

EPISTEMIC TRUTH IN A PLURALITY OF WORLDS

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Abstract

Both Charles S. Peirce and Edmund Husserl have agreed with the need for distinguishing two kinds of objects in referential direction. Dynamical Object and Immediate Object, in Peirce's words. And the object "as a simple noematic object" and the object "as expressed by its determinations", in Husserl's words.

Based on a very similar distinction, a double notion of the world is elaborated in this article. One notion constituted by objects as conceptualized objects that turns into the different languages ($L_1, L_2, L_3, \dots, L_n$) used by humans in conceptualization of world. And the other constituted by objects as the determinable objects, the objects as the "supports" of all possible conceptualizations of them.

Taking that distinction as a basis, a criterion of truth for perception statements belonging to every language ($L_1, L_2, L_3, \dots, L_n$) in which the world or conceptualized worlds are expressed, is proposed in the last part of this paper.

1. Introduction: two kinds of objects in referential direction

Charles Peirce and Edmund Husserl are perhaps the only philosophers who, in considering reference, have insisted on the need to distinguish between two different types or notions of object in a way I believe to be extraordinarily fruitful for both semantics and epistemology. For example, I have argued that applying a distinction similar to theirs in a semantic analysis of incommensurability allows this concept, understood as non-translatability, to be separated from the concepts of incommunicability and incomparability with which it was confounded in *The Structure of Scientific Revolutions*, Vázquez [20]; and more recently I have used the same two-fold notion of object to reply to Kripke's arguments against theories of sense and show why speakers use proper names as if they were rigid designators, Vázquez [22]. I now propose to show how this two-fold notion of object allows formulation of a criterion for assignment of truth values to a particular kind of truth-bearer, statements reporting perceptions.

Let us begin by recalling that, as I showed in the papers mentioned above, Vázquez [20]-[22], numerous passages of his *Collected Papers*

and *Letters to Lady Welby* show Peirce maintaining that in appraising the reference of a sign it is necessary to distinguish between two different notions of object, namely, the “immediate object” and the “dynamical object”; Peirce [11], 8:183. By “immediate object” Peirce means the object as represented by the sign, the nature of which accordingly depends on the representation effected. By “dynamical object” he means the object as it really is, regardless of appearances; the object as defined by all the relationships that a hypothetical ultimate, infinitely comprehensive and detailed study would reveal, Peirce [11], 8:183.

In a very similar spirit, in § 131 of the *Ideen* Husserl sustains that it is necessary to distinguish two notions of noematic object: the “simple noematic object” or “pure unit”, and the “object as defined by its modes of presentation”. The former corresponds roughly to Peirce’s dynamical object, the latter to his immediate object.

For my purpose in this paper it is significant that, in the same paragraph in which he formulates the above two-fold notion of object, Husserl writes: “the ‘sense’ (*Sinn*) of which we have repeatedly spoken is this noematic ‘object as modes of presentation’, with all that the description just characterized is able to express in concepts”, Husserl [5] § 131. It should be borne in mind that in the *Logische Untersuchungen* Husserl had used the term *Sinn* not only for the sense of a sign (like Frege), but also (*erfüllender Sinn*, impletive sense) for the referential content of an intuition in which the sense of the sign is fulfilled; the reason being that for Husserl acts of fulfilment, or verification, involve the content of impletive acts being experienced as identical to the content of the corresponding acts of signification, Husserl [4], Inquiry I, § 14, and Inquiry VI, § 28. We are told in § 25 of Inquiry VI that “comparison of significant intentions and their corresponding intuitions in the static and dynamic unity of the identifying consciousness results in what was defined as the matter of signification reappearing as the corresponding intuition and contributing to identification; and hence in the freedom to accept or discard intuitive elements - or even whole intuitions, in the case of the identity signification corresponding to an expression - resting on the total act associated with the verbal sound having one and the same matter, regardless of whether it is viewed from an intuitive or a significant standpoint”. It should be pointed out that, for Husserl, “matter” is “that instant of the objectifying act that makes it represent precisely *this* object, in *this* way; that is, precisely with *this* organization and form, with special reference to precisely *these* determinations or relationships. Representations of concordant matter do not just represent the same object, but *represent it as absolutely itself*,

that is, as determined in exactly the same way", Husserl, [4], Inquiry VI, § 25).

The above brief tour of Husserl's semantic postulates is relevant to the criterion of truth that is proposed and argued for in this paper because this criterion, though formulated in a different epistemological context, is in many respects closely akin to the criterion of truth put forward by Husserl in the *Logische Untersuchungen*. Both Husserl's criterion and mine rest on the fundamental postulate that the modes of apprehension of an object through a sign correspond, in the case of statements reporting perceptions, to the modes by which the object manifests itself in acts of perception. For example, when in an act of visual perception my attention centres on features of the visual field that I integrate as *that door is shut*, the propositional content expressed by the sentence "That door is shut" is none other than that which the door is apprehended as manifesting in the act of perception. If there is any difference at all between the propositional content, or representation of the door in the sign, and the manifestation of the door in the corresponding act of perception, it has more to do with the specific sensory stimuli involved in each particular case than with the contents as such: whereas at the linguistic level the same phrase ("that door is shut") may be used to express the observational content of any door we perceive to be shut, at the non-linguistic sensory level the content of a perception of a door as shut is apprehended as a manifestation of that particular door.

The above analysis will be pursued further below. In the next two sections, however, I pause to reformulate the two-fold Peirce-Husserl notion of object in purely epistemological terms, ignoring the ontological commitments of its originators. Even when ontological commitments are thus put aside and objects are considered only as experiences, their Peirce-Husserl duality turns out to persist, since even under these conditions they manifest themselves both a) as something that is determined by their multiple and diverse modes of presentation, and b) as something that is an endless source or subject of new presentations.

2. Objects as determined by their multiple and diverse modes of presentation

It seems clear that at both the linguistic level and the level of perceptual experience objects always manifest themselves in one of their multiple guises. This holds both for everyday experience and language, and for scientific observation and language. Both linguistically and perceptually or observationally, I can consider a chair, a glass, a table, a

stone or any other object of ordinary experience as regards its shape, its colour, its size, its position, or any other of its manifold attributes. In any given situation, one of these attributes or modes of presentation will be highlighted, the rest lying dormant until my focus changes and they are brought to the forefront of my attention. If I look at my watch to find out the time, because I have a feeling it is getting late, then the time displayed is what my attention focuses on; but if I am buying a watch, then I am oblivious to the time displayed by each of the watches shown me by the jeweller, and instead see and evaluate other properties, such as shape, size, brand, colour, number style, price, and whether or not they have a second hand, a calendar or an alarm. In short, I consider the set of properties that make me prefer one watch to another. All these properties, and all the many others that I might also have paid attention to, constitute what we normally understand by “watch” and what we expect to be observable by anyone belonging to our culture when he or she looks at a watch. They are properties that belong to the watch as a typified object in a certain culture. When shown a watch for the first time, someone who had never seen one, or who came from a culture in which watches are not used, would hardly be able to appreciate many of its apparently obvious features, or tell the time. This is not to say that this individual for whom watches are novel objects would not eventually be able to view one with an appreciation of all the rich detail with which watches manifest themselves to any of us in our perception of them; but first he or she would have to undergo a perceptual learning process similar to the process that each of us has undergone. As Christopher Peacocke puts it in *A Study of Concepts*, what we really perceive when we have a visual perception is not the scene in the visual field but the content that our attention highlights in this scene, which to distinguish it from the propositional content of language Peacocke calls “protopositional content”, Peacocke [10], pp. 74 sqq.

The modes in which everyday objects manifest themselves to us are properties of these objects, but only in so far as these objects are perceived or spoken of within a certain culture or in the language expressing a certain culture. As Lakoff and Johnson note, “since the natural dimensions of categories (perceptual, functional, etc.) arise out of our interactions with the world, the properties given by those dimensions are not properties of objects *in themselves* but are, rather, interactional properties, based on the human perceptual apparatus, human conceptions of function, etc.”, Lakoff and Johnson [9], p. 163. These modes of presentation, in so far as they belong to objects as conceptualized entities, constitute a world, the world of objects as they are conceptualized in a given language.

Leaving the universe of common-sense objects for the universe of science, each scientific discipline or subdiscipline presents its own systems of conceptualization, its own worlds. Within the realm of physics, for example, the set of dimensions of the objects considered by classical mechanics (mass, gravitational and electromagnetic forces, volume, position, momentum, etc.) differs from the set of dimensions of the objects considered by quantum mechanics (atomic structure, positive and negative charges, strong and weak nuclear forces, and position and momentum as an inseparable pair such that the precision with which each is known depends on the precision with which the other is known). Similarly, chemistry and biology concern other sets of dimensions.

What objects are, *qua* objects determined by their various modes of presentation, is something that depends on the available conceptual framework. But this is not to say that the determinations in question are arbitrary, or - as Putnam asserts - that objects do not exist independently of conceptual schemes, Putnam [13], p. 61; for we also possess a second notion of world, the notion of a world to be conceptualized that, as we shall see below, stems from the second notion of object proposed by Peirce and Husserl. To assert, like Putnam, that objects do not exist independently of conceptual schemes makes sense if we are referring to objects as constituted by their diverse modes of presentation, since these modes of presentation do indeed depend on conceptual schemes; but Putnam's assertion is no longer true if we consider the other facet of objects: their susceptibility to determination, as entities ever open to countless new determinations.

The plurality of conceptual systems generates a plurality of worlds because every conceptual system is constituted so as to account for particular sets of dimensions of our experience of the world, and although many dimensions may be common to different worlds, others are specific to their particular world. The universe of objects as determined by their manifold modes of presentation generates a plurality of worlds (M_1, M_2, \dots, M_n), each of which constituting the concern of a particular conceptual system. None of these worlds is independent of the corresponding conceptual framework, and neither is any conceptual framework independent of the world it focuses on (even though a thought about M_i that arises in the corresponding conceptual framework may of course become objectivized in a language L_i appropriate to that framework, in the sense that the appropriate sentences of L_i persist without the observational experiences that gave rise to the thought). As Kuhn pointed out, when the presentation of examples forms part of the process of learning terms such as 'motion', 'battery cell' or 'quantum of energy', knowledge of the language and knowledge of the world are ac-

quired simultaneously, Kuhn [8]. To learn a language is to learn what categories of things populate the world and what their salient characteristics are within the scope of that language; to learn what behaviour is expected and what behaviour is not. Although not all language is directly related to the world, an important part is acquired jointly with knowledge of nature. Knowledge of language and knowledge of the world are therefore not two distinct types of knowledge, but two sides of the same coin, Kuhn [8].

One might say that it is objects as typified or codified entities that constitute the dimension of reality that is highlighted by Putnam's "internal realism". But as the subjects of experience objects are not completely defined by their modes of presentation. It is essential to our knowledge of objects that they are experienced not only as determined by their diverse modes of presentation, but also as the subjects of determination, as the source of indefinitely many and varied possibilities of determination, as what shows itself to be ever susceptible of countless new and unforeseeable determinations.

3. Objects as entities that are an endless source or subject of new determinations

The set of modes of presentation of objects within a particular conceptual framework constitutes a world M_i . The set of modes of presentation of objects relative to a plurality of conceptual frameworks constitutes a plurality of worlds, M_1, M_2, \dots, M_n . Being constituted by objects *qua* conceptualized objects, this plurality of worlds share a fundamental characteristic: their existing only in relation to their respective conceptual frameworks. However, objects as experienced have a second facet, a facet that gives rise to a different notion of world, and which it is now time to consider in greater detail.

In our perceptual experience, we always approach objects from a particular spatio-temporal viewpoint. Consequently, only a subset of the perceivable features of objects are in fact perceived at any one time. Furthermore, what is perceived depends not only on the spatio-temporal position from which the object is viewed, but also on the observer's attention and conceptual schemes. As Kuhn writes in the *Postscript to The Structure of Scientific Revolutions*, "very different stimuli can produce the same sensations; ... the same stimulus can produce very different sensations; and, finally, the route from stimulus to sensation is in part conditioned by education", Kuhn [6], p. 193. If I change my position relative to a certain object (a chair, say), the visual scene changes because the stimuli that reach my retina change, but I do not cease to

perceive the object in question as one and the same chair if that is the aspect of its reality that I continue to consider; and *vice versa*, if I maintain my spatio-temporal position, and therefore continue to receive the same stimuli, the chair manifests itself in a different fashion if in a new act of perception I attend to another aspect of its reality, Treisman [17]. In short, the same stimuli can mediate different modes of presentation of the object and, contrariwise, different stimuli can mediate a single mode of presentation; but the aspect of our perceptual experience of objects that I wish to draw attention to here is that each mode of presentation simultaneously manifests the object as something that is not exhausted by the determinations produced in each particular mention or act of perception.

We cannot say what objects are without a conceptual scheme, but with each conceptual scheme they are manifested both as determined within the framework of that scheme and as what is ever susceptible of other possible determinations. As well as being experienced as its modes of presentation within one or another conceptual scheme, an object is also experienced as something that is not completely defined by the set of determinations that it may have within a particular conceptual framework at a particular moment in time. This second facet of the experience of objects gives rise to a notion of world that is different from the others: the world as constituted by objects as entities that are ever susceptible of further conceptualization. The objects of our experience are both conceptualized objects and objects experienced as transcending each particular conceptualization.

I am not trying to say that this two-fold nature of objects is something we are explicitly conscious of, either when they are the object of predication or when they are perceived. What we are conscious of in each case is the dimension that at that moment we are attending to, i.e. one of their multiple modes of presentation. At the same time, however, each of these modes of presentation is underlain by this knowledge that objects, be they the objects of mention or of perception, are not limited to what we may be mentioning or perceiving at any particular time; for each determination also assures a certain transcendentalty.

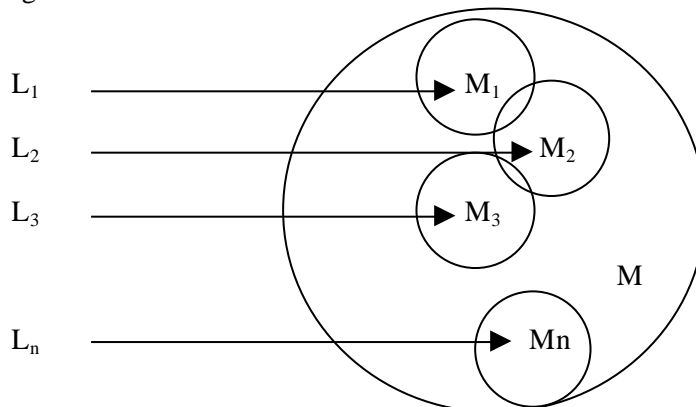
It must at once be stressed that this transcendentalty is an epistemic transcendentalty, pertaining to objects as objects of experience. It is possibly this feature of objects as experienced that prompts metaphysical realism: for if part of the experience of objects is that they transcend all finite determination, it would appear to follow that we should treat them as independent of mind. But this is a conclusion that I do not draw, and which, as Putnam points out, cannot be drawn except from the viewpoint of the Divine Eye. Nothing that I have said here

about objects goes beyond the question of how they are experienced. Their transcendental, I repeat, is a property of their being experienced. What objects may be outside any conceptual system is a question for which there are no answers because it makes no sense, Putnam [14], p. 87; but the epistemological stance represented by Putnam's internal realism is nevertheless complemented to advantage by recognition of this epistemic transcendental that is suggested by the two-fold notions of object developed by Peirce and Husserl, and which, as we shall see below, allows formulation of an epistemic criterion of truth with which to evaluate observational statements.

4. Epistemic truth in a plurality of worlds

If we distinguish, as above, between *a*) objects as determined by their manifold modes of presentation, and *b*) objects as ever susceptible of countless new determinations, then we are led by concept (*a*) to consider a plurality of worlds M_1, M_2, \dots, M_n corresponding to different conceptual systems (each with its language L_i), and by (*b*) to consider a notion of world M that is of a different kind from all the others. This situation is illustrated in the figure,

Languages:



which emphasizes that, according to the above view, any connection between a language L_i and “the” world, be it the structural isomorphism postulated by the atomism of Wittgenstein and Russell or the conventional correlation of Austin, must necessarily be a relationship of L_i with M_i , not with M . As was pointed out above, only from the viewpoint of a Divine Eye could a language be correlated with a world independent of

mind. Divine Eyes apart, a language L_i can only correspond to the world as conceptualized by that language, the correspondence being created between the propositional content or modes of presentation of objects in L_i and the perceptual content, or modes of presentation of the objects of M_i , in the corresponding acts of perception.

On the basis of the proposed epistemological tenets we may now formulate the following criterion of truth:

An observational statement p in a language L_i is true in relation to a world M_i if and only if there is a possible truthful perception x of M_i , the perceptual content of which is expressed by p .

The perception x confirms the truth of p if, as Husserl writes in § 25 of *Inquiry VI*, the acts of perception fulfilling statements of observation are such that “the total act associated with the verbal sound has one and the same matter [i.e. content], regardless of whether it is viewed from an intuitive or a significant standpoint”. It is nevertheless far from easy to separate the intuitive content of a perception from the propositional content proper to language. In testing an observational statement of the kind “the cat is on the mat” we find, if the cat is indeed on the mat, that the propositional content of the statement coincides with the content of the perceptual process through which the cat and the mat manifest themselves to us; or, to put it otherwise, that the statement expresses what we really perceive, which would not be the case if, for example, the animal on the mat were the dog instead of the cat. The problem is therefore how to separate the two contents, the intuitive and the significant.

The propositional content of the statement is clear, in the sense that it can be expressed by the statement regardless of whether the cat and the mat are present or not. Both when we utter the statement in the presence of the cat and the mat and when we utter it in their absence, its propositional content is the same. But what about the intuitive content? Is there a “propositional content” at the level of perceptual intuition? The straightforward answer is “no”: we only acquire explicit awareness of the “propositional content of the perception” when we express it in language, and since in doing so we switch from the perceptual to the linguistic level it is no longer the content of a perception but the propositional content of a statement linked to the perception, which is quite different.

Although I certainly agree with Brown [1], pp. 79 sqq, Peacocke [10], pp. 61 sqq and others in that our perception is a perception of contents similar in kind to propositional contents, not of stimuli or sensations devoid of informational content, I find it both necessary and non-trivial to distinguish perceptual content from linguistic proposi-

tional content. So far in this paper I have referred to perceptual content as the “mode of presentation” of the object in the process of perception; but the expression “modes of presentation” was introduced by Frege to refer to the modes of presentation of the object in a sign, and it is not immediately evident that these modes of presentation pertain to objects in a way that is independent of how the objects are conceptualized in language; if modes of presentation necessarily involve language, we are in the same position as before, with modes of presentation (or contents) that are not, after all, the modes of presentation (or contents) of the objects in the process of perception, but instead their modes of presentation (or contents) in a sign, however intimately linked these modes of presentation in a sign may be to a process of perception.

In spite of the above, the distinction between the modes of presentation of an object in a process of perception and its modes of presentation in a sign is feasible and necessary, since only this or some equivalent distinction can provide a non-coherentist criterion of truth for statements reporting observations.

Following Peacocke, we may describe the information provided by sensory stimulation in a process of perception - what I have been calling the modes of presentation of objects in the perception - as “protopositional content”. However, whatever name we use, the important thing is to clarify whether non-linguistic sensory stimulation does indeed activate the “same” contents as the appropriate linguistic stimulation; in other words, whether at the level of observational statements it is legitimate to speak of perceptual contents that are equivalent to the propositional contents expressed by language even though language is not involved in their constitution. Notwithstanding Husserl’s remark that the total act associated with the verbal sound has the same matter whether viewed intuitively or significantly, this question cannot be settled by consideration of experiences in which perception and language are both involved, such as the empirical testing of an observational statement like “the cat is on the mat”. But then, how are we to represent in language the perceptual content of perceptual experiences with no linguistic component?

As Wittgenstein might have said, we cannot in fact speak of perceptual contents with no linguistic component, but we can approach them by means of an analysis of the behavioural coherence of the perceiving individuals. In learning a language one learns a certain way of conceptualizing the world; it is partly this that hinders the separation of perceptual contents from the conceptual frameworks that are embodied in language and which are used to encode the world as it appears to us in processes of perception. As adults, we therefore perceive a conceptual-

ized world with a system of conceptualization that is simultaneously inherent in the language and the world; hence the difficulty of separating the two. Difficulty, but not impossibility. Perceptual contents acquire propositional structure upon being expressed in language, but they do not require language to be constituted as such. An individual who has not yet acquired certain linguistic items, such as *knife* or *fork*, nevertheless perceives the differences in form between one and the other type of object; and if he has seen them used, he can also appreciate functional differences. It is precisely because he perceives such differences that a language that expresses them has significance for him: the significance that comes of familiarity with the things signified.

We could go on indefinitely presenting examples of perceptions with contents that are similar to those expressed by language but which, in their constitution as perceptions, may in many cases be prior to acquisition of the corresponding linguistic structures (although in many other cases the temporal order of events may be the reverse). But it is not, in fact, necessary to appeal to the process of language acquisition in order to show the existence of perceptual contents that are similar to, albeit possibly less structured than, the propositional content expressed by language.

Perceptual content is constituted directly on the basis of non-linguistic sensory stimulation, without any need for explicit intervention of language. What to my mind is most indicative of this protopropositional content (or whatever it may be called) at the level of perceptual experience is the way we behave in practice. To approach a door and open it in order to pass through; to give way to someone and greet her upon bumping into her; to pick up a pen to take notes; all these actions imply identification of the door as a door, of the person bumped into as an acquaintance, of the pen as a pen. And these identifications are based on the sensory stimuli received, without any need to project any kind of linguistic structure on the perceived reality. It is no counterargument to say that it is the sensory stimuli that cause the coherence of this behaviour, because it is not a question of simple causation but of the recognition of objects, of their properties and functions; recognition of the significance of our environment for us, which language does no more than express. Certainly, explicit consciousness of these contents may require their linguistic expression; this is what makes it difficult to give an account of them that does not rely on their linguistic codification, and makes it necessary to resort to their indirect characterisation in the behaviour that manifests awareness of them - awareness of the significance that we acknowledge to be possessed by the ways in which the world presents itself to us in acts of perception.

Similar conclusions have been reached on the basis of recent neuropsychological research, which shows that the cerebral area traditionally thought to store semantic content, the area of Wernicke, actually serves merely for recognition of words, the semantic content of which is embodied in memories stored in associative perceptual areas. Lesions of certain associative areas of the sensory cortex cause not only perceptual deficits but also the loss of semantic contents corresponding to the areas in question. For example, an individual with a lesion of the part of the posterior parietal lobe that is involved in spatial perception of objects suffers not only deficient spatial perception of objects but also loss of the spatial significance of words and expressions such as “up”, “down”, “under”, “on top of”, etc., even though he may still understand non-spatial meanings they may have in phrases such as “prices have gone up”, Carlson [2], p. 584. What cases like this show is that the same semantic content, if it directly concerns perceptions, may be activated both by linguistic stimuli and by non-linguistic sensory stimuli; any differences between the propositional content linked to the linguistic stimuli and the perceptual content linked to non-linguistic sensory stimuli have more to do with the particular sensory stimuli than with their conceptual content as such.

Language, of course, allows us to constitute propositional contents that have little if anything to do with perceptual experience; but such contents are always constructed from information stored in the areas of association. It is one of the most valuable characteristics of language that this basis allows the construction of propositional contents that go far beyond the perceptual contents supplied by non-linguistic sensory stimuli.

Hence although it appears to be true that in the process of deciding the truth value of an observational statement p the perceptual content - the mode of presentation of the world in the corresponding perceptual act - is mediated by the language in which p is formulated, that does not mean that we cannot distinguish between one and the other. The propositional content expressed by p only determines that our attention selects one or another aspect of the perceptual field; it is the perceptual contents of the truthful perceptions corresponding to p that determine its truth value. As Husserl put it, that the total act associated with the verbal sound has the same matter whether considered from an intuitive or significant viewpoint is not due to a language imposing its system of conceptualization on the world, but to language and the perceived world sharing the same system of conceptualization.

To ask what the world may be in the absence of any system of conceptualization is meaningless; but if we are given a particular system

of conceptualization, then what the world is, when viewed through this system of conceptualization, is something that does not depend solely on the system of codification, but also on what the world being codified actually is like. If my system of codification is that of ordinary language, then I see a Pekinese as a Pekinese and a fox terrier as a fox terrier. If my system of codification did not distinguish between pekineses and fox terriers, but only the single canine category “dog”, I would see both pekineses and fox terriers simply as dogs; I would see them as different dogs (in the same way as I can distinguish one Pekinese from another), but I would not elevate this difference to the level of a categorical distinction.

We might wonder, like Davidson, how the content of a perception can justify the propositional content of a statement if the contents of the perception and the statement are the same, Davidson [3], p. 80). To my mind the answer is obvious: the content of the perceptual experience is constituted on the basis of sensory stimuli, whereas at the linguistic level content is expressed by words. Even though both contents are more or less independent of the sensory material that support them, it is obvious that the relationship of the perceptual content to the non-linguistic sensory stimulus is different in kind from the relationship between the propositional content and the linguistic sensory stimulus. The former relationship is natural, the latter conventional. If an individual x states that there is a cat on the mat because he has a truthful perception of there being a cat on the mat, this statement is justified for x in a way that is quite different from the justification it might have if it were made anywhere other than in a room containing a cat and a mat. The content constituted from informative stimuli in acts of perception is the perceptual content of the world, pertaining to the world as perceived; whereas the content expressed by language in observational statements and the like refers directly to the world but may or may not be justified by perceptual experience.

According to the proposed criterion of truth it is *truthful* perceptions that justify the truth of observational statements. This requires some explanation. Specifically, an individual x has a *truthful* perception of y if and only if he perceives y as y ; that is, if his perception of y is consistent with the rest of his perceptions of y and with the perceptions of y of the individuals that share x 's system of codification. If someone perceives a fox as a dog - whether because of bad vision, bad visibility or any other cause - then this is not a truthful perception because it is not consistent with the other pertinent perceptions of the individual or with those of human beings sharing his conceptual schemes.

The proposed criterion of truth for observational statements is equidistant from non-realist coherence approaches and realist correspondence approaches. It is not coherentist because the perceptual content considered in the empirical verification of an observational statement pertains to the world *qua* perceived world; and it is not realist because it does not postulate correspondence between a propositional content and a world independent of mind, but between the propositional content expressed by a statement and a perceptual content pertaining to the perceived world, i.e. to one of the worlds M_i . And whether or not a perception is truthful does not depend on language, but on its consistency with other perceptions.

To close, I stress that the approach presented here allows the truth of a statement to be justified on the basis of a fact because, in comparing statements with facts, we do not compare the propositional content of a statement with an independent reality, but instead compare two kinds of experience: one of an exclusively linguistic kind, the other of a linguistico-perceptual kind. In terms of the symbolic notation used previously, the comparison is between a language L_i and the world M_i to which it corresponds.

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