim that when we become skillful in recognizing, say, trees, what is really happening is that we rely on a description which unconsciously directs us to effect the recognition.

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[24] In order, however, for this method to be functional, I have to be able to recognize directly horses, whiteness and stripes.

[25] See, also, Evans 1982, chapter 8.

[26] It seems, then, to paraphrase Polanyi, that we can recognize more than we can recall; this constitutes one of the ways that we realize our ability to forget.

But the objector could insist that, independently of how we start to learn to recognize things, when we finally acquire this capacity what is really happening is that we unconsciously manage to abstract a theory which afterwards directs us in the acts of recognition. Thus, when one acquires the capacity to recognize lions, this capacity is based on the possession of a theory of how lions appear. In other words, the capacity to use the concept 'lion' in perception amounts to the possession of an unconscious theory -namely, of a set of subpersonal mental representations.

This objection has two problems. The first is that it has to be shown that the knowledge that we possess when we acquire a recognitional capacity can indeed be a set of rules and descriptions. But even if we accepted that the possession of a recognitional capacity amounts to this kind of knowledge, the further problem that would remain would be that in order for the recognition of a particular thing to be effected, these rules and descriptions would have somehow to be *applied* to the particular thing.

I am not going to dwell on the first problem because even if it could be solved that would not explain how recognition is effected[27]. This is because the most pressing problem is, as I said, the second problem, which we can term "the problem of relevance"[28]. Even if a body of rules and descriptions were involved in the recognitional capacity, how would that allow the skillful application of them in each particular situation? In other words, how can we select the part of this knowledge that is *relevant* for the recognition of each particular individual? Introduction of further rules just transfers the problem at the level of these new rules. More generally, this is a problem that haunts every attempt to express theoretically the practical knowledge involved in the skillful exercise of capacities. The problem seems to stem from the fact that no theory, however detailed, can anticipate its *skillful* application for all possible contingencies. This is why, no matter how good knowledge one has of the theory of a domain, it would not suffice to make him an expert in the application of this knowledge. Kant, illuminates this point very clearly by distinguishing between the knowledge of rules and the knowledge of the application of the rules. Moreover, he attributes these two kinds of knowledge to two distinct faculties: the faculty of understanding and the faculty of judgment:

> "If understanding in general is to be viewed as the faculty of rules, judgment will be the faculty of subsuming under rules; that is, of distinguishing whether something does or does not stand under a given rule" (Kant 1929, A132 /B171)

> "A physician, a judge, or a ruler may have at command many excellent pathological, legal, or political rules, even to the degree that he may become a profound teacher of them, and yet, none the less, may easily stumble in their application. For, although admirable in understanding, he may be wanting in natural power of judgment. He may comprehend the universal *in abstracto*, and yet not be able to distinguish whether a case *in concreto* comes under it" (Kant 1929, A134/B173).

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[27] This does not mean that there is no evidence which suggests that the particular problem is insoluble. We could think, for example, of the repeated failures in philosophy to find adequate definitions of concepts or of the failure of classic AI to show that all knowledge is a kind of propositional knowledge. Moreover, relevant in this context is Cussins' argument that demonstrative content cannot be canonically specified by means of any description in a way that makes justice to the cognitive significance of this content (Cussins 1990, pp. 389-390). Of course, Cussins uses this argument in favor of nonconceptual content because he identifies conceptual content with descriptive content. But this move is not obligatory, since we could hold that the nondescriptive sense involved in demonstrative content is still conceptual because it presents the world as bodily present.

[28] See Dreyfus 1992.

Kant holds that the way to develop our judgment (and, I would add for our purposes, the recognitional capacities) is by examples, that is, by particular cases. As he remarks, the error with one who does not know how to apply the rules "may be due to his not having received, through examples and actual practice, adequate training for this particular act of judgment. Such sharpening of the judgment is indeed the one great benefit of examples" (ibid)[29].

Thus, if the recognitional capacities are developed through examples and particular practice and not through theory, then this kind of learning is not theory-driven but task and data-driven[30]. The recognitional capacities we finally acquire through such kind of learning allow us to apply concepts, as it were, *passively* to experience. But if the knowledge that we possess when we acquire a recognitional capacity is not a set of rules and descriptions –a kind of theory–, then perception is not necessarily *theory*-laden, in that sense of theory. More particularly, what is not theory-laden is the perception which involves *skillful* recognition. But even when we make scientific observations and encounter something never seen before, we still recognize it (skillfully) as an object with a particular colour, shape, magnitude etc. To that extend, of course, perception is not theory-laden, because these recognitional capacities have been acquired through experience and long before we start to learn scientific theories and to make scientific observations. This is why common sense physics has hardly changed since Aristotle's time.

However, I do not want to suggest that no perception is theory-laden. When a scientist observes new phenomena –phenomena with which he is not acquainted–, then his perception is certainly influenced by the scientific theory he holds. This seems an obvious point to make. But there is another issue that seems to create problems for the approach I suggest: when a scientist, after much training, becomes skillful in the recognition of certain well-studied scientific phenomena, his recognitional capacities are not supposed to involve the possession of a theory but a practical nonpropositional kind of knowledge. In that sense, what the trained scientist perceives is not, strictly speaking, theory-laden, but still in *accord* with the scientific theory he accepts. In this case, the influence of theory on perception may be indirect, but it is still an influence. However, I believe that this indirectedness, which characterizes the way theory influences perception, guarantees our capacity to perceive new phenomena that are slightly different from those predicted by the theory. These are phenomena that a novice, namely a scientist who relies exclusively on the criteria that the theory provides, cannot differentiate them from the predicted phenomena. On the contrary, a scientist who is skillful in the recognition of the phenomena predicted by the theory is capable of making very fine-grained distinctions and this allows him to observe new phenomena which are very similar to the predicted.

Thus, I argued that perception based on skillful recognition is *not* theory-laden. However, this claim holds only on the presupposition that 'theory' is understood here as a kind of propositional knowledge. Skillful recognition does not rely on this kind of knowledge and, in that sense, it is not theory-laden. But if 'theory' is understood in a

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[29] An analogous point is made by Wittgenstein (1953, 227e) in relation to how we can learn to recognize whether an expression of feeling is genuine or not: "Is there such thing as 'expert judgment' about the genuineness of expressions of feeling?…Can one learn this knowledge? Yes: some can. Not, however, by taking a course in it, but through '*experience*'.–Can someone else be a man's teacher in this? Certainly. From time to time he gives him the right *tip*.–This is what 'learning' and 'teaching' are here.–What one acquires here is not a technique; one learns correct judgments. There are also rules, but they do not form a system, and only experienced people can apply them right. Unlike calculating-rules".

[30] See Raftopoulos 2001.

broader way as involving the acquaintance with practices and skills[31], then perception is of course theory-laden. In any case, I think that it would be more appropriate to characterize perception as *practice*-laden, because it takes a lot of effort and practice to experience even very small changes in the way we perceive the world. On the other hand, we certainly do not immediately experience changes in the way we perceive the world every time we learn new theories and acquire new propositional knowledge[*].

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[31] See Kuhn 1962.

[*] I am indebted to A. Raftopoulos for his incisive comments and suggestions on an earlier draft of this paper. I would like also to thank V. Kindi, L. Skourla, S. Virvidakis and F. Zika for discussion of several points.

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