Perception Pragmatized: a pragmatic reconciliation of representationalism and relationalism

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Forthcoming in Philosophia

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ABSTRACT

This paper develops a theory of perception that reconciles representationalism and relationalism by relying on pragmatist ideas. I call it the *pragmatic view* of perception. I argue that fully reconciling representationalism and relationalism requires, first, providing a theory in which how we perceive the world involves representations; second, preserving the idea that perception is constitutively shaped by its objects; and third, offering a direct realist account of perception. This constitutes what I call the *Hybrid Triad*. I discuss how Charles Peirce's theory of perception can provide a framework for such a view and I devote the rest of the paper to developing my own pragmatic and Peircean theory of perception. In particular, I argue that considering perception as a continuous temporal process, which essentially involves interaction with the environment, allows us to do justice to the Hybrid Triad. I motivate this view by discussing how a pragmatic theory of perception would deal with issues such as the distinction between veridical and nonveridical experiences and the nature of perceptual objects.

In this paper, I develop a pragmatist theory of perception that reconciles representationalism and relationalism. In particular, my claim is that considering the temporal and active aspects of perception allows us to make sense of how perception can be representational and also constitutively shaped by its objects. These two aspects are, accordingly, what makes the pragmatist theory a novel view in relation to other theories in philosophy of perception. Here is how I proceed: Section 1 surveys representationalism and relationalism and raises some problems for a recent attempt to reconcile them. Moreover, I discuss how a reconciliatory theory should look. Section 2 discusses Charles Peirce's views on perception and introduces pragmatist ideas to theorize about perception. I argue that, by recognizing the pragmatic dimension of perception, namely, that perception is temporal and active, we can fully reconcile representationalism and relationalism. Finally, Section 3 lays the groundwork for a pragmatist theory of perception that successfully reconciles representationalism and relationalism.

THE NATURE OF PERCEPTION

What is it that determines how we perceive the world? This question has been central in contemporary philosophy of perception, motivating three different influential views. The first is representationalism, which takes perception to be essentially a matter of representing the external world (see, e.g., Searle 1983; Harman 1990; Dretske 2003). Representationalists say that when I look at a book sitting on a desk, my visual experience consists in a representation of that object and its properties. If the book is red and rectangular, my experience represents the object as being a book, as having the properties of being "red", "rectangular", and so on. What explains how I perceive the world is not how the object is, but how my mind represents it to be. In other words, "[t]he properties and situations one is aware of in having an experience... [are the] properties things are represented as having" (Dretske 2003: 71). This means that "[t]he world needn't contain [the properties] in order to be represented as containing them." (Dretske 2003: 71), for experiences can represent the world differently than it really is.

The second view is relationalism, which holds that an experience is ultimately shaped by its relation to an external object (see, e.g., Martin 2004; Travis 2004; Brewer 2007; Fish 2008, 2009). For the relationalist, the way I experience the world is *directly* shaped by the objects and their properties. The reason why I see a red and rectangular book is that I stand in a perceptual relation with it, meaning that I am directly acquainted with the book. The objects of perception "shape the contours of the subject's conscious experience by actually being the contours of the subject's conscious experience." (Fish 2009: 6). That is, the object shapes the experience by being a constitutive part of it (Martin 2004: 64). As Bill Fish correctly notes, representationalists and relationalists can agree that the way experiences present the world to us is the same; what they disagree about is whether the phenomenology of our experiences is ultimately shaped by the subject representing features of the world or by the features themselves (Fish 2009: 13–14).

The third view, which I will call *hybridism*, says that representationalism and relationalism need not be seen as exclusive (see Schellenberg 2011, 2014; Logue 2013; McDowell 2013; Hanna 2015). Susanna Schellenberg (2011; 2014) argues, for example, that perception is partly determined by some internal structures and partly determined by external objects. According

to Schellenberg, external objects can be parts of the content of experiences, but they do not determine, or at least not directly, the phenomenology of experiences. What makes my experience of the red rectangular book have the properties "red" and "rectangularity" are the concepts recruited by the capacities I have to identify particular features of the environment (Schellenberg 2014: 210). For example, a red rectangular book recruits my capacity to discriminate things that are books from things that are not books, my capacity to discriminate red and rectangular things, and so on. These capacities and the concepts employed thus determine the phenomenology of my experience. Therefore, perception is representational because it is shaped by the capacities recruited and also relational because objects recruit the capacities.

The motivations for these views vary, but two of them will be important for my purposes. The first has to do with the phenomenological directness of perception. When I see a red rectangular book, it seems to me that I stand in a direct contact with an external object that is red and rectangular. Perception is direct, in the sense that I do not perceive redness as being a property of my experience, but as a property of the book in front of me (see, e.g., McDowell 1996; Crane 2006; Hellie 2007; Fish 2009; see Millar 2014 for a critical assessment). The second motivation relates to the nature of illusions and hallucinations. Illusions, on the one hand, consist in cases in which we perceive an object as having a certain property when it does not, e.g., seeing the red book as being green under different lighting conditions. Hallucinations, on the other hand, are experiences about things that do not exist; for instance, seeing a unicorn in my room. For my purposes, I will use the term *non-veridical experiences* to cover both illusions and hallucinations.

Relationalists take the idea that objects shape perception seriously, which allows for an intuitive account of the phenomenology of perception, for it preserves the idea that perception is a direct relation to the world. Directness is understood here in relation to the idea that what fundamentally shapes the way we perceive the world are worldly objects, and not in relation to the idea that perceptual experiences are directly or indirectly related to wordly objects by means of intermediary entities, such as sense-data. So, while most representationalists would indeed say that perception is direct in the sense that there are no intermediary entities connecting our perceptual experiences to the world, they would deny that perception is direct in the sense that it is fundamentally shaped by worldly objects. In this sense, since it seems to me that I have phenomenologically identical experiences in either the presence or in the absence of an object – e.g., when I hallucinate a red and rectangular book - relationalists have to deny that veridical and nonveridical experiences are both instances of perception, for the latter do not relate to objects. This results in a disjunctivist account of this distinction, i.e., either a mental state is a perception, in which case it relates to objects, or it is something else entirely.

Representationalists offer an intuitive account of why non-veridical experiences can appear exactly like veridical experiences. Since my experiences are shaped by how I represent the world to be, I can have an experience that represents a red rectangular book sitting on the table when there is no such book — or when its properties are markedly distinct, such as when I see the book as being green. However, this account is at odds with the idea that our experiences put us in direct contact with the world, for how the subject perceives it is not ultimately shaped by how the world is.

¹ Although some relationalists, such as Fish (2009), deny that veridical and non-veridical experiences have the same phenomenology.

As an alternative, hybridists try to reconcile these two views. Susanna Schellenberg (2011; 2014) argues that veridical and non-veridical experiences can be phenomenologically indistinguishable because, in both cases, the same capacities to identify a given object can be triggered. When I have a veridical experience of the red rectangular book, the book recruits my capacities to identify an object as being a book, as having the color red, and a rectangular shape. These capacities explain, in turn, why I see a red rectangular book. However, I can have phenomenologically identical experiences in the absence of objects, since "[w]e can employ a perceptual capacity even if a relevant particular is not present — where a relevant particular is a particular of the type that the capacity functions to single out", for in such cases, "one could be prompted to employ the capacities due to nonstandard circumstances, such as unusual brain stimulation or misleading distal input." (Schellenberg 2014: 211). This account allegedly reconciles relationalism and representationalism because it preserves the relationship to external objects in veridical experiences and explains how veridical and non-veridical experiences can be phenomenologically alike.

There are two important problems with Schellenberg's (2011; 2014) hybrid view. First, while it provides an account of why veridical experiences involve a relation to their objects, it is not the kind of relation that matters for the relationalist. As Bill Fish points out, when the relationalist says that objects shape our experiences, "the metaphor of 'shaping' is read in a constitutive rather than a merely causal sense." (2009: 6). Therefore, the fact that objects trigger our capacities to identify their properties consists merely in a causal connection holding between objects and experiences. Schellenberg's account fails to incorporate this, for the subject can have that same experience when the object is not present, that is, as long as the relevant capacities are triggered.

The second problem is that if Schellenberg's hybrid account wants to do full justice to relationalism, then it should adopt some form of disjunctivism, for if her hybrid view is both fundamentally relational and representational, then there must be a fundamental difference between veridical and some cases of non-veridical experiences. Since a relation to an external object is at least part of what fundamentally makes an experience what it is, if such a relation is absent at least in cases of hallucinations, some non-veridical experiences will be fundamentally different from veridical ones. But if this is true, then it cannot be the case that perception is fundamentally relational.

One worry here would be that it is not clear why hybrid views should preserve these relationalist intuitions. It is plausible to think of hybrid views as attempts to reconcile *some* important features of representationalism with some important features of relationalism, while consistently leaving out some other important features from each theory. In fact, Schellenberg's hybrid view is often taken to be a variant of representationalism that incorporates relational elements by introducing perceptual contents that are object-involving.² So, it might be argued that not incorporating all the important relationalist features into a hybrid view is not an inherent problem for Schellenberg's view.3

In response, I should say that my aim here is not to provide an argument against Schellenberg's view, but rather to point out aspects of her view that might be seen as problematic from a relationalist perspective. In other

² Representational views of this sort usually define perceptual content as being structured propositions, which are partly determined by objects. See, for example, Speaks (2009); Chalmers (2004); Schellenberg (2010); Siegel (2010) for variants of such views.

³ I am grateful to an anonymous referee for raising this point.

words, in claiming that her view leaves out important elements of relationalism, I want to suggest that a hybrid view that incorporates these elements could be potentially insightful and also more appealing to those with relationalist inclinations. For this reason, I will simply take it for granted from now on that the underlying motivation behind hybridism is right, namely, that to explain perception, we need to take into account both representational and relational elements. As a result, the following discussion will be an attempt to develop a hybrid view that is more sensitive to the relational aspects of perception.

Before moving on, it will be instructive to discuss what a hybrid view should look like in this context. Preserving the relationalist idea that objects stand in a constitutive relation to perceptual experiences, and the representationalist idea that perception involves representing the world, requires acknowledging that perceptual objects can be at least partly individuated by how the subject represents the world. If the act of representing and how an object is are completely independent of one another, then it seems impossible to have a hybrid view that genuinely reconciles the two views above. However, in acknowledging this, I am not saying that hybridism should accept that perception requires the postulation of intermediate entities, such as sense-data, between the subject and the world (see Russell 1997; Ayer 1956). This would mean giving up on another idea dear to relationalism, namely, that perception puts us in direct contact with the world. I am suggesting, instead, that hybridism should rethink the idea that how the world is is completely independent of how we perceive it.4

Therefore, I suggest that a genuine hybrid view should, first, recognize the representationalist insight that perception depends on how subjects represent the world to be; second, preserve the relationalist insight that the objects of perception shape our experiences in a constitutive sense; and third, offer a direct realist view of perception. I call this the *Hybrid Triad*. This paper develops a view that satisfies the Hybrid Triad. I rely on Charles Peirce's theory of perception in order to show how representationalism and relationalism can be combined so as to provide a fully consistent hybrid view. I will not be defending Peirce's view here, but only take it as a starting point to develop my own pragmatic view. In particular, I will argue that Peirce's view that perception is a continuous process of interpretation of what we sensorily apprehend in our interactions with the world is the key to satisfy the Hybrid Triad. I then develop this theory in more detail by discussing how it conceives of the nature of perceptual objects and how it conceives of the distinction between veridical and non-veridical experiences.

PEIRCE'S THEORY OF PERCEPTION 2

In this section, I will discuss the main aspects of Peirce's theory of perception, which introduces an alternative hybrid theory. Peirce's theory of perception follows a general trend in classical pragmatism to overcome dichotomies created by opposing philosophical systems, such as rationalism and empiricism, materialism and idealism, and so on. Peirce wanted his theory of perception to reconcile both direct and indirect realist theories

⁴ Some might worry that this view flirts with subjective idealism. However, the kind of dependence I have in mind is intersubjective dependence. In other words, we should recognize that the world is partly shaped by how multiple perceptual subjects interact with it, as opposed to one single subject (see Zahidi 2014 for related discussion). For more on this, see Section 3.2.

of perception. Although the debate between representationalism and relationalism is not strictly about the directness or indirectness of perception, it presents itself as an updated version of this old quarrel: i.e., instead of asking whether perception is direct, we now ask whether the objects themselves, or representations of them, ultimately shape how we perceive the world. In this respect, Peirce's view can be instructive.

Peirce says that perception is composed of two important and irreducible elements, the percept and the perceptual judgment. The percept is that which immediately imposes itself on us and contributes something positive to our current stream of consciousness. Suppose, for instance, that you are sitting next to a river thinking about the future. Then, all of a sudden, lightning strikes the river, and you experience a very intense flash invading your visual field followed by loud thunder. Your stream of conscious experiences is abruptly interrupted by an experience possessing certain features that positively contribute to the contents of your mental states (i.e., the experience has certain qualitative features such as a brief but intense brightness in your visual field). The percept, according to Peirce, "is a forceful thing. Yet it offers no reason, defence, nor excuse for its presence. It does not pretend to any right to be there. It silently forces itself upon me." (CP 7.621).⁵ This means that, in perception, we seem to be related to something that is external to our own consciousness and that presents itself as being insistent, in the sense that it is forced on our consciousness, but makes no claims of any kind (see Haack 1994; Bergman 2007; Legg 2014b; Wilson 2016). The percept "is absolutely dumb. It acts upon us, it forces itself on us, but it does not address the reason, nor appeal to anything for support" (CP 7.622, his emphasis), meaning that it cannot establish truth conditions alone.

The perceptual judgment, on the other hand, consists in the interpretation of the percept in propositional terms, such as when we say, "The lightning was very intense". In opposition to the percept, the perceptual judgment is abstract, for it prescinds from the immediate and particular elements of perception in order to establish a general, coarse-grained connection in propositional form. To use Peirce's own example, when we see a yellow chair, the percept conveys the exact qualitative features of that object — e.g., that the object's color is a certain tone of yellow. The perceptual judgment, on the other hand, abstracts from these particularities, focusing instead on a general description of the object, e.g., "x is yellow".

Like many relationalists in contemporary philosophy of perception (see, e.g., Travis 2004 and Genone 2014), Peirce acknowledges that there is an important sense in which perception is "silent". The percept is not the kind of thing that is either "true" or "false"; it is just imposed on us and does not depend on anything else to be what it is. The "discursive" or representational aspect of perception that allows me to say that I see a yellow chair is introduced by the perceptual judgment. The perceptual judgment announces its representation of something, and hence it can be said to be either true or false (CP 7.630). While the percept delivers us particular objects which have a particular color, shape, etc., the perceptual judgment abstracts from these particular properties to form propositional judgments.

One important problem is how to understand the relationship between the percept and the perceptual judgment. Two points are of interest here. The first relates to Peirce's claim that the distinction between the percept and the perceptual judgment is analytical (CP 7.626-36), that is, it is intended to help us understand two conceptually distinct elements of perception, rather

⁵ For convenience, I refer to Peirce's work from the Collected Papers.

than to establish a clear-cut division in how perception unfolds in time. This idea is reflected in his introduction of the notion of the percipuum, which is the analytical moment in which the percept is interpreted by the perceptual judgment (CP 7.643). The percipuum is required because, for Peirce, thought is always a mediation, and placing the percept as an object of analysis implies standing in a mediated relation to it. So, the percipuum is not the percept per se, but the first stage at which the perceptual judgment interprets the percept.

The second point is about the nature of the percipuum. One natural interpretation would be to think of it as being a single mental state combining both the percept and the perceptual judgment. But, for Peirce, this is not right, for the percipuum is an analytical rather than a temporal moment of perception. In the same way that it would be misleading to pinpoint an exact temporal moment when a given species originated in the course of evolution, it is misleading to see the percipuum as a single mental state combining the percept and the perceptual judgment in the course of our perceptions (see also Legg 2014b).

To make these points clear, I will appeal to Sandra Rosenthal's (2001) interpretation of the percipuum and discuss how these elements work in perception. Rosenthal distinguishes between two uses that Peirce makes of the notion of the percipuum. The first use, which she calls narrow, is when the perceptual judgment captures the percept in relation to a synthesis of previous percepts. This synthesis is responsible for recruiting certain habits developed by the subject based on his previous experiences, such that he will perceive the world influenced by those habits. Consider the case in which I see a red apple sitting on the table. The perception of this object will be influenced by habits I developed in my previous interactions with apples; for example, I will perceive that object as something that I can eat. It is important to note that this is not a two-step process: I do not see the apple first and only then form a judgment that it is an object that I can eat it. Rosenthal (2001) notes that, according to Peirce, perception is not a matter of passively receiving some "given" content from the world, but rather a "taken". Thus, when considered in this narrow sense, the percipuum should not be understood as delivering the subject an "appearance" of the world that is distinct from it, upon which we further form judgments, but rather as presenting the world itself from the perspective of the subject's past experiences.

The second use that Peirce makes of the notion of the percipuum, which Rosenthal calls wide, is when we form a judgment, in propositional form, that interprets the percipuum in its narrow sense. These judgments come in the subject-predicate form, such as in the proposition "The chair is yellow". The difference between the narrow and the wide percipuum is that the former does not establish any truth conditions, while the latter can be said to be true or false. However, the truth-value of the perceptual judgment is not solely determined by its correspondence to some external reality. Peirce notes that merely thinking about a judgment takes time, however short, which implies that, by the time we are finished thinking the perceptual judgment, the initial percept is no longer present (CP 5.544). The initial percept, as it is interpreted by the perceptual judgment in the wide sense, can only be remembered as interpreted, thus allowing for its truth-value to be evaluated only with respect to future experiences. This means that whether my initial perception of the object will be said to be "true" or "false" will depend on how my future interactions with the world will take place.

To see how this works, take the apple case again. I see an apple sitting on the table and I judge (in the wide sense) that it looks red. By the time I finish making the perceptual judgment, I no longer have access to the initial percept, which makes me unable to determine whether the perceptual judgment is true of the percept. To determine this, I have to engage in future experiences with the apple. For example, I could take it outside my house and look at it in sun light. This would present the apple as being red to me. Or I could ask another person to look at the apple and tell me its color. This would show whether my actual interactions with the object conform with what I remember to be the initial percept. If it does, I might take my actual experience to confirm the past experience, thus making it true (or veridical); if it does not, then I might take my initial experience to be false (or non-veridical) in relation to my actual experience.

One worry is that this view is simply false in relation to how perception actually works. When one sees a red apple, one does not need to perform any experiment in order to know that one is seeing a red apple. This is right with respect to how we ordinarily deal with objects in our environment, and we do not perform experiments with them because we assume, based on previous experiences, that certain regularities will hold for them. I do not need to experiment with every apple that I see to know that my judgments about apples are usually true. In this respect, it is important to note that the truth-value of a perceptual judgment depends on possible future experiences too, meaning that if we were to perform actions based on that experience, we would learn that it is true or false.

This point can be further clarified by thinking of perception as analogous to the way scientific investigation develops. When a scientist is investigating a certain phenomenon, he interprets what he perceives based on prior knowledge and generates a hypothesis to explain what is being perceived. In order to determine whether his hypothesis is true, he has to interact with the phenomenon (e.g., by conducting experiments), such that he will reformulate certain aspects of his hypothesis, or drop it altogether. Additionally, he has to see whether other scientists can interact with that phenomenon, and arrive at the same (or very similar) interpretation or hypothesis. If a certain agreement is reached about the nature of the phenomenon being investigated, then, and only then, the scientific community will agree on the nature of the phenomenon, and on the most adequate theory of it. Ian Hacking (1983) notes, for example, that interaction with the world often comes before we have a theory of it. He mentions the case of J. J. Thomson and Robert Millikan, who did not know about the existence of electrons — as we understand the term today — when they studied electric charge. They could perceptually interact with what we now call "electrons" through instruments, but it was only when the scientific community learned enough about electrons, that they could be used to intervene in other parts of reality, thus making them "real" (Hacking 1983: 262-263). Now, whenever scientists are concerned with electrons, they do not need to perform experiments to determine their nature, for they take as granted that the regularities observed in prior interactions with them would hold in the present moment.

The discussion above illustrates aspects of Peirce's theory of perception that will be central to my proposal in the next section. The first is that Peirce sees perception as being a continuous and ongoing process in which time plays an essential role. One implication of this is that Peirce denies that perception is a succession of distinct mental states, meaning that we cannot clearly distinguish between the role of what is merely given in terms of sensory inputs (the percept), and how we interpret these inputs (the perceptual judgment). For Peirce, these are different features of an ongoing process of interacting with the world. I shall call this continuity of perception over time its temporal aspect.

The second aspect, which is a consequence of the temporal aspect, is that perception is not a passive process, meaning that fully understanding how we are perceptually related to the world requires considering, first, the nature of our previous interactions with the world; second, how we are prompted to act based on what we perceive; and third, how our interactions relate to the experiences of other individuals. I call this the active aspect of perception.

These two aspects also highlight an important feature of perception that is often underemphasized by most contemporary theories. This is the idea that perception is determined by our interactions with other individuals in the environment. This is not a new aspect of perception in itself, but rather an important implication of the temporal and active aspects. As with the process of scientific investigation, perceptually interacting with the world also involves evaluating our experiences in terms of how other individuals act, and also in relation to what we are taught by those individuals. For example, instead of reaching for the apple to verify if it is real, I can ask other people whether they see the same apple. Their answer will then influence how I evaluate the wide percipuum formed on the basis of my narrow percipuum. Hence, there is an important sense in which social interactions influence how we perceive the world. In the next section, I develop the temporal and active aspects in more detail and show how they can help us theorize about perception; in particular, how they can satisfy the Hybrid Triad.

THE PRAGMATIC VIEW

I will now discuss how a theory of perception inspired by Peirce's theory can satisfy the Hybrid Triad. I will call it the pragmatic view of perception. The pragmatic view takes as a starting point the temporal and active aspects of perception. I proceed by discussing the representational and relational aspects of the pragmatic view, and apply it to the issue of the veridicality of perception. This discussion will allow us to see how the pragmatic view can satisfy the Hybrid Triad.

The representational aspect of perception

I have argued that Peirce's theory of perception takes the temporal and active aspects of perception seriously. I do not mean to suggest that other views in philosophy of perception completely ignore this. My aim in this section is rather to show how we can deal with important contemporary problems when we think about perception explicitly in these terms. That said, when I claim that perception is continuous in time, I mean two things: first, that it is not possible to draw a clear separation between perception and other mental states, such as beliefs, and second, that perceiving is an ongoing active process and not merely a succession of discrete mental states.

Note that the first claim is not that perception and beliefs are the same thing. The impossibility of drawing a clear separation between them relates to how perception unfolds in our continuous interaction with the environment. So, for example, when I see a a yellow chair in my office, it is plausible to say that I have a visual experience of a yellow chair and that I formed the belief "There is a yellow chair in my office". For the pragmatic view, the perceptual experience and the belief are continuous in the sense that it is misleading to see this case as involving a two-step process where we first perceive and only then form beliefs on the basis of perception. In other words, seeing a yellow chair in my office partly consists in believing that there is a yellow chair in my office. These two things (perceiving and believing) are indeed different, but this difference is only clearly visualized in analytical contexts, meaning that there is no clear way to separate them we we look at our actual interactions with the world. Moreover, with respect to the second claim, when I say that perception is active, I mean that perception is not simply a matter of a subject being sensorily stimulated by the world. Being perceptually related to the world also requires interacting with it based on sensory stimuli.

When we consider these two aspects together, it is possible to see how the pragmatic view makes sense of the "representational aspect" of perception. The fact that perception develops in time and requires the interaction of subjects with their environment allows subjects to change, based this ongoing interaction, their interpretation of what is being perceived over time. Imagine that I see an apple on the kitchen table and decide to have a bite. However, after the first bite, I notice that it is a fake wax apple. I then reconsider my initial experience and realize that it was misleading. That is, I had a visual experience of an object (the percept) and my initial perception was influenced by my previous interactions with apples (the percept plus the perceptual judgment yielding a percipuum in the narrow sense). I thought that the apple looked tasty and that I should have a bite (the percept plus the perceptual judgment yielding the percipuum in the wide sense). By the time I formed this perceptual judgment, the initial percept was gone, so what determines whether my experience is true is how my future engagement with the object would line up with the how other subjects would engage with the object in that situation.⁶ Finally, I decided to have a bite and discovered that my initial perception was misleading.⁷

Although this is one way in which I can revise my representations of the world over time, it is not the only one. In some cases, these revisions require interacting not only with inanimate objects, such as apples, but with other perceptual subjects in the environment. Suppose that I arrive one day at my office and see a pink chair in the corner. I do not own a pink chair, so I

⁶ Here we stumble on an important notion in Peirce's philosophy, that of truth. For Peirce, a proposition would be true if, given enough inquiry about its nature (what he usually called "the end of inquiry"), it would generate agreement among inquirers. However, Peirce is not concerned with offering a theory of truth, in the sense of providing necessary and sufficient conditions for truth, but rather an analysis of what it means to say that something is true (see Misak 2004; Hookway 2012; Legg 2014a). As Cathy Legg (2014a) points out: " [the] 'end of inquiry' [...] is not 'end' in the sense of 'finish'. It is 'end' in the teleological sense of 'aim' or 'goal'. Rather than a description of some future time where all questions are settled, Peirce's explication of truth is an idealised continuation of what scientists are doing now, namely settling questions about which they genuinely doubt" (206). What I have in mind here is something similar, but now applied to perception: that is, a perceptual experience is said to be true or veridical if it generates agreement among relevant inquirers in relevant situations when their perspectives are taken into account. I develop this claim in more detail in section 3.3

⁷ One worry with this example is that it assumes that perception can represent high-level properties (see Peacocke 1992; Siegel 2006; Nanay 2011), such as kind properties, as opposed to low-level properties (see Tye 1997; Dretske 1995; Clark 2000), such as color and shape. While this is a controversial issue, it is only tangential to the idea being conveyed here, as the same points could be made in relation to low-level properties, e.g., in cases where we see objects as instantiating different colors because of different illumination settings.

simply assume that someone left it there for some reason. However, since I feel curious, I ask my colleagues whether they know why the chair is there. To my surprise, I find out that they cannot see the pink chair and they say that the only chair in the room is my usual black chair. In this case, I have a visual experience of a pink chair and I perceive that chair as being there based on my prior experiences — i.e., chairs are objects that I usually see in offices. But when I asked my colleagues if they knew anything about it, I found out that I was hallucinating the chair, for none of my colleagues could see it.

One worry here is that this will only work if we assume that perception is cognitively penetrable, which is a highly controversial issue (see Siegel 2006; Stokes 2012, 2013). Roughly, as Stokes puts it, the idea is that "[...] perception is, sometimes, penetrated by cognition." (2013: 647). Note, however, that the example above does not require assuming that perception is cognitively penetrable. The "revisions" are not revisions in the phenomenology of my experience, but rather in the way I evaluate my experience. After talking to my colleagues and learning that there is no pink chair, I might still continue to see the chair for some reason or another. The only difference now is that I know that the experience is not veridical, which I could not tell before by merely introspecting.

These examples show that, while it is true that we form representations of the world when we perceive, those representations are constantly revised as we interact with the world and other individuals. For the pragmatic view, perception is representational in the sense that each individual perceives the world from the perspective of his previous experiences. These representations prompt subjects to act, thus creating opportunities to reformulate them. If we understand the representational side of perception along these lines, then the first part of the Hybrid Triad is satisfied.

3.2 The relational aspect of perception

The pragmatic view is also fundamentally relational, which is similarly possible because of its temporal and active aspects. Relationalists say that the objects of perception shape experiences in a constitutive sense, meaning that the properties of objects determine how we see them. Yet, it is hard to understand how this constitutivity can be reconciled with the idea that perception is representational.

It is important to distinguish here between relationalism, which is a view about perception, and metaphysical naïve realism, which is a view about the objects of perception. Relationalism says that perception is constitutively shaped by its objects, but does not say anything about the nature of those objects. Most relationalists, however, accept metaphysical naïve realism, which says that the objects of perception are ordinary material objects, such as tables and stones, which are completely mind-independent (Brewer 2007: 88). Once we associate these two views, relationalism is taken to imply that perception is constitutively shaped by ordinary material objects. However, these two views are independent: it is possible to be a relationalist without being a metaphysical naïve realist about perceptual objects.

That being said, by saying that the pragmatic view has a fundamentally relational aspect, I endorse the first view above, but reject the second. In other words, I believe that perception is ultimately a relation to what I will call pragmatic objects, which include what we ordinarily call material objects, but is not restricted to them. Broadly understood, pragmatic objects are

the objects of the mind that promote action. I understand action in two senses here: first, there is physical action, such as moving my arm to reach for an apple; and second, there is mental action, such as thinking that an apple looks tasty. To motivate this view of perceptual objects, I shall introduce what I call the phenomenology-first approach to perception and then connect it to the temporal and active aspects.

The phenomenology-first approach consists in looking at the qualitative elements of our experiences without assuming any theory about their nature. When I see a red apple sitting on a table, the phenomenology-first approach says that I see a thing which has certain qualities grouped together, such as color and shape. Moreover, I see that object as being distinct from myself, in that its existence does not seem to depend on its relation to my mind. More specifically, what I mean here is that this object seems to resist any of my attempts to change it — e.g., if I wish that a banana could be red, this wish cannot change the qualities of the perceptual object. This is all the phenomenology-first approach extracts from perception: it recognizes that, when I perceive something, it seems to me that I see some qualities united together, which I call a "thing", and that thing seems to be something external to my own consciousness. At this level, I refrain from judging whether the thing is physical or mental. The objects that we perceive in this minimalist phenomenological sense and that make subjects to act in the environment, irrespective of whether they are real, are what I call pragmatic objects.

To further clarify this point, pragmatic objects can be compared to a more familiar notion, the idea of intentional objects. Broadly understood, intentional objects are the objects that our mental states are directed at (Brentano 2014; Crane 2001, 2013). Pragmatic objects are similar to intentional objects in this respect. However, while Brentano (2014) conceived of intentional objects as being distinctively mental, pragmatic objects are defined in neutral ontological terms. In other words, they are objects in the sense that they are the kind of things that minds can be directed at, but facts related to their existence (or inexistence) are to be determined in terms of the actions that they promote in subjects. That is why the phenomenology-first approach is important, namely, it requires us to put aside our knowledge of the world acquired through previous interaction with it to properly identify pragmatic objects. In this sense, the phenomenology-first approach resembles the phenomenological reduction proposed by Husserl (2012, 2013), in which we are required to suspend our "natural attitude" to investigate what is presented to the mind.8

Before we proceed, it is important to highlight an assumption being made here in relation to the neutral ontological aspect of pragmatic objects. That is the view that how we ultimately understand metaphysical notions, such as existence and non-existence, physical and mental, and so on, are best characterized in pragmatist terms. The basic idea here refers to what Peirce called the pragmatic maxim in his well-known essay How to Make Our Ideas Clear (CP 5.388). Peirce conceived of the pragmatic maxim as a logical principle that analyzes the meaning of concepts in terms of the conceivable practical effects the concepts have or would have have in our experience.9 For exam-

⁸ While such methodological assumptions might seem controversial for some analytic philosophers, there has been a growing interest in how the phenomenological reduction can be a useful tool for philosophy of mind and cognitive science more generally (see Gallagher and Zahavi 2013: ch. 2, for a more detailed discussion).

⁹ This is not, however, Peirce's initial formulation in How to Make Our Ideas Clear. As he later recognized, his first formulation of the maxim was too nominalist, in that it did not take

ple, Peirce says that a thing is hard if it would not be scratched by many other things. The concept HARD is therefore defined in terms of the effects it would have in our experience if we were to interact with hard things. The same is assumed here of more general metaphysical notions, which is what allows us to say that a pragmatic object exists only in relation to the actions that they promote in subjects. Instead of viewing opposing notions as discontinuous, the pragmatist opts for a continuous characterization by appealing to actions (see Menary 2009; Solymosi 2013 for related discussions).

This is a bold metaphysical assumption to make and a full pragmatic account of perception has to motivate it properly if it is to succeed. However, my scope here is more modest. I do not want to provide a full-blown argument for a pragmatist view of perception, but simply show that understanding perception in pragmatist terms can be useful to deal with a particular issue in philosophy of perception. I will not, consequently, attempt to defend any pragmatist metaphysics here. By making this assumption explicit, however, I hope that it becomes clear that, instead of being wrong-headed, the attempt to bring pragmatist elements to theorizing about perception draws at least part of its motivation from an independent and well-established philosophical tradition, namely, classical pragmatism.

With these clarifications in mind, let us return to the discussion of pragmatic objects. The phenomenology-first approach, as discussed above, does not allow us to know much about pragmatic objects and therefore to take any position on whether they are physical or mental, or even real (or existent). We only know that we can possibly interact with them. Throughout the course of our lives, we learn that some pragmatic objects can be used in a certain way, and that certain regularities hold in our interactions with them. More importantly, I know that the regularities hold not only for me, but for other people who interact with those objects. I can talk to my partner about the apple on the table and we can discuss its properties. If my partner is hungry and decides to eat the apple, her hunger will be satisfied. The point is that we do not need to make metaphysical assumptions about the nature of those objects in order to make sense of their role in perception. All we need to do is to pay attention to their qualities, the effects generated by our interactions with those objects, and how they allow us to get along with other individuals who can also interact with them.

This discussion highlights that, on the phenomenology-first approach, we perceive different pragmatic objects, and our interactions with them reveal different regularities. Knowing these regularities allows us to interact with individuals who can also perceive those pragmatic objects. Now, some of those objects will not be useful to engage in further actions in my environment. For example, if I see a car parked outside but my friends do not, and I tell them that we can use it to go the beach, that will obviously not be possible. In this case, my perception has a pragmatic object, but fails to allow me to engage in further interactions with the world and other individuals. Thus, a pragmatic object is said to be "real" or "not real" depending on the paths of action that I undertake based on my perception of it, and on whether those actions line up with the actions that other individuals undertake in the same context.

One might worry that this fails to be a realist theory of perception, in the sense that it does not say anything about whether the things we per-

into account how things would effect our experiences in possible but not actual experiences. Later in his works, Peirce provided a new formulation of the maxim in the Harvard Lectures on Pragmatism (CP 5.14), which is the one described here. Since I do not intend to provide a complete picture of Peirce's philosophy, I will leave these exegetical subtleties aside.

ceive are really out there, or mere figments of our minds. I will address part of this worry later when I talk about the veridicality of perception, but the pragmatic view is certainly not an anti-realist theory of perception. The pragmatic view takes a different starting point than most contemporary theories of perception, i.e., it does not assume beforehand that perception is a relation between two fundamentally distinct entities, namely, a subjective mind and an objective world. The phenomenology-first approach urges us to start considering perception blinded from ontological theories. Thus, it says that our notion of reality, understood as something that exists independent of any perceivers, is a late product of our perceptual interactions with the world. It is only after we interact with the world and learn which pragmatic objects can serve as successful guides for action in the environment for different individuals that we form this notion. An object is said to be "real" when more than one individual can interact with it, such that they can undertake successful paths of action in the environment. This view can deliver us a notion of "reality" understood as mind-independence without having to talk about the nature of the objects in question.

I do not expect to make a complete case for this notion of "reality" here, but only show that the pragmatic view of perception does not ignore these worries. My claim is, instead, that all perceptual experiences involve a relation to pragmatic objects. Moreover, I want to say that pragmatic objects constitutively shape the way we perceive the world. This preserves the relationalist insight that objects shape experiences and avoids disjunctivism, because all experiences relate to objects. And once disjunctivism is discarded, we can understand the relational side of non-veridical experiences without having to say that they are not instances of perception.

To illustrate this, consider the following example. Imagine that you are at the beach with some friends, and you spot something floating on the sea. 10 At first glance, it looks like a log to you. Your friends can also see this object, but it looks different to them. John thinks that it is a broken piece of wood from a boat, and Peter sees it as seaweed. Given that the object is far away, it is hard to tell with precision what it really is. However, in this particular context, that black dot floating on the sea stimulated your visual systems, and each of you "created" an interpretation of what is being perceived based on your previous experiences.

This case illustrates a situation where different individuals are sensorily stimulated by the same external thing, but they end up seeing different things. It is natural for us to ask what these individuals are perceiving. Since we want a hybrid theory that preserves constitutivity, we cannot simply say that they perceive the same thing, for otherwise they would not have different experiences. How would the pragmatic view conceive of this case? The first thing to note is that you, John, and Peter have developed different habits during your past interactions with the world. So, when you see that thing on the beach, each of you will interpret it according to your previous experiences. This is Peirce's percipuum in the narrow sense. At the initial moment, you are related to different pragmatic objects: a log, a piece of wood, and seaweed, respectively. You then make judgments about the nature of this object, e.g., "The black dot on the sea is a log", which is Peirce's percipuum in the wide sense. Note that, despite these interpretive elements influencing how you perceive the black dot, they influence perception only to the extent that they determine that different pragmatic objects

¹⁰ This example has been adapted from Hausman's (2006) discussion of the relationship between perception and semeiotics in Peirce.

will be picked up because of them. On the phenomenology-first approach, the piece of wood, the seaweed and the log are all perceived as objects out there in the environment.

The pragmatic view says that perception is temporal and active, so we should take into account the future interpretations we make based on what we sensorily perceive. Suppose that, as the object gets closer, you learn that it is a log. It turns out that the pragmatic object of your initial perception is the object that persisted, for it allowed you, John, and Peter to make reliable inferences about the world. Throughout this process, however, you have been related to different pragmatic objects which have shaped the way you see the world. I am not suggesting that the initial pragmatic objects are intermediary entities separating you from the final pragmatic object, but that during the perceptual process, you relate to different pragmatic objects, and your interactions with the world eventually lead you to relate to the "right" pragmatic object. This is possible, initially, because your habits make you pick different initial pragmatic objects, but as you interact with the world, you can correct your interpretations, such that you end up picking the "right" pragmatic object.

When I say that the initial pragmatic objects are different from the final one, I mean that they are qualitatively different, but not numerically different. In the same way that the same object can appear with different colors to a daltonic individual and an individual with a normally functioning visual system, the same external object can appear as a different object for me and someone else — i.e., a log as being seaweed. Instead of saying that individuals represent the same object differently, the pragmatic view says that the same object appears differently to individuals because of their prior habits, which can be corrected by their future interactions with it. Therefore, the final pragmatic object is said to be the "real" thing residing in the world, but this is not because it has a physical or material nature, but rather because it is the object that allows subjects to interact successfully in the environment.

This discussion allows us to see how the constitutivity of relationalism can be incorporated by the pragmatic view. By relying on the idea that subjects perceive different pragmatic objects because of their past experiences (Peirce's percipuum in the narrow sense), we can make sense of how our representations can influence the way we perceive the world without giving up on the idea that objects constitutively shape our experiences. However, since perception also involves making judgments (Peirce's percipuum in the wide sense), it can only be fully understood in relation to future actions undertaken because of the initial experience. Thus, when subjects interact with the environment, they revise their initial interpretations, such that they can eventually pick up the "right" pragmatic object. The temporal and active aspects of perception are essential in this process, for it is only by acknowledging them that we can understand how subjects can relate to different objects in the course of perception without saying that those objects stand between mind and world. This satisfies the second part of the Hybrid Triad, that is, that a genuine hybrid view should preserve the constitutivity idea.

3.3 The veridicality of perception

Can the pragmatic view provide a direct realist view of perception? This is the third part of the Hybrid Triad and bears on the distinction between veridical and non-veridical experiences. For my purposes here, I take it that veridical experiences are those that deliver the subject correct information about the external world. To recapitulate the example from the beginning, when I have a visual experience of a red rectangular book and there is a red rectangular book in front of me, my experience is veridical. In contrast, non-veridical experiences provide partially or completely misleading information about the external world to a subject. These are usually classified as either illusions or hallucinations respectively. I have an illusory experience when I perceive some feature or property of the external world misleadingly, and I have a hallucinatory experience when I have experiences of things that do not exist in the external world.

The dispute between representationalism and relationalism depends, in part, on how one conceives of the veridicality of perception. One advantage of representationalism is that it provides a unified account of veridical and non-veridical experiences, which differ only with respect to the accuracy of a given perceptual experience. Relationalists take a difference position on this issue, stating that perception is constitutively shaped by its objects. However, non-veridical experiences can be indistinguishable from veridical experiences, in the sense that the subject cannot tell, from his own point of view, whether it really involves an object or not. So, the problem is to explain the possibility of there being similar experiences in the absence of objects. To deal with these cases, some relationalists have argued that the subject not being able to tell veridical from non-veridical experiences does not imply that there is no difference between them. In fact, some relationalists, such as Martin (2004), go so far as to claim that the only similarity between veridical and non-veridical experience is the fact that they are indistinguishable. This results in a bold metaphysical claim, often called metaphysical disjunctivism, which claims that either an experience is a perception, in which case it is constitutively shaped by an object, or it is a mental state of a different kind.

How does the pragmatic view conceive of the distinction between veridical and non-veridical experiences? I have suggested that a satisfying hybrid view should preserve the constitutivity of relationalism for non-veridical experiences, which casts doubt on the plausibility of disjunctivism. My proposal is that we can avoid disjunctivism and do justice to the constitutivity idea by claiming that perceptions, veridical and non-veridical alike, are related to pragmatic objects. Moreover, the distinction between veridical and non-veridical experiences depends on whether subjects can take successful paths of action based on such experiences. I shall say that an experience is successful when the subject can pursue paths of action that allows him to coordinate his actions with both the environment and the actions of other subjects.

To motivate this approach, let us reconsider the case of the black dot on the sea. Each of you see different pragmatic objects: a log, a piece of wood, and seaweed respectively. You also learn, later on, that the object is a log. At this initial stage, who is perceiving veridically? One natural answer is that you are the one who has a veridical experience, while John and Peter have non-veridical experiences. The reason is that your experience captures how the world is, while their experiences do not. However, if perception is relational, this cannot be the case, for you, John, and Peter are perceiving the same thing.

The pragmatic view holds on to the initial intuition that you are perceiving veridically, while John and Peter are not. However, it says that, considered only in relation to their objects, there is no absolute question of whether an experience is veridical. An experience is only said to be veridical or nonveridical in relation to what I call pragmatic contexts, which are broadly understood as the practical situations in which the actions we undertake on the basis of our experiences relate to the actions that other subjects undertake on the basis of their experiences. In more detail, I understand pragmatic contexts as being actual or possible¹¹ situations in which perception could occur, in which (i) the physical constitution, (ii) the biological selective history, (iii) the way a perceptual subject interacts with the world, and (iv) how it interacts with other perceptual subjects, mutually co-determine whether an experience is veridical, or not.

Let us explore this in more detail. On the example above, your experience is said to be veridical because it is the only one that leads to successful inferences about how the world is in the relevant pragmatic context. In other words, your experience is the only one that allows you to successfully interact with other subjects in the environment. To see this, take the case of Peter. Peter's initial experience is of seaweed. However, as you discuss the nature of that thing on the sea, you formulate new interpretations of what you see, such that Peter eventually agrees with you when the object is close enough for him to identify it as a log. This is only possible because you and Peter are human beings, and therefore you have a similar physical constitution and you share the same evolutionary history (i and ii above). Moreover, due to these similarities, you can interact with the world and evaluate your actions on the basis of your interactions with each other, such that you can coordinate your actions in the environment accordingly (iii and iv above). Thus, if subjects can agree on what the pragmatic object of their experiences is after engaging in actions in the world, then the experience is veridical. Otherwise put, an experience is veridical if it would generate pragmatic agreement in relevant pragmatic contexts.

Two important clarifications are required. First, although the notion of agreement seems to imply some kind of verbal communication, I understand it more broadly here. I can reach pragmatic agreement with other subjects even when there is no verbal communication of any sort. When I pass the basketball to another player in my team, we are in pragmatic agreement about what we perceive, for we can coordinate our actions based on how we perceive the ball. Second, it is important to note that pragmatic agreement depends on the actuality and possibility of subjects interacting in pragmatic contexts. The example above seems to suggest that an experience will be veridical or non-veridical only if subjects actually interact on the basis of it. However, this would imply that if no interaction takes place, there is no answer to the question of which experience is veridical. I want to say that the veridicality of an experience depends not only on subjects actually engaging in actions on the basis of the experience, but also on possible and non-actual paths of action that would have been the case if subjects had engaged with the experience. In other words, an experience is veridical not only if it generates actual pragmatic agreement in actual pragmatic contexts, but also if it could have generated pragmatic agreement if the subjects had further engaged with the experience. Thus, even if after looking at the object on the sea you, Peter, John had left the beach, your experience would still be veridical and theirs would not be, for if you had engaged with them, your experience would be the one to have generated pragmatic agreement.

¹¹ This is where realism enters into the theory. Veridicality does not depend only on actual contexts of interaction, but also on possible but not necessarily actual contexts. Therefore, we do not need to say that it depends on the existence of individual subjects.

To further motivate this approach, let us now consider a hallucination, the pink chair that I see in my office. The pragmatic view says that the pink chair is the pragmatic object of my initial experience and it constitutively shapes it. However, when I talk about that chair to my colleagues, I learn that they cannot see it, and I convince myself that despite appearances, there is no pink chair. In this case, I have a hallucinatory experience because my experience failed to be the source of useful inferences about my environment in relevant pragmatic contexts, such that I could not coordinate my actions with the actions of other subjects. That is, individuals who have the same physical constitution and who share the same evolutionary history with me (i and ii) could not engage in the same actions with the environment in that context (iii and iv). Therefore, my experience of the pink chair failed to generate pragmatic agreement, and thus is non-veridical.

It might be argued that this account does not explain cases in which I am perceiving veridically, but my friends pragmatically disagree with me. For example, it might be the case that there is a pink chair in the office, but for some reason on another, my colleagues fail to see it. The pragmatic view seems to imply that my experience is still hallucinatory in this case. Here it is important to remember that a full account of veridicality depends not only on the actual, but on the possible interactions that could happen in a pragmatic context. Thus, while in most situations it is better to rely on actual pragmatic agreement to assess the veridicality of an experience, this does not mean that this agreement is absolute or infallible. The idea here is that my experience counts as veridical in this case because, if other people were to enter the office, they would see the chair and pragmatically agree with me.

One worry likely to arise in relation to this account is that it does not distinguish between veridical and illusory experiences. A number of illusions do generate pragmatic agreement, but we still take them to be nonveridical. For example, in the Müller-Lyer case, where we see two lines as being of different lengths when they are not, due to the arrows attached to their extremities, we might pragmatically agree that the lines are of different lengths. Therefore, the pragmatic view has to say that this experience is veridical. In response, it is worth noting that we know this experience to be illusory because we further interacted with it, for instance by finding out that if we remove the arrows at the extremities, we can see that the lines are of the same length. Thus, the interaction with the lines allows us to see that the initial state of pragmatic agreement was wrong. It is only then that we pragmatically agree that the lines are of the same length and that the initial experience is illusory. This means that the pragmatic view is ultimately fallibilist, in the sense that absolute pragmatic agreement about the status of a given experience is impossible. Although this might seem problematic at first glance, this is what actually makes the idea of illusions and hallucinations possible. If we want to be direct realists about perception, then we have to take our interaction with the world into account, for this is the only way to know that what we sensorily perceive is actually real. This does not give a complete answer to the problem of illusion, but I hope it is enough to show that the pragmatic view does not ignore it.

I do not expect this to be a full account of the veridical and non-veridical distinction, but rather an outline of how we can think of it in pragmatic terms. However, one important worry relates to perception in the animal realm. The definition of pragmatic context seems to be restricted to individuals belonging to the same species, thus ignoring the fact that other animals

are perceptually related to the same world as humans. The pragmatic view does not preclude humans from pragmatically agreeing with non-human animals. The difference in these cases is that the relevant pragmatic contexts will differ across different species. Suppose that I am standing next to a pigeon and a crazy person throws a brick at me. Both the pigeon and I see the brick approaching and dodge it, for we see it as a potential source of harm. According to the definition above, I am in pragmatic agreement with the pigeon, for we perceive the object in similar relevant ways, which allows us to engage in further actions to achieve an end, i.e., avoiding being hit. However, pigeons are tetrachromatic animals, as opposed to humans, who are trichromatic, which makes us see colors differently. If we could devise an experiment in which pigeons were required to identify the color of that object, there would be likely pragmatic disagreement between me and the pigeon. So, instead of ignoring animal perception, the pragmatic view provides a useful framework to understand how different species perceive the world differently. On this view, we can avoid potential problems relating to questions such as which species perceives the world correctly. We can opt, instead, for a notion of veridicality that is context-sensitive, thus making room for the idea that different species can veridically perceive the same world (see Chirimuuta 2016).

CONCLUSION

To conclude, if this view of veridicality is plausible, the pragmatic view can finally offer a theory of perception that is direct, i.e., perception is directly shaped or constituted by its objects (the pragmatic objects), that moves beyond disjunctivism. Since perception is temporal and active, we can say that even non-veridical experiences have objects, and are constitutively shaped by them, without saying that they are fundamentally different from veridical experiences. This reconciles representationalism and relationalism on the issue of veridicality, for the constitutivity idea and the view that veridical and non-veridical experiences belong to the same metaphysical kind are preserved. We are thus left with a theory that satisfies the Hybrid Triad, that is, it provides a satisfying reconciliation of representationalism and relationalism about perception. Although this paper has not developed a full pragmatic account of perception, it has laid the groundwork for the development of such theory. In particular, it has established the basic framework to think of important problems in contemporary philosophy of perception, such as the nature of veridical and non-veridical experiences, that moves beyond current theories in the field.

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